

A Grammar of Galo

Submitted by

Mark William Post

B.A. (Honours), Wesleyan University

M.A., University of Oregon

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Research Centre for Linguistic Typology
Faculty of Humanities and Social Sciences
La Trobe University
Bundoora, Victoria 3086
Australia

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Summary

This work is the first comprehensive descriptive grammar of the Lare dialect of Galo, a Tibeto-Burman language of the Tani branch spoken in central Arunachal Pradesh State, in the North-East Indian Himalaya. It is based on primary data obtained from original fieldwork conducted by the author in Galo towns and villages in Arunachal Pradesh. In addition to description of the synchronic phonology and grammar of Lare Galo, it contains a historical overview and preliminary reconstruction of Proto-Galo segmental phonology, in addition to a glossary of approximately 1,300 lexical roots with 4,000 lexical exemplars and three fully analyzed texts.

Statement of authorship

Except where reference is made in the text of the thesis, this thesis contains no material published elsewhere or extracted in whole or in part from a thesis submitted for the award of any other degree or diploma. No other person's work has been used without due acknowledgment in the main text of the thesis. This thesis has not been submitted for the award of any degree or diploma in any other tertiary institution.

Dedication

To my great teachers: Bob Dixon, Tom Givón, Susan Guion,
and Doris Payne, and every Galo man and woman who ever lived.

Acknowledgements

If there is only one thing of value that emerges from this project which has so far occupied more than nearly four years of my life, it is easily this: that I was fortunate enough to spend so much time with a group of people who easily rank among the kindest, most generous, and most hospitable people in the world. When I first arrived in *lɪ̀kàa-balí* (frontier of the Galo area, on the Assam-Arunachal border) by public bus back in mid-2004, unshaven, filthy, and disoriented, I had only the vaguest idea of what sort of people I would find, the most tenuous of local contacts (friends of friends of friends of Galo people I had managed to meet in Guwahati and Itanagar), and no idea about whether I'd be welcomed and, therefore, be at all able to carry out the work I was proposing. Within minutes of stepping from bus to ground I was spontaneously greeted and welcomed by strangers, and thus began a long chain of introductions that led me to consultant after consultant, village after village, and welcoming home after welcoming home. It is quite the custom in prefaces to works such as this to say that one has so many people to thank that one cannot possibly name them all, and this is no exception. But I must stress that this is no idle formula. The simple fact is that almost every Galo person I met over the course of four years immediately offered to help me in whatever way he or she could, and I received important assistance in various ways from almost every one of them; many people ended up spending literally hundreds of hours working patiently with me through what must have sometimes amounted to an agonizingly tedious chore (but how about if you say it *this* way?), while others cooked for me, cared for me, sheltered me, and helped me in so many ways to (very) slowly learn their language. Almost none among them ever asked for anything more than friendship and respect in return. It is no exaggeration to say that I feel a debt to the Galo people which is greater than anything I will be able to repay in my lifetime.

Among those many Galo who have helped me in numerous ways, I particularly wish to acknowledge my primary consultants, *milɿɿ nodù* of *dipó* (Dipa) Village, and *tomóo rɿbáa*, *igò rɿbáa*, *ilɿ rɿbáa*, *doonàa rɿbáa*, *zikèn rɿbáa* and *bomcák rɿbáa* of *daarɿ* (Daring) Village, *lɿkàa-balí* (Likabali) and Itanagar. I also wish to thank all other members of the (extremely large!) *nodù* and *rɿbáa* clans of *dipó*, *lɿkàa-balí*, and *daarɿ* for all of their hospitality and assistance. I also wish to thank many residents of *hilɿ* Village, in particular *kenjóom zɿrdóo* and all other members of the *zɿrdóo* family, *gumrɿ soráa*, *riimóo rɿbáa*, *jumsɿr baamé*, *borée rɿbáa* and *bozɿr kadu*. I also thank *kɿrlɿ padù* and *mobɿ lojɿ*, whom I met in Guwahati and who helped me with the crucial initial efforts, *moozi “paku” rɿbáa* of the Centre for Cultural Research and Documentation (CCRD) in Naharlagun, who initially put me in touch with people in the *lɿkàa-balí* area, and the *keena* family, in particular *jompáa keena*, who were the first Galo people to welcome me into their homes. In *lɿkàa-balí*, I also wish to acknowledge and thank *kombɿ “moni” tao-rɿbáa*, *kari tao*, and *camrɿk jorɿ*. In Delhi, my heart absolutely goes out to *miizùm nodù*, who toiled tirelessly on my behalf in the Kafkaesque and seemingly interminable process of applying for the necessary research permits, protected area permits, and so on. I also acknowledge the encouragement and support of the Galo Welfare Society and the Galo Language Development Committee, in particular Dr. Tado Karlo of the North East Regional Institute of Science and Technology; I deeply appreciate their earnest concern for the continuity of Galo cultural and linguistic heritage, am encouraged by the cooperative steps we’ve taken together so far, and look forward to many future collaborative efforts. Finally I thank the State Government of Arunachal Pradesh, in particular Chief Secretary *tabóm baamé*, Secretary (Power) *tumkə bagrá*, Superintendent Engineer *boráa əətə* and Senior Engineer *rokom bado* for their help and support in moving the powers that be. To all other Galo people who have assisted me in so many ways, if your name does not appear here, please accept my apologies together with my gratitude for all that you have done for this project, for the continuity of your wonderful culture and language, and for me.

In Australia, I wish to thank my supervisor Bob Dixon and co-supervisor Sasha Aikhenvald – firstly, of course, for reading and re-reading many drafts and revisions of

what is after all a fairly hefty document, and for their very many comments and suggestions along the way – but also for simply *having* a place as unique and important as the Research Centre for Linguistic Typology, for doing all the work that is necessary to keep such a place funded, functioning, and (ultimately) so vibrant and productive, and for making it possible for people like myself to undertake large-scale descriptive projects which – in absence of places like the RCLT – would simply not be possible. In this connection, I also wish to thank the administration and staff of La Trobe University, and the Government and people of Australia who fund it, for supporting language documentation and description in this time of most urgent need; suffice it to say, not every place in the developed world has its priorities as well thought-out. Finally, I thank my partner Naomi, who’s been through all of it, and keeps on going...

Abbreviations used in this work

| | |
|-------|---|
| ˊ | High tone |
| ˋ | Low tone |
| ˊˋ | Rising-falling tone |
| ˊˊ | High-rising tone |
| ˊˋˊ | Stressed/accented |
| * | Unacceptable (preceding example) |
| # | Awkward (preceding example) |
| ? | Marginal/uncertain |
| * | Proto-form (preceding reconstruction of one-word unit or smaller) |
| ** | Non-occurring |
| N/A | Not attested |
| < | Comes from |
| ⌘ | Is related to |
| ≐ | Approximately |
| — | Suffix boundary |
| = | Clitic boundary |
| ≡ | Clitic/suffix boundary |
| # | Word boundary (phonology) |
| . | Syllable boundary |
| ~ | Alternates with |
| → | Becomes |
| / | In the environment of |
| Ø | Deletion (phonology) |
| Ø | Zero/covert realization (morphosyntax) |
| σ | Syllable |
| μ | Mora |
| + | Positively specified for feature |
| - | Negatively specified for feature |
| α | Variably specified for feature |
| V | Vowel (any) |
| C | Consonant (any) |
| T | Stop (any) |
| G | Approximant/glide (any) |
| N | Nasal (any) |
| K | Underspecified consonant |
| ... | Prosodic pause |
| (...) | Omission from data |
| Apt | Apatani |
| Asm | Assamese |
| Bkr | Bokar (Adi) |
| Bng | (Na) Bangni/Bengni |
| Eng | English |
| Hin | Hindi |
| Ind | Indic (multiple potential languages or unknown) |
| Min | Minyong |
| Msg | Mising |
| PG | Proto-Galo |
| PT | Proto-Tani |

| | |
|------|--|
| PTB | Proto-Tibeto-Burman |
| PTp | Proto-Tani reconstruction by Post (this work) |
| PTs | Proto-Tani reconstruction by Sun (1993) |
| TB | Tibeto-Burman |
| 1 | First person |
| 2 | Second person |
| 3 | Third person |
| A | First core argument of transitive predicate/clause |
| ABES | Abessive |
| ABIL | Ability |
| ABL | Ablative |
| ABRT | Abortive |
| ACC | Accusative |
| ACHV | Achievement |
| ACMP | Accompaniment |
| ACNC | Additive concessive |
| ADD | Additive |
| ADJ | Adjective/adjectival |
| ADJP | Adjective phrase |
| AZR | Adjectivalizer |
| ADM | Admonitive |
| ADMS | Admissive |
| ADV | Adverb/adverbial |
| ADVP | Adverb phrase |
| ADVS | Advisative |
| AVZR | Adverbializer |
| AFF | Affirmative |
| AINC | Abortive inceptive |
| ALL | Allative |
| ANAP | Anaphoric |
| ANIM | Animate |
| APPL | Applicative |
| APRX | Addressee-proximate |
| ASC | Ascending |
| ASRT | Assertive |
| ASSR | Assurance |
| ATAG | Assertive tag |
| ATR | Atransitive |
| ATTN | Attainment |
| AURV | Auto-revelative |
| AUX | Auxiliary |
| BCNC | Bi-concessive |
| BEN | Benefactive |
| BNZN | Backgrounding nominalization |
| CAUS | Causative |
| CC | Copula complement |
| CCUR | Concurrent |
| CERT | Certainty |
| CEXP | Counter-expectational |
| CFAC | Counterfactual |
| CJEC | Conjectural |
| CLAR | Clarifying |
| CLF | Classifier |
| CMPL | Completive |
| CNJ | Conjunction |

| | | | |
|-------|---------------------------------------|--------|--|
| CNT | Continuative | HAB | Habitual |
| CNTR | Contrastive | HDST | Hyperdistal |
| COMP | Comparative | HEMP | High emphatic |
| COMPL | Complement (clause) | HEST | Hesitation |
| COMT | Comitative | HORT | Hortative |
| CONC | Concessive | ICEP | Inceptive |
| COND | Conditional | ICMP | Implicit comparison |
| CONJ | Conjunct | IDEF | Indefinite |
| CONT | Continuative | IDIC | Indicative |
| COP | Copula | IDIR | Indirect |
| COS | Change-of-state | IJEC | Interjection |
| CQ | Content interrogative | INAN | Inanimate |
| CS | Copula subject | INCL | Inclusive |
| CTIN | Continuous | INCP | Incipient |
| CTRY | Contrarative | INCR | Incremental |
| CTZR | Complementizer | IND | Individuator |
| DAT | Dative | INFL | Inflection/inflectional |
| DCOL | Dual collective | INFO | Informative |
| DCV | Discontinuous compound verb | INIT | Initiative |
| DECL | Declarative | INT | Interrogative |
| DER | Derivation/derivational | INTN | Intention |
| DESC | Descending | INTS | Intensifier |
| DESD | Desiderative | IPFV | Imperfective |
| DIM | Diminutive | IPTV | Imperative |
| DIR | Direct | IRR | Irrealis |
| DISC | Discovery | ISOL | Isolative |
| DISJ | Disjunct | ITER | Iterative |
| DPD | Discontinuous predicate derivation | LMT | Limiting/Limitative |
| DRCT | Direct | LOC | Locative |
| DSJ | Disjunctive | MASC | Masculine |
| DL | Dual | MDIM | Masculine diminutive |
| DLMT | Delimiting | MDST | Mega-distal |
| DOWN | Downward | MIR | Mirative |
| DST | Distal | MNOM | Modifying nominal |
| DUB | Dubitative | MOT | Motion modal |
| DUR | Durative | NAGT | Non-agentive |
| E | Extension to core | NAME | Human proper name |
| EMPH | Emphatic | NCNJ | Nominal conjunction |
| ENUM | Enumerator | NEC | Necessity |
| EPF | Experiential perfect | NEG | Negative |
| EPIS | Epistemic | NF | Non-finite/non-final |
| ESR | Expressive semi-reduplication | NFI | Non-final intonation |
| ETAG | Emphatic tag | NLMT | Numeral-limiting |
| ETR | Extended transitive | NNME | Non-nominal modifying expression |
| EXH | Exhaustive | N | Noun |
| EXHR | Exhortative | NOM | Nominal |
| EXIS | Existential | NP | Noun phrase |
| EXT | Extensive | NSUB | Non-subject |
| FDIM | Feminine diminutive | NUM | Numeral |
| FEM | Feminine | NUMCNJ | Numeral conjunction |
| FNZN | Framing nominalization | NZD | Nominalized |
| FOC | Focus/focal | NZR | Nominalizer |
| FWD | Forward | O | Second core argument of a transitive clause |
| GEN | Genitive | OBJ | Object |
| GENP | Genitive phrase | OBL | Oblique |
| GRAD | Gradual | OBLG | Obligation |
| GUES | Guess | | |

| | | | |
|-------|--|------|--|
| ODIR | Other (non-self) directed | SCNJ | Sentence conjunction |
| ONOM | Onomatopoeia | SDIR | Self/speaker-directed |
| PADV | Pro-adverbial | SEMB | Semblative |
| PDER | Predicate derivation | SFX | Suffix |
| PCL | Particle | SG | Singular |
| PERM | Permissive | SJNC | Subjunctive |
| PERP | Perpetual | SITR | Single-iterative |
| PERS | Persistive | SLCT | Selective |
| PF | Perfect | SLEV | Same (topographic) level |
| PFV | Perfective | SPRX | Speaker-proximate |
| PFX | Prefix | SSEQ | Subsequential |
| PINFL | Predicate inflection | SSUB | Switch-subject |
| PL | Plural | STAT | Stative |
| POL | Polite | SUB | Subject |
| POS | Position | SUGG | Suggestive |
| POSD | Possessed | SUPL | Supplicative |
| POSR | Possessor | SUPP | Suppositional |
| POST | Postposition | SUPR | Superlative |
| PQ | Polar interrogative | SYM | Sympathetic |
| PRD | Predictive | TBU | Tone-bearing unit |
| PREC | Precision | TENT | Tentative |
| PRED | Predicate | TERM | Terminative |
| PRHD | Pre-head demonstrative | TMP | Temporal |
| PRO | Pronoun | TOP | Topic |
| PROH | Prohibitive | TSUB | Temporal subordinator/ subordinate clause |
| PROP | Propositional | UCRT | Uncertainty |
| PROS | Prospective | UP | Upward |
| PRX | Proximate | V | Verb/verbal |
| PSHD | Post-head demonstrative | VA | Atransitive verb |
| PSEQ | Perfective sequential | VAE | Extended atransitive verb |
| PTOP | Proximal topic | VCC | Verbless clause complement |
| PUNC | Punctual | VCS | Verbless clause subject |
| PURP | Purpose/purposive | VI | Intransitive verb |
| QCMP | Quasi-complement | VIE | Extended intransitive verb |
| QN | Qualifying noun | VOC | Vocative |
| RCOM | Root-combining form | VT | Transitive verb |
| RCUR | Recursive | VTE | Extended transitive verb |
| RDUP | Reduplicant | WOND | Wonder |
| REAL | Reality | | |
| REAS | Reason | | |
| RECP | Reciprocal | | |
| REFL | Reflexive | | |
| RELC | Relative clause | | |
| REP | Reportative | | |
| REPT | Repetitive | | |
| REVS | Reverse core argument roles | | |
| RFOC | Referent-focusing | | |
| RLS | Realis | | |
| RN | Relator noun | | |
| RQE | Referential qualifying expression | | |
| RSOL | Resolutive | | |
| QASM | Assumptive interrogative | | |
| QN | Qualifying noun/nominal | | |
| S | Core argument of an intransitive predicate/clause | | |
| SBRD | Subordinator/subordinate clause | | |

1. Introduction

1.1. Overview

The following work is a descriptive grammar of the Lare dialect of Galo,¹ a language of the Tani branch of the Tibeto-Burman language family which is spoken in central Arunachal Pradesh state, North-East India. It is the first ever attempt at a comprehensive description of the grammar of Galo, or, for that matter, of any Tani language. It is designed to serve three main purposes. First, it is designed to serve as a partial historical record of the Galo language as it was spoken in the early 21st century. For reasons that will be discussed, no extant document yet comes close to serving this purpose. Second, it is designed to serve as a reference for linguists, anthropologists, and other scholars engaged in comparative language typology, or with other interests in languages and cultures of the region. Third, and perhaps most importantly, it is designed to serve as a foundation from which further descriptive, documentary and pedagogical materials may be developed to aid in the preservation and maintenance of the Galo language, for the benefit of future generations of Galo people.

Although the primary focus in this work will fall consistently on the Lare dialect of Galo, in light of the extreme paucity of documentary and descriptive materials for Tani languages in general, references will be made to certain other Galo dialects and certain other Tani languages where possible and relevant to the discussion; this is as much in aid of situating Lare Galo in typological relation to its relatives and neighbours as it will be – I hope – in aid of furthering broader linguistic studies in this extremely interesting and very much neglected area of the linguistic world.

In this chapter, the following subsections provide a contextual overview of Galo language and culture (§1.2), followed by a review of relevant works by other scholars (§1.3), a discussion of the theoretical framework in terms of which this study is conducted (§1.4) and a description of my fieldwork and analytical methodologies (§1.5). §1.6 and §1.7 finally discuss conventions and the structure of this work in more detail.

¹ Except where relevant to address a particular point, I adopt the convention throughout this work of referring to major tribal, language and dialect names in running text using the simplified romanizations which are most likely to be encountered elsewhere in print, despite that these are often at odds with their pronunciations in Lare Galo – the latter, for example, being pronounced *larèe galòo* by the Lare Galo themselves. Most Galo proper names, clan names and village names are referred-to using the Lare Galo pronunciation; where a particular village name may have a relatively well-known and dissimilar romanization, this is given in parentheses, as *daarh* (Daring) village of West Siang District. Where a non-Lare pronunciation of a Galo word is referenced, the dialect is always identified; where a word is simply identified as “Galo” (without mentioning a specific dialect), pronunciation may be assumed to be basically the same across dialects, to the extent that I have been able to determine.

1.2. Galo language and culture

1.2.1. Cultural-geographical context

The North-East of India is among the most cultural-linguistically rich and diverse regions of all Asia. This is due as much to its position at the cultural-geographical crossroads of East, South, and South-East Asia as to its varied topography and difficulty of travel and access, and consequent opportunities for populations to develop to a degree independently in relatively isolated niches (Burling 1965). Bordering West Bengal and Bangladesh to the west, Tibet and Bhutan to the north, and Burma to the east, North-East India encompasses the Indian states of Meghalaya, Tripura, Mizoram, Nagaland, Manipur, Assam and Arunachal Pradesh (with Sikkim sometimes thrown in to boot). The borders of each state, and many districts within each state, reflect the traditional boundaries of tribal² or other cultural-linguistic groups, down to a sometimes minute level of detail. However, the area can also be more roughly but insightfully divided into two broad regions on the basis of topography, cultural features, and language distribution into *hills* and *plains*.

Most *plains* areas in North-East India are and probably have long been characterizable as great meeting grounds of cultures and languages, and exhibit the usual set of linguistic characteristics of such places, including multilingualism, multidirectional borrowing, language mixing and low-level pidginization and possibly creolization of prevailing lingua franca. In modern times, the North-East Indian plains are mainly dominated by speakers of Eastern Indo-Aryan languages (Assamese and/or Bengali), although large areas are also predominantly controlled by (usually multilingual) Bodo-Kachari, Tai, and Tani (Mising) populations. North-East Indian *hill* areas are traditionally dominated by non-Indo-Aryan tribespeople – mostly of Mongoloid or mixed Mongoloid stock – who speak either Austro-Asiatic (Khasi), Tai (Khamti, Aiton, Phake), or, more often, Tibeto-Burman (TB) languages (probably well more than 100) (Figure 1.1-Figure 1.2).

² The term “tribal” is (in my experience) used without hesitation and without so much as awareness of any possible negative connotations, in both official and unofficial discourse, by both “tribals” and “non-tribals” throughout India; if anything, in North-East India, “tribal” has a positive connotation, at least when used by tribal people themselves. I follow this tradition in my use of the term “tribal”.



Figure 1.1 – *miilhi* *nodu* above *dipó* village



Figure 1.2 – *ribáa* clan elder wearing traditional Galo *tangò* coat, *habà* loincloth, *boolùp* cane hat and *raacàə* backpiece, standing in the *baagò* men's seating area of his house in *daarhi* village, with mithun, barking deer and wild boar skulls (hunting trophies) hung on wall in background

The cultural-linguistic history of North-East India is a fascinating but seriously understudied field. Some contemporary scholars have attempted to describe the historical geography and populations of North-East India in terms of Indic – usually, Hindu – historical myths and traditional beliefs, some of which are even taught as fact in the modern public and private school systems. However, evidence from *toponyms* (chiefly, river names) suggest that the plains areas, as well as at least some hill areas, were probably inhabited by Bodo-Kachari tribespeople at the earliest potentially reconstructible time period, whenever that may have been (Gait 1997 [1926]).³ The cultural and linguistic descendants of these early Bodo-Kachari groups remain among the most widespread of the North-East Indian plains peoples.⁴ At subsequent but uncertain historical points, it appears that Indo-Aryan speaking populations migrated northward and eastward from the Bengali area (modern West Bengal state of India and the nation of Bangladesh). Mixture with local tribal populations in turn gave rise to the eventual coalescence of the Assamese people who currently dominate most parts of the Brahmaputra plain. The plains were later ruled by the Tai Ahom, who invaded circa 1228 AD with considerable success from their traditional base in the Shan states of Northern Burma (Gohain 1999). However, the Tai Ahom were inevitably overwhelmed by the far larger Indo-Aryan population; although numerous modern-day Assamese trace their ancestry to the Tai Ahom, there now exist – comparatively speaking, of course – only remnants of the earlier Tai culture. Although there are now numerous and admirable efforts toward revival in some form or another, as a first-language medium of communication at least, the Ahom language is and has long been extinct (Morey 2005:17).

The history and migration patterns of the hill cultures remain largely obscure. Although there is a widespread assumption among most scholars that these mostly Tibeto-Burman cultures must have originated from outside the North-East – an assumption which is, incidentally, shared by the majority of the peoples themselves –

³ A glance at any detailed map of Assam will reveal numerous river names with initial *dī-* or, less often, *tī-*, both of which cannot possibly reflect anything other than PTB **ti* ‘water’ (Matisoff 2003:674). These names in many cases persist even in areas which have long been settled by non-Tibeto-Burman peoples (whether Indo-Aryan or Tai), although gradual shifts over time have of course occurred; the Brahmaputra itself was known in at least some places as the *tī-lao* at the time of the Ahom invasion, as discussed by Gait (1997 [1926]:6).

⁴ Prior to the arrival of Bodo-Kachari populations, it is perhaps reasonable to suppose that much of the North-East would have been inhabited by Austro-Asiatic-speaking populations, whose cultural-linguistic descendants persist as the Khasi of Meghalaya, North-East India, as well as (perhaps more distantly) the Munda to the west. However, I am not aware of any concrete support for such a theory beyond the current distribution of these populations and the seeming unlikelihood that Austro-Asiatic speakers could have penetrated so deeply into the Indian subcontinent from their presumed original home in mainland South East Asia unless they controlled large contiguous areas, perhaps at various historical times, in between.

very little concrete evidence indeed has been brought to bear as of this writing (a few details relating directly to the Tani languages and cultures are sketched in §1.2.2).

Geographically, the plains of North-East India are dominated by the enormous Brahmaputra River, which drains the hills and continues through Bangladesh, emptying into the Bay of Bengal. The massive, yearly flooding of the Brahmaputra renders the surrounding valley ideally suited for wet rice cultivation, which has traditionally been the mainstay of the plains economy. By contrast, hill tribes populate the Himalayan foothills, traditionally practicing shifting, *jhum* or ‘slash-and-burn’ cultivation on hillsides, supplemented by hunting and gathering. In most areas, although crops and agricultural techniques have been diversified somewhat, shifting cultivation is still practiced. Hills and mountains are often very steep, and despite a period of intensive logging in the late 20th century (since largely curtailed) many jungles remain to this day all but impenetrable (Figure 1.3).

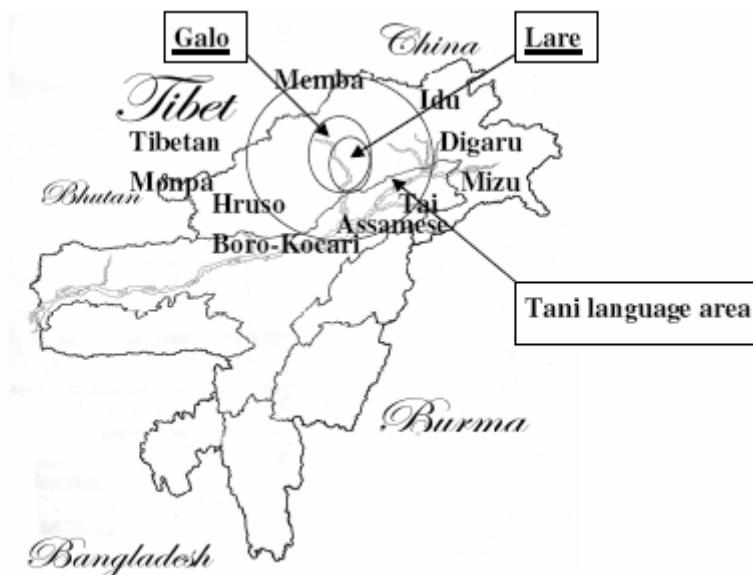


Figure 1.3 – Map of North-East India, showing the Lare dialect of Galo, the overall Tani language area, and major surrounding non-Tani languages

Difficulties in communication in the hill areas range from serious to extreme, and probably account for much of the diversity we find. What few roads exist are often poorly constructed and require considerable expense of time and energy, as well as risk, to travel. Many roads are swept away yearly by rampaging floods, often isolating people (including foreign linguists) for weeks or even months on end. In Arunachal Pradesh, most settlements remain to this day accessible only by foot or helicopter.

Cultural traits associated with the hills/plains division are widespread, and have been discussed in the broader South-East Asian context by Burling and others (Burling

1965). Linguistic features associated to the hills/plains division (in excess of the genetic differences associated to the resident languages) are less well-understood, but at least a few certainly do exist. For example, hill languages tend to both lexicalize and grammaticalize distinctions corresponding to up/down topography, which plains languages tend to ignore; in Galo, we find motion verbs and deictic demonstratives corresponding to upward, downward, and same-level axes, such as *tə* ‘up there; upriver; to the north’, *bə* ‘down there; downriver; to the south’ and *áa* ‘over there (on the same or an unknown level); to the east or west’ (§7.4.1.4). At the same time, hill languages tend not to lexicalize the compass point distinctions found in some plains languages. Given the starkly contrasting environmental conditions, it would be surprising if more such differences could not be found.

1.2.2. History; past and present distribution

According to legend, the Tani-speaking tribes all descend from a common ancestor usually referred-to as *abó taníi* (literally, ‘father (of) humankind’). Described as the first human being created out of the *zimíi*, or ‘void’, *abó taníi* nonetheless quickly found himself surrounded by animals, friends and rivals, innumerable spirits, and even what appear to have been members of different local tribes. *abó taníi* is supposed to have “descended” – the verb root *íi-* ‘descend’ in Galo means both to move downward (in elevation, or downriver) and to move southward – and to have founded a lineage which is believed to continue up to the present day.

According to Galo genealogy,⁵ *abó taníi* would have existed around 35-40 generations ago, or 600-1000 years. Given the present-day distribution of the Tani people and the relatively shallow differences in their languages, this is a strikingly reasonable estimate of a possible Proto-Tani time depth. Thus, while one must of course remain cautious regarding such matters, it would not be absurd to imagine that the legend of *abó taníi*, while framed as a creation myth centred upon a single individual, may at least partially reflect a historical memory of the migration of a group or set of groups from an earlier, more northerly homeland to the present-day location of their descendants in central Arunachal Pradesh.

⁵ The Galo naming and lineage-tracking system is discussed and exemplified in detail in §5.2.2.15.

Although it remains unclear where this earlier Proto-Tani homeland might have been, the widespread belief among the Tani peoples themselves – as well as among at least some scholars – is that they originate from the north, i.e., somewhere in present-day Tibet;⁶ indeed, it is a striking fact that there are, or perhaps remain, small populations of Tani-speaking tribes (officially lumped together with non-Tani-speaking tribes as the *Luò-bā* 珞巴 nationality in the modern Chinese context (Sun, Ouyang et al. 1980; Sun and Liu 1992)) to the present-day Tani homeland of central Arunachal Pradesh in North-East India. However, we cannot at present distinguish effectively between at least three possibilities: first, that the Proto-Tani may have moved directly southward into present-day Arunachal Pradesh from some location in south-eastern Tibet.⁷ Second, that the Proto-Tani may have entered present-day Arunachal from somewhere around northern Kachin state in present-day Burma. Or, third, that the Proto-Tani homeland was in fact within modern-day Arunachal Pradesh, albeit probably somewhat to the north of the location of many modern-day Tani tribes. Although my own predilection is to argue in favour of the first hypothesis, it must be admitted that we currently know so little about the prehistory of North-East Indian tribes that we are really only taking probabilistic stabs in the dark.⁸ True progress will only be made once we have a far larger number of serious, dedicated scholars working in the area, engaging in cross-disciplinary research from a politically neutral perspective. Unfortunately, such a productive research environment cannot be found at the present time, although there have been some encouraging developments.⁹

Culturally, most Tani-speaking tribes are neither Lamaist like many other Arunachali tribes of more or less Tibetospheric origin (such as the Monpa and Sherdukpen of western Arunachal Pradesh, and the Memba of northern West Siang), nor do they particularly resemble the predominantly Hindu and Muslim cultures of the Indian subcontinent. Galo legends perhaps surprisingly contain no hints of past associations with

⁶ This possibility is most prominently entertained, though not necessarily endorsed, by the eminent folklorist Stuart Blackburn (2003/2004).

⁷ The natural assumption following this view would be that the main pathway of migration would have been the Siang river valley (i.e., the valley of the north-south leg of the river called Tsangpo in Tibet and Brahmaputra in Assam).

⁸ One truly glaring uncertainty concerns the nature of the Tani-Mishmi-Hrusish relationship, and whether a Proto-Tani-Mishmi-Hrusish, or some similar configuration, is at all reconstructible. A promising step in this direction was taken by Tian-Shin Jackson Sun (1993b), but his work has not been expanded on by anyone since.

⁹ Anthropologists have thus far taken the lead in developing the research environment in Arunachal Pradesh, with the first ever large-scale documentary project “Tribal Transitions” (led by Stuart Blackburn of the School of Oriental and African Studies in London in association with colleagues in Arunachal (a.k.a. “Rajiv Gandhi”) University and the University of Delhi, mainly focusing on the Apatani) now complete, and an equally ambitious project in the Tagin/Mishmi area led by Toni Huber of Humboldt University in Berlin now in the planning stages.

Tibetans,¹⁰ although their much-prized heirloom *tadòk* beads, brass or copper *borèe* platters and all-important *oròk* machetes and antique *roksì* broadswords are widely believed to have come from this ultimate source (whether directly or via intermediaries) in ancient times. It seems possible that following a southward move into the deep jungles of Arunachal Pradesh at some time prior to the conversion to Buddhism of most Tibetospheric peoples (if, that is, they were in fact within the same cultural-geographic sphere) Tani-speaking tribes maintained only loose trade contacts with Tibetans or other Tibetospheric groups, and until recently had as few contacts with the plains tribes of the south.

Whatever the facts concerning the origins and migration history of Tani-speaking populations, the strongest cultural affiliations to the Tani people are to be found squarely in Mainland South-East Asia, among the hill tribes who continue to hold tenaciously to a trans-national corridor stretching from Northern Thailand, Laos and Vietnam, to South-West China, to the northern borders of Burma, and to North-East India (Blackburn 2007). Similarities among these ancient and still vibrant cultures are found in raised, bamboo-and-wooden house construction, in shifting hillside cultivation, in numerous traditionally animist festival and ritual practices, in folklore and – above all – in an often fierce sense of autonomy and independence from the typically more numerous and economically prosperous plains people at their borders. As pirated Thai and Chinese DVDs are making their way slowly into the Tani-speaking region, many Galo are astonished and excited to find such familiar faces from so far away.

1.2.3. Tribes, subtribes and clans

The history of the Tani tribes appears to have been marked by frequent, almost perpetual movements of people, group separations and integrations, and shifts in alliances and rivalries. Accordingly, it is difficult if not in fact impossible to draw strict and well-principled divisions between tribes and subtribes, subtribes and clans, and clans and villages, to say nothing of effectively correlating dialect groups to them. In fact, among the terms “moiety”, “tribe”, “subtribe” “clan” and “village” only “clan” and “village” seem to consistently refer to commonly agreed-upon and more or less time-stable entities; the references of terms apparently designed to describe larger groups of individuals (or groups of groups) seem to shift almost infinitely depending on who one asks, and indeed

¹⁰ It seems that other Tani tribes, such as the Apatani at least, have incorporated at least some consciousness of Tibet into their legends (Blackburn 2003/2004).

exist on different and not necessarily consistent levels.¹¹ Nevertheless, the following broad divisions are generally considered to be meaningful to my consultants at least, and may be usefully, if provisionally, be taken up by scholars.

First, the term *Tani* (Galo *taníi*), while not naming any particular language or tribe, may be used to refer to those culturally and linguistically similar groups of individuals who believe themselves and are recognized by confederates to have either descended directly from *abó taníi* or to fall within the lineage of *abó taníi* as a result of marriage relation or clan incorporation (usually due to being, or having an ancestor who was, a slave). In this sense, i.e. as a sort of “macro-tribal” label, Tani – which means ‘person’ in most Tani languages – has a positive connotation to the majority of Tani language speakers, and replaces outmoded, sometimes offensive, and often linguistically meaningless exonyms such as “Abor,” “Dafla” and “Miri(sh)” (§1.3). In recognition of this fact, the founding father of Tani linguistic studies, Tian-Shin Jackson Sun, first used the term in 1993 to designate a common ancestral language “Proto-Tani”, as well as a label for the branch within Tibeto-Burman to which the descendant languages all belong (Sun 1993b). I have observed Tani language speakers informally using the term Tani to refer to the group of languages which they view as sufficiently similar to their own (in most cases without knowledge of Sun’s work on the topic). It seems therefore certain that the term Tani is both linguistically meaningful and culturally appropriate; I continue to use this term in the present work, and urge my fellow scholars to do the same.

Within Tani, the label *Adi* (Galo *adii*) identifies a sort of “macro-tribe,” or cluster of closely-related tribes. However, unlike the label Tani, Adi has only partial and imprecise linguistic relevance. The term itself almost certainly derives from the pan-Tani term *adii* (PTs **di*¹²) ‘mountain/hill’, although it has also been informally analysed as a clipping of *adivasi*, an Indic term for ‘aboriginal’; the latter seems certain to be a folk etymology which should be disregarded by any serious scholar, however politically attractive it may be to some people.

¹¹ For example, among the Lare Galo, the terms *jízi* and *jiràa* traditionally identify two rivalrous clan groupings, possibly with a historical dominant-subordinate relationship (although this remains a subject of considerable political sensitivity). However, my consultants do not always agree as to which extant clans correspond historically to which of these two groups, whether the groups must fall strictly within Lare or could include some extra-Lare clans, whether all clans within Lare (or in general) fall into one of these two groups – or whether some clans are simply neutral with respect to a clan grouping at this level – and so on.

¹² Throughout the present work, I adopt the convention of referring to Sun’s (1993b) Proto-Tani reconstructions as “PTs”. In rare cases where my reconstruction differs from Sun’s, I label the form “PTp”. However, the reader should understand that PTp forms are arrived-at simply by applying Sun’s framework and methods to a relatively larger database than Sun had access to, and do not reflect any fundamental differences of system or approach.

The term “Adi” is also used by many putatively Adi tribespeople to refer to the language which they speak, whether this be Galo, Minyong, Milang, Bokar, or something other. This quite informal tradition has led some scholars to (I believe erroneously) assume that the various languages of Adi tribespeople must represent dialects of a single “Adi” language, even going so far as to posit one or another “dialect” among them as a “standard” form.¹³ However, many Adi “dialects” are in fact mutually unintelligible and, in turn, are in some cases mutually intelligible with languages spoken by non-Adi tribes (§1.2.7); for example, the Mising are considered to be a quintessentially non-Adi group, having (at least according to legend) fled the Adi area following an ancient inter-tribal quarrel. However, their language is almost completely one with Padam – a tribe which in turn is generally recognized as quintessentially “Adi”. In turn, the Galo – also nominally “Adi”, together with the Padam – cannot converse in either Padam or Mising, with whose speakers I have observed Assamese to be invariably used. Finally, the Milang are as “Adi” as any others so-called, and yet their language is largely unintelligible to almost all other Tani language speakers – most Milang I have met are able to speak three or four other Tani languages, a reflection of their own relatively small population size together with the practical necessity of communication with larger neighbouring populations. In sum, it is unlikely that the term “Adi” can be usefully applied by scholars either as a name for any particular language or as a name for a group of languages exclusively sharing a common ancestor (i.e. an “Adi” branch within Tani, with a reconstructible “Proto-Adi” to correspond); rather, the term should be understood as a colloquial label which at best designates an “in-group” of related (mostly Eastern Tani) tribes. Its origin appears to have been in something as simple as the equation of a group of people with the quality of the terrain in which they live, and its continuing use in various domains appears to amount to little more than habit.

Be that as it may, the following tribes or tribal groups are generally recognized by at least some of my Galo consultants to qualify as “Adi”¹⁴: Ashing, Bori, Bokar, Galo, Karko (Galo?), Komkar, Milang, Minyong, Padam, Pailibo, Panggi, Pasi, Shimong, Ramo

¹³ For example, the Summer Institute of Linguistics’ *Ethnologue* (Gordon 2005) persists in referring to the Eastern Tani language Padam (Galo *paadám*) as “Standard Adi” – presumably because this was the “Adi” language most frequently encountered by missionary fieldworkers at the former Sadiya mission, and has been the lens through which the missionary community and their supporters have viewed the “Adi” tribes and their languages ever since. This is unfortunate, since not only is Padam not easily intelligible to most tribespeople who identify themselves as “Adi” – rendering the label linguistically unsound – but to suggest that any Adi language is or should be viewed as a “standard” is in effect to impute a relative supremacy to the speakers of that language which in fact does not exist, and which the speakers themselves do not appear to have so much as sought.

¹⁴ It is of course possible that in other areas or among other tribes, a different list of affiliations may be recognized.

and Tanggam. Tani-speaking tribes or tribal groups who are usually not counted as Adi include Apatani, Damu, Hills Miri, Mising, (Na) Bangni, Nyishi, and Tagin.

Neighbouring peoples who are not usually considered to be directly related to the Tani include the Aka/Hruso, Boro-Kachari, Bugun/Khowa, Deuri, Khamba, Memba, Mishmi, Monpa, Sulung, Tibetans, and of course the Indo-Aryan peoples of the foothills and plains.

Within the Galo, at least six major subgroups may be identified, which in principle correspond both to dialect differences and to different clan groupings: *larèe*, *puugóo*, *karkóo*, *taíi*(*podia*), *zîrdóo* and *gensîi*. The largest are unquestionably *larèe* and *puugóo*, with the term *larèe* often applied in a sort of residue or “non-*puugóo*” sense to include e.g. *zîrdóo* and *gensîi*. In its sense as a term designating a population of individuals, *larèe* properly designates the majority of the inhabitants of the Basar and Gensi Community Development Blocks, in the south of West Siang District, and probably includes over a hundred clans. Major *larèe* towns or large villages include *baahár* (Basar), *daarî* (Daring), *lîkàa-balîi* (Likabali), and *gensîi* (Gensi). *puugóo* similarly designates most of the inhabitants of Along Community Development block, to the north of the *larèe* area, which has the densest population in West Siang District and includes dozens of clans. *karkóo* speakers are mainly found in Liromoba Community Development Block to the west of Along, and exist in significant but much smaller numbers.

In their senses as dialect names, *puugóo* and *larèe* are easily defined in opposition, but less easily defined within themselves. That is, certain salient *larèe-puugóo* differences exist and are easily identified by speakers (such as *r-* \approx *j-* and *c-* \approx *h-/s-* initial correspondences), but not all of them are shared (at all or in the same way) by every *larèe* or *puugóo* subdialect. At the same time, certain differences among subdialects of *larèe*, for example, may be mirrored by differences among subdialects of *puugóo*. All told, *larèe* and *puugóo* may be meaningfully used to identify the two major Galo dialect groups, with the caveat that a far more complex but yet-to-be-fully-told story more accurately describes the true state of affairs.

Clans are much easier to identify, since they uniquely correspond to the title (surname) shared among a group of people. Among the Galo, clans are strictly patrilineal

and operate like extended families, with highly complex networks of kin relations and reciprocal social obligations predicated upon them. Strict taboos are maintained against intra-clan marriages and/or sexual relations, meaning that marriage outside the clan is a virtually absolute surety. Accordingly, incorporation of an outsider into the clan – usually, a woman from a sufficiently distant clan or tribe – is a commonplace event, and quite likely accounts for much of the relative linguistic homogeneity of the Tani languages that we find (because population exchange fosters linguistic convergence). Inter-clan relations among the Galo may be close or distant, friendly or hostile, and may transcend or otherwise fail to correspond to the broader tribal or sub-tribal divisions discussed above. In fact, the clan is the natural organizing element to Tani society, often (though not always) superseding village, language, and tribe in importance and relevance to daily life.

1.2.4. Economy and village life

Traditionally, virtually all Tani people have practiced a similar type of shifting cultivation, supplemented by hunting and gathering. In the Galo area, cultivation takes place on steep mountain fields, which are first cleared and burnt by men, then planted by women using planting sticks (Figure 1.4). Mainstay crops include several varieties of rice,



Figure 1.4 – *task* (fan palm) plantation with *moodii-riks* (jhum) field in foreground

millet (in northern areas), chilli peppers, various tubers (mostly tapiocas), maize, and several usually diminutive species of *Solanum* (eggplants). In addition, a wide variety of fruits, mushrooms, roots, leaves, ferns and other wild vegetables are harvested, with most meals consisting of at least one or two dishes made entirely of wild-gathered foods.

Bamboo shoots are usually consumed as *iikúu*, a delicious earth-fermented pickle of diced bamboo generally employed as a flavouring agent rather than as a primary ingredient. In the foothills, red lentils (*masur dal*) constitute the principal Indic contribution to the Galo kitchen, although they are less commonly eaten further north. Rice beer, Galo *opòo* (more widely known as *apong*, from the more segmentally conservative Mising/Minyong form *apong* (< PTs **pon*)), has traditionally ranked together with rice in importance to Tani culture and village economy. Most Tani tribes have both white and black varieties of rice beer, with the black variety – which is sweetened with charred rice husks, involving considerable effort in preparation – generally preferred among the Galo. The parents and grandparents of modern Galo adults are said to have consumed *opòo* from breakfast until night, to have offered it immediately to any guest, used it to wean babies, and to have abundantly consumed it at all manner of occasion. The widespread adoption of at least two important cultural features – Christianity and tea – have led to an overall decline in *opòo* consumption in many areas; however, its ritual importance is maintained during festivals and ceremonies even among many Christian Galo, and in less strictly Christianized areas, the continuing social, cultural, and indeed nutritive importance of *opòo* is easily seen.

The most important semi-wild plant in Galo economy and culture is bamboo, at least eight varieties of which are employed in innumerable uses. Other widely used plant varieties include various types of *ohóo* cane (rattan), most often used as rope (such as in fencing and house construction), *taák* leaves (a fan palm variety, probably *Livistona rotundifolia*; see Figure 1.4), used as roof shingling, and various types of *okó* leaves (poss. *Zingiberales spp.*), used mainly in food preparation and service. The most important domestic animal in terms of cultural significance by far is the mithun (*Bos frontalis*), a massive variety of semi-domesticated gaur which is frequently sacrificed and eaten at important occasions (Figure 1.5). Other traditional domestic animals include chickens,



Figure 1.5 – Young mithun (*Bos frontalis*) captured for festival sacrifice

pigs, and ducks, with goats and cows found mainly in the lower foothills where wet rice cultivation is also practised. Almost any wild animal¹⁵ is subject to hunting by the meat-loving Galo, with barking deer (*hodum*), wild boar (*horô*), red jungle fowl (*pîrsin*), and numerous varieties of cold river fish among the most highly-prized.

Reciprocal labour, Galo *rigée*, is an important and enduring¹⁶ feature of Galo society, enabling Galo people to overcome logistical challenges which would be difficult or impossible for a single family to manage. For example, the clearing and planting of fields, which often involves levelling large swathes of dense jungle, is an unimaginable task for an individual, but is relatively easily accomplished by a large group working together. Similarly, *rigée* is required to accomplish the construction and frequent reconstruction of the massive and intricate houses in which Galo traditionally live (Figure

¹⁵ Taboo restrictions on the consumption of different animals for different reasons (such as age, sex, menstruation, etc.) were traditionally observed, but most of these are not followed strictly today.

¹⁶ As the Arunachali economy grows increasingly cash-oriented, a small number of Galo villages have through common agreement adopted contractually-based labour norms. I have not myself been able to witness the contractual system in operation, although I am aware that this innovation is viewed negatively by most people outside such villages; the majority of Galo villages I have stayed in appear to retain robust reciprocal norms. That said, the shifting norms of Galo village economy would make an excellent potential research topic for social anthropologists with interest in the area.

1.6). Labour donors in an event such as house-construction can anticipate both an ample feast and large quantities of *opòò*, as well as reciprocation by the beneficiary when it comes time to build or repair the donor's own house.



Figure 1.6 – Galo houses, with granaries in foreground (approach road to Basar town)

The intricacies of a Galo house are profound, both in terms of architectural accomplishment and in terms of the layers of meaning constructed into them, which surround the Galo as part of their traditionally highly-structured daily life. Virtually every element of a Galo house has a name, and has some function within the network of taboos (particularly those governing relations among the sexes) which were traditionally observed among Galo. Separate *koobàa* ladders are reserved for men and women, leading to separate *koodàa* balconies. The men's balcony, the *nilòò-koodàa*, is often enormous, extending as many as ten by fifteen meters, while the women's balcony, the *jimé-koodàa*, is sometimes no more than a narrow strip running the circumference of the house. Nowadays, while many traditionally female tasks such as dishwashing and food preparation may continue to be performed on the *jimé-koodàa*, women more generally frequent the more spacious and comfortable *nilòò-koodàa*, where important activities such

as weaving and entertaining of guests are more easily performed. Traditionally, *jilòo-koodàa* balconies face East, although this is not strictly observed; south-facing balconies are also popular, and other orientations are also found. Men, women and guests come together around the *imik*, a large fireplace found either in the centre of the house or, in a larger house, towards the *jilòo-koodàa*. The *imik* is used both for cooking and relaxing during cold evenings, and is crowned by a massive *rapkò* suspended shelving complex, on which foods are smoked and various utensils are stored.

Family life is traditionally centred around the *imik*, with seating areas reserved for different categories of person. The father of the house is entitled to sit in the *baagò*, behind which mithun skulls and hunting trophies are also hung from the wall; it is considered a great privilege to be offered a seat in the *baagò* as a guest. Ordinarily, guests sit in the *joodáa*, together with elders. Unmarried people such as children may sit in the *udúu*, with the *jooihì* and *dəətúu* reserved for women. During menstruation, women are traditionally barred from trespassing beyond the *jooihì*, and must perform all cooking at an auxiliary *imik*, if the family is fortunate enough to have been able to build one.

Although many taboos cease to be observed among the modern Galo, house construction almost always continues to follow traditional patterns closely, and even wealthy Galo who can afford to construct hideous and frigid concrete palaces in the modern South Asian tradition will almost invariably build a wood-and-bamboo hut around the back to house an *imik* and other fixtures of traditional life, and frequently spend most of their time in this far warmer and cosier environment.

Galo have traditionally lived in vertically-extended family settings, surrounded by kin, with marriageable women leaving for other villages and women from other clans marrying in. Polygamy was traditionally quite common, leading to a large and intricate network of relations. A full explication of the Galo kinship system deserves a full-length study in its own right, which it would exceed my competence to attempt. However, some introductory notes and diagrams from a linguistic perspective may be found in §5.2.2.2.

1.2.5. Religion and spiritual life

The Galo, like most if not all Tani people, have traditionally practiced a complex and seemingly indigenous shamanistic religion which in recent years has come to be known as *Donyi Polo* (Galo *dooní-poolò*; literally, ‘sun-(and)-moon’). Donyi Polo observances have traditionally addressed nearly every aspect of daily life, from house construction to cultivation techniques, to marriage, birth and death ceremonies, to the comprehension of Tani cosmogony and tribal history, to the many taboos interwoven throughout the seemingly insignificant details of daily life. Donyi Polo rituals frequently demand costly animal sacrifices, gifts of rice beer and other appeasements to various spirits by way of the *jibò*, a kind of shaman or priest.

Increasing contact with Christian missionaries – typically, those hailing from Nagaland, and supported directly or indirectly by often fundamentalist evangelical protestant groups originating in the USA – together with probable dissatisfaction with the comparative rigours of Donyi Polo observances have led large numbers of Galo to convert to Christianity, and a comparative few to Hinduism.¹⁷ In many foothill areas, conversion to Christianity would appear to hover around 90%, with some villages even boasting two or three churches from rival denominations. Devotees are typically guided by a relatively strict interpretation of the Christian Bible, and are often strongly pressured to abandon numerous traditional practices, such as drinking rice beer, observing taboos, practising polygamy, and telling and singing traditional stories and songs. Responses by Donyi Polo devotees to the decline in their ranks have included the establishment of impromptu churches, missions, and even Sunday services of their own; however, conversions to Christianity continue apace, and at the present rate, it would be surprising indeed to find Donyi Poloism outlasting the present century. A comprehensive study of this ancient and complex religious tradition is very much needed indeed; suffice it to say, it should be conducted sooner rather than later.

1.2.6. *gor̀kù* ‘classical language’

To many Galo whom I have encountered during my research, linguistic study of Galo can ultimately have only one serious goal: study of *gor̀kù* or Galo ‘classical

¹⁷ In the plains of Assam, conversion to Hinduism among the Mising has been far more pronounced, in some areas seemingly reaching 100%.

language’ (< PG **góm*- ‘speech’ + **kù*- ‘old’¹⁸). Considered central to any truly detailed knowledge of traditional Galo history, folklore, and spirituality, *goŋkù* is not only employed in the ritual practice of a Galo *jibò* ‘shaman’, but presents a rich and culturally significant “parallel lexicon” to the ordinary Galo speaker which may be employed to great effect in orations, village councils, and storytelling by those who take the time (and have the opportunity) to learn it well.

goŋkù also poses great challenges to the outside analyst, for a variety of reasons. For one, the number of people with detailed knowledge of *goŋkù* is certainly dwindling fast (in parallel with the general wane and decay of native Galo spiritual traditions; see §1.2.5); although *goŋkù* words – sometimes entire phrases or partial sentences – have often surfaced in my corpus, I have rarely found consultants with the ability or confidence to explain them in any detail. A more interesting fact, however, is this: very few *goŋkù* words I have attested to date suggest even remotely recognizable etymologies, although their phonology is quite clearly native. Why should this be? It is of course possible, as some of my consultants maintain, that *goŋkù* words *pre-date* the lineage within which modern Galo falls, and could represent (for example) an earlier substrate lexicon which has been handed down through the centuries in parallel to everyday Galo speech. Another possibility, though, is of course that *goŋkù* is a basically *secondary* lexicon, revealed (through whatever process, and for whatever reason) in the course of the *jibò*’s practice. That is, *goŋkù* may not have a history of use as a natural language, in the normal sense, at all.

These are sensitive waters in which to tread, to be sure, and I do not wish to deny the value of *goŋkù* either from a cultural, linguistic or anthropological perspective; quite the opposite, in fact. At the same time, the analyst approaching *goŋkù* with the aim of analysing its structure as well as use should be straightforwardly warned: things may not necessarily be as they seem.

¹⁸ Note that this word irregularly but quite understandably resists the post-PG Lare sound change Word-final weakening; the expected form is **goŋkò*, which is not found (see §2.4.4.5).

1.2.7. Linguistic affiliations, dialects and subdialects

As definitively shown for the first time by the eminent Taiwanese scholar Tian-Shin Jackson Sun (1993b), Galo falls within the Tani subgroup of Tibeto-Burman. However, both the position of Tani within Tibeto-Burman and the position of Galo within Tani remain to be fully worked-out. While I cannot address the first question in the present work, I will attempt to address the second.

As noted earlier, this is the first comprehensive grammar not only of Galo, but of any of the Tani languages; accordingly, we lack adequate grammatical descriptions such as would enable us to subgroup languages and dialects on the basis of the shared morphological innovations which have been noted e.g. by Dixon (1997) to be the most effective criteria for subgrouping when available. However, on the basis of segmental phonological correspondences, and by comparison with the Proto-Tani (PT) reconstructions by Sun, we can establish a Proto-Galo (PG) segment inventory which places it in the position in Sun's (1993b) tree shown in Figure 1.7. We can very provisionally further group those Galo dialects I have studied to date as in Figure 1.8.

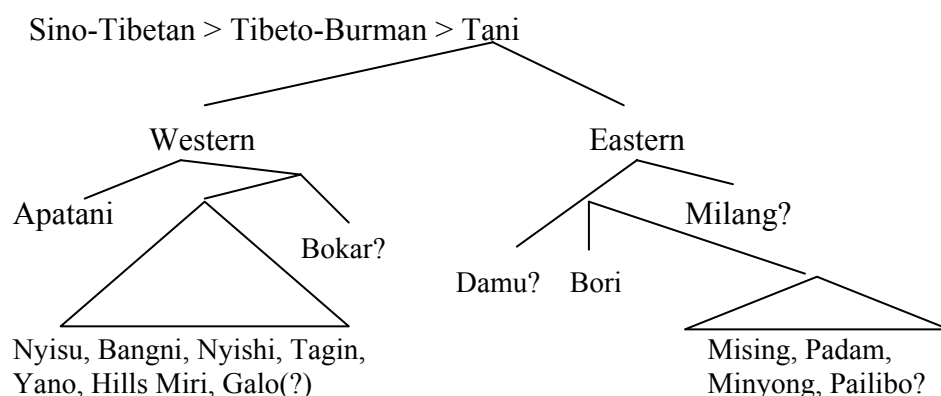


Figure 1.7. – Provisional Tani *stammbaum* (based on Sun (1993b))

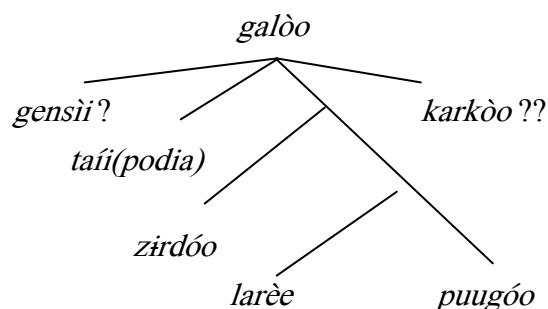


Figure 1.8. – Provisional Galo dialect *stammbaum*

For discussion of Proto-Galo phonology and post-Proto-Galo developments in a partial set of Galo dialects, see §2.4.4.

It must be emphasized that these groupings are by nature provisional, and subject to further revision as additional data comes in. Numerous irregularities and unexplained variations occur in the data, and we cannot be sure in every case what will account for them. As noted earlier, frequent population exchanges, together with more ordinary contact conditions, have ensured a high degree of language and dialect mixture among the Tani peoples which continues to the present day;¹⁹ as noted by Sun (1993b) the resulting picture is of a near-perfect dialect continuum, with the pervasive reality of small differences from village to village belying the neat, clean divisions pretended by the linguist. This reality notwithstanding, it is hoped that this account will serve as a useful reference point for further research. A map provisionally locating the major dialect areas is provided in §1.2.9, Figure 1.11.

1.2.8. Standardization and de facto standards

It is common among both linguistics and laypeople to refer to “standard” varieties of languages. In identifying “standard” forms of a language, one admits that a multiplicity of varieties exist, but also implies that the “non-standard” varieties are to be treated (in some sense, or in certain domains) as lesser objects of study or as providing more dubious points of reference than a “standard” variety. My personal belief is that this bias represents a complete inversion of the proper and improper objects of descriptive linguistics; indeed, “standard” forms of languages are generally subject to artificially normative pressures, and may therefore offer up data points in certain domains which do not in fact fall within the province of a naturally-evolved system.

In any case, this sort of construction cannot be easily applied to the Galo language. The reasons for this are many, but certainly include the fact that, since Galo is not in fact officially recognized as a language at all, there have been no official (as in government-authorized) efforts at standardization. More to the point, Galo are traditionally a highly egalitarian people, and would, it seems to me, be as unlikely to be seen attempting to

¹⁹ From my personal field experiences, it is far from uncommon to come across a family in which four or five distinct speech types (whether “languages” or “dialects”) are controlled by many if not all members of the household, and used on a daily basis. In one of my host households, for example, I found the father of the house speaking the *gensii* Galo dialect of his birthplace, one *gensii*-speaking mother and another from a nearby Mising community, living in an area dominated by *larèe* and *tafi(podia)* Galo, whose children are educated in Hindi and English and who conduct daily business mainly in Assamese. This septalingual family is perhaps not prototypical, but is not of a rare type either.

impose their own views and norms upon others as they would be to passively accept such impositions upon themselves.

In absence of an official standard, we may inquire about *de facto* standards, which could be “prestige” or “majority” dialects; here again, though, we fall into difficulty. There is no dialect of Galo which is clearly more “prestigious” than others; although the *puugóo* dialect spoken in and around the district capital Along perhaps comes closest to being a prestige dialect due to its natural association with local government and economic prosperity, and seems overall to be the preferred dialect for Galo popular song recordings, most non-*puugóo* speakers show few if any signs of feeling pressured to conform to *puugóo* norms outside of these limited contexts. Furthermore, the aggregate population of *puugóo* dialect speakers appears to be considerably smaller than that of *larèe* and its subdialects, and the geographical area within which *larèe* is spoken is certainly far larger than that in which *puugóo* is spoken.

In the present work, I have focused primarily on the variety of *larèe* Galo which is spoken in and around *daarĩ* village and *baahár* town, as well as by the majority of people in many if not most foothills villages (including much of *l̥ikáa-balíi* town). Although there are certainly subdialects of *larèe* which differ in some respects from the speech of most people in *daarĩ* and *baahár*, it is my impression that the majority of *larèe* Galo would agree that the speech of most people in *daarĩ* and *baahár* represents acceptable speech, but that the reverse would be less likely. Furthermore, I have the impression that while many young Galo whose parents are speakers of some other subdialect of *larèe* tend to abandon many aspects of their parents’ speech in favour of convergence upon *daarĩ* /*baahár*-style norms, the reverse – though not unattested – is less common. In short, it is my impression that the variety of Galo most commonly spoken by residents of *daarĩ* and *baahár* is naturally emerging as a *de facto* standard variety of *larèe* Galo, and that the *larèe* dialect itself (including subdialects) has the widest geographical spread of all Galo dialects.

However, we must be quite clear that the trends I have identified do not either constitute a stable situation of dialect convergence or a purposeful or enforced coalescence of a recognized standard. Under the current type of pluralistic organization to Galo society, subdialectal differences will continue to exist, and could at any time, and for any number of reasons, become more widely diffused. Thus, to be as precise as possible, the target of my description is the variety of *larèe* Galo spoken by the majority of the mature inhabitants of the *daarh* and *baahár* areas in the early 21st century.

Insofar as the present work could inadvertently serve as a “standardization” of *larèe* Galo or even of Galo as a whole – an outcome which would certainly cause considerable dismay to my Galo friends and consultants who speak a different dialect than that recorded here – I can only say in my defence that I am guided principally by a desire to be as inclusive as I can without risking too much imprecision; any final decisions regarding standardization of Galo, whether for pedagogical purposes or any other, certainly rest entirely with yourselves.

1.2.9. Language context and language contact

The Galo area is mainly concentrated in the lower half of West Siang District of Arunachal Pradesh state. A number of clans who identify themselves as Galo, and whose speech is largely but not always completely intelligible to my consultants, are found in lower East Siang District and Upper Subansiri District. I have not yet had the opportunity to visit either area (Figure 1.9).

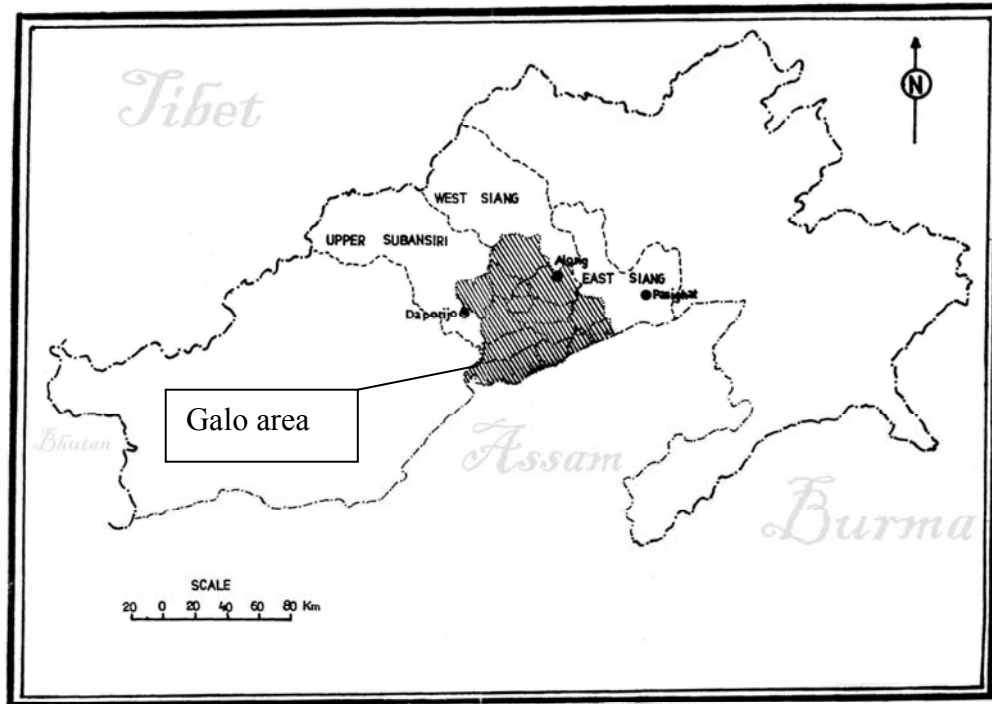


Figure 1.9 – Map of Arunachal Pradesh, with Galo area shaded

The major Galo towns are *aalóo* (Along), the West Siang District capital and *de facto* capital of the *puugóo* dialect area, *baahár* (Basar), the next largest town and *de facto* capital of the *larèe* dialect area and *lìkàa-balíi* (Likabali), a rapidly-growing Assam-bordering town and *de facto* capital of the *taíi(podia)* dialect area (though at least half of the current residents speak a variety of *larèe*). *lìrò-moobáa* (Liromoba) and *gensii* (Gensi) are relatively large villages, and are identified with less well-defined dialects, which have been provisionally identified as *karkóo* and *gensii* in this work. A view of major Galo towns and villages mentioned in this work is given in Figure 1.10.

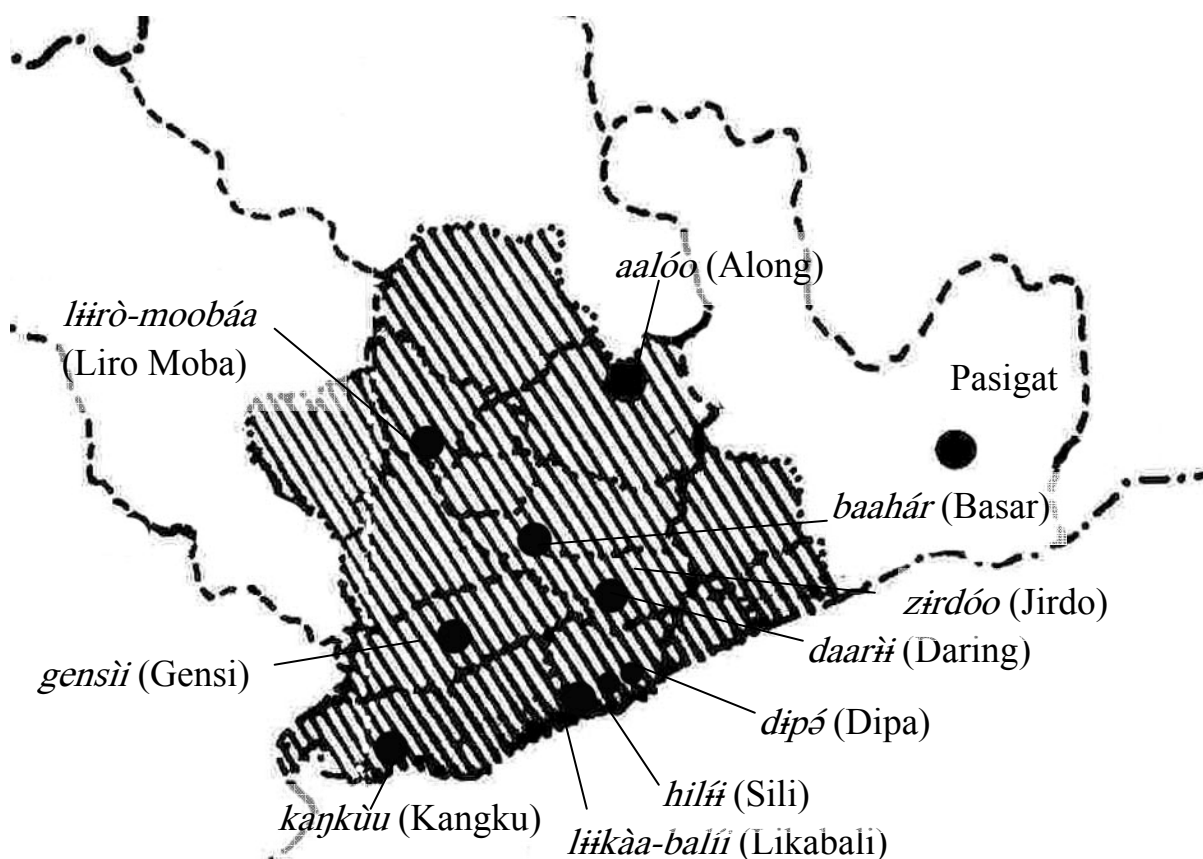


Figure 1.10 – Detail of Galo area showing major towns and villages mentioned in this work

Figure 1.11 and Figure 1.12 illustrate the Galo dialects provisionally identified in this work and surrounding non-Galo languages/dialects respectively, and may be compared with the identification of major towns and districts in the preceding maps. It must again be emphasized that these are highly preliminary and provisional characterizations. In most cases, I have not visited Galo border areas personally (Assam border excepted), and cannot vouch for the nature of languages/dialects spoken there, nor describe how close they may be to Galo dialects spoken nearby, nor say with any certainty whether there are in fact language prototypes which correlate to the labels presented here (or whether there might in fact be a perfect dialect chain throughout the Tani area, rendering language names and geographical groupings linguistically meaningless). In most cases, I am simply repeating the views of my consultants, supplemented by impressions I have of the linguistic state-of-affairs based on secondary sources and chance encounters with one or two speakers from this or that area. I hope that these figures will help in orienting the reader, but they cannot replace, and are not intended to replace or count as, a proper, in-depth areal survey.

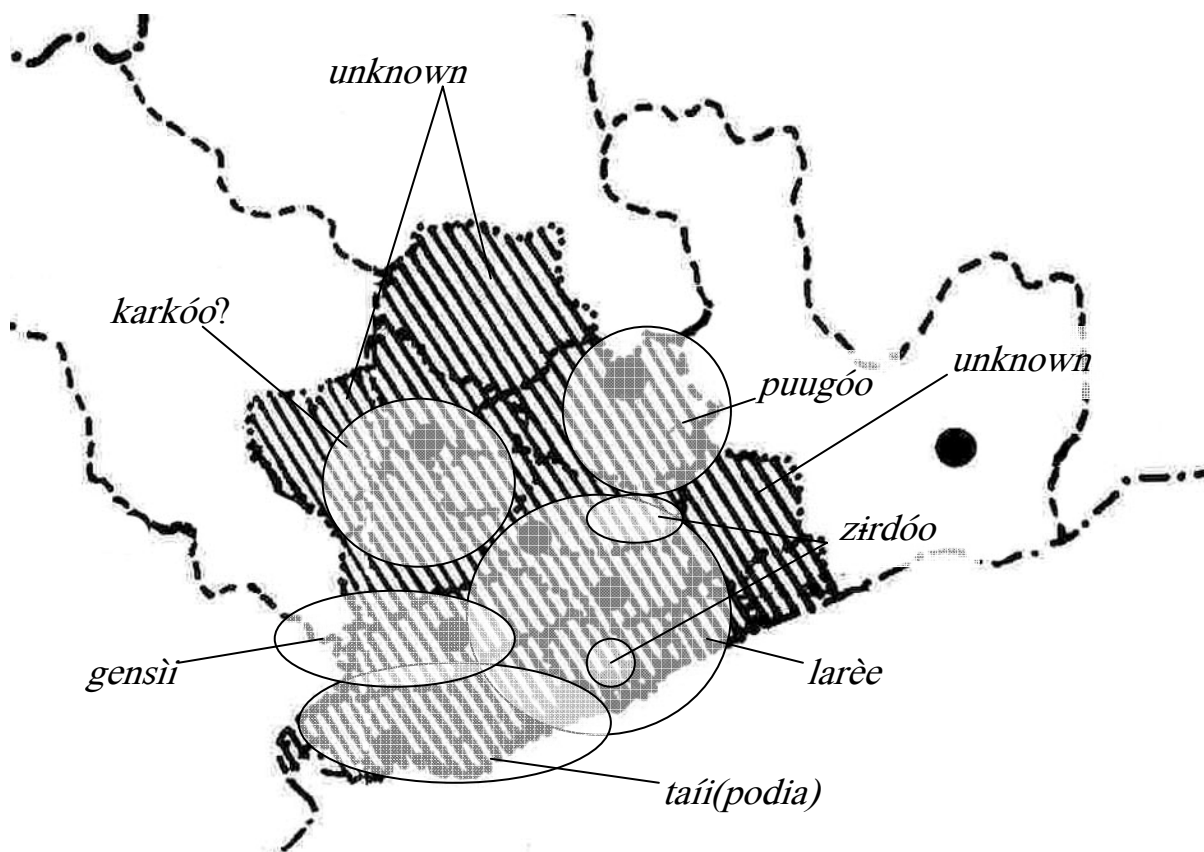


Figure 1.11 – Detail of Galo area showing basic location of major Galo dialects

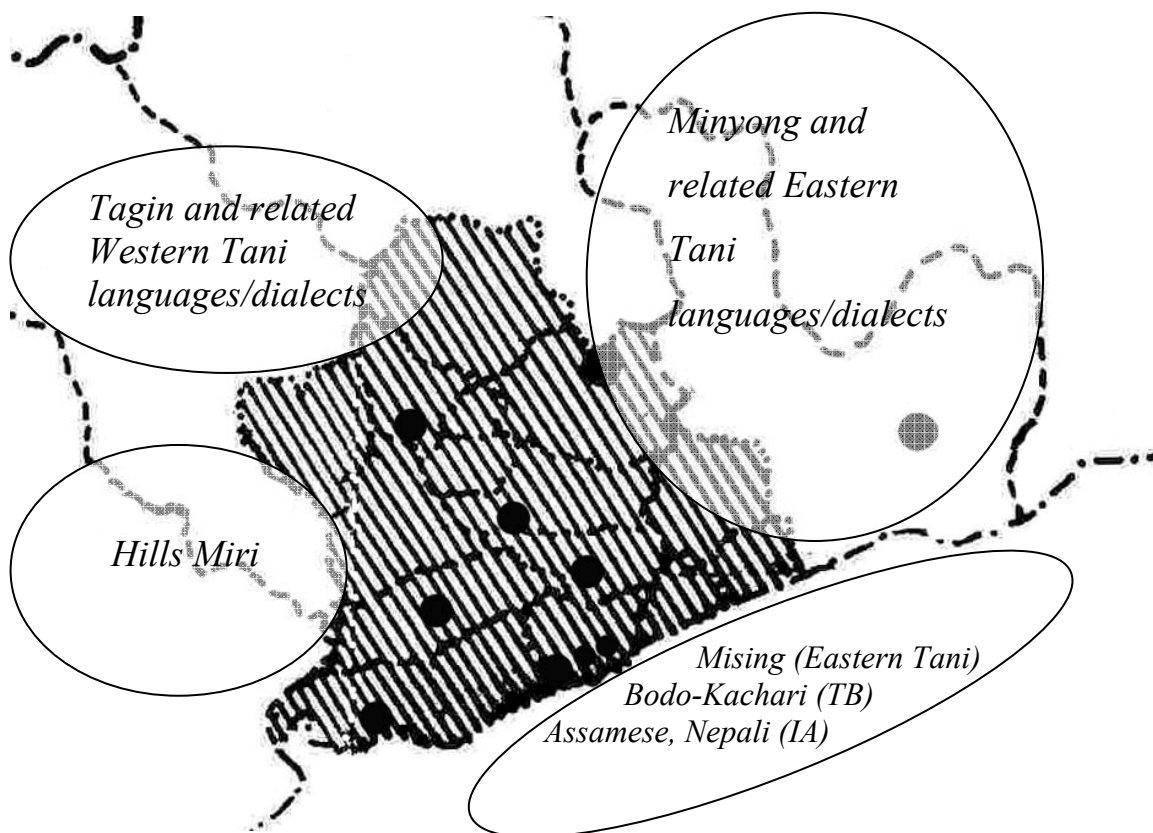


Figure 1.12 – Detail of Galo area showing language contact/context

1.2.10. Overview of linguistic features

This section provides a very brief overview of some salient linguistic features of Galo language; it is divided into two subsections: a grammatical sketch, which represents an overall synopsis of this work, followed by an overview of some notable linguistic features, basically comprising features which appear to be typologically unusual, of potential theoretical interest, or which otherwise have seemed to me to be for various reasons remarkable and/or especially worthy of general attention.

1.2.10.1. Grammatical sketch

1.2.10.1.1. Phonology

Galo has seventeen consonants and seven vowels. Consonants include bilabial, alveolar, palatal and velar voiced and voiceless unaspirated stops and nasals (palatal stops are affricated), lateral and rhotic liquids and alveolar and glottal fricatives. Vowels include three high, three mid and one low. Galo exhibits a “root-to-word” tone system, in which two tones (high/plain and low/tense) are lexically-assigned at the level of the (usually bound and monosyllabic) morpheme/root, and realized on the surface as a derived property of the (usually complex and polysyllabic) phonological word. Stress is trochaic/initial/falling, feet are minimally bimoraic; words are minimally one foot.

1.2.10.1.2. Morphology

Galo is basically synthetic and agglutinating, although noun phrases and predicates differ greatly in the number and status of dependents. Nouns exhibit a maximum of one usually non-productive or semi-productive prefix, as *ho-dúm* ‘PFX:HIGH.ANIMAL-barking deer’ ‘barking deer’, but do not generally host suffixes. Predicates host no prefixes, but may exhibit as many as five or six suffixes, in addition to three or four additional particles/enclitics which fall outside the grammatical predicate word, as in *mò-ṇám-zí-kò-tó-kú = kée!* ‘make-EXH-BEN-RVS-CMPL-IPTV.ODIR=HORT.POL’ ‘please let him finish making it for you!’

Roots must be grammatically distinguished from words; roots are in general bound, and usually require either to be prefixed, suffixed, or compounded in order to stand as a grammatical word. A few seemingly simplex, monosyllabic lexemes are found;

in some cases, such forms may represent reductions or simplifications of earlier complex forms (for example, *ii* ‘blood’ may reflect PTs **a-vii* → **a-ii* → **i-ii* → *ii*; see §2.4.3.1). Or, such forms may in some if not all cases be genuine exceptions. Suffixes must be grammatically distinguished from clitics in Galo; suffixes are word-level dependents, and can license a grammatical word through attachment to a grammatically bound root; for example: *ín-nam* ‘go-NZR:RLS’ ‘to go’, from *ín-* ‘go’. Clitics are usually phrase-level dependents, and cannot license a grammatical word by attaching to a bound root. Most noun phrase operators are clitics, as *namé=lo* ‘house=LOC’; most predicate operators are suffixes (as *-nam* ‘NZR:RLS’).

1.2.10.1.3. Lexical classes

Open lexical classes in Galo include noun, verb and adjective, each of which has at least hundreds of basic members (thousands in the case of nouns). Most adverbs are productively derived from adjectives, although a few basic, non-derived adverbs may also exist. To the extent that there is in fact sufficient evidence for identifying a basic, non-derived adverb class in Galo, its open/closed status is not yet certain.

Nouns and adjectives tend to more closely resemble one another in structure than either does verbs. Adjectives often exhibit [prefix-root] or [root-root] internal structure, like nouns, whereas verbs more often exhibit [root-suffix] internal structures. In terms of distribution, adjectives are somewhat more similar to verbs than either is to nouns; both adjectives and verbs can head a final (inflecting) predicate, whereas nouns cannot, and nouns can head a referring noun phrase, whereas underived adjectives and verbs usually cannot.²⁰ However, sufficient criteria exist for establishing nouns, adjectives and verbs as three distinct lexical classes, on structural and distributional, as well as semantic grounds.

1.2.10.1.4. Functional classes

Functional classes of the noun phrase include pronouns and demonstratives, numerals, classifiers, relator nouns, qualifying nouns, articles and postpositions. Pronouns and demonstratives are closely related but not identical in terms of functions and distribution; all basic demonstratives may function pronominally, and many basic pronouns also function as demonstratives; however, the differing internal structures of the

²⁰ Zero-derivation also occurs, and can override these tendencies; however, it does not seem to be generalizable as a uniform property of any particular lexical class or subclass.

two classes render them clearly distinct. Numerals, classifiers, relator nouns and qualifying nouns all closely resemble lexical nouns in terms of structure and semantics, and may be used as lexical NP-heads in certain conditions. However, all may also occur in post-head modifying functions, which lexical nouns ordinarily cannot do; in terms of their post-head modifying functions, they seem to constitute closed classes.

Articles and postpositions are closely related and are in complementary distribution in many functions. Both articles and postpositions also bear resemblances to certain types of demonstrative, with which they are sometimes paradigmatically related. For example, the set of “demonstrative postpositions” includes true demonstratives which, however, also accomplish postpositional functions; for example, *aló* ‘Distal locative (same/unknown level)’. Despite these similarities, articles, demonstratives and postpositions can all be clearly distinguished from one another in terms of their core distributional properties.

Functional classes of the predicate complex include predicate derivations and predicate inflections. Predicate derivations constitute a very large class of bound, predicate stem-expanding formatives which handle a wide array of modifying functions, including manner, result, purpose, direction, modality, aspect/*aktionsart*, class change, and valence rearrangement/change. Predicate inflections are suffixes marking polarity, aspect, modality, and (to a very limited extent) evidentiality, as well as (again, to a limited extent) “conjunct/disjunct” subject person-agreement.

Functional classes of the clause include a wide array of particles, most of which either occur clause-finally or noun-phrase-finally, but some of which may occur in a wide range of syntactic positions, often with different scope effects. Noun-phrase-final particles generally mark inter-clausal referential-continuity values, such as contrast, while clause-final particles primarily mark epistemic status of propositions and illocutionary force. Most types of particle have the ability to act as a “focus particle”, marking the focal constituent of a cleft/focus construction. Additional functional classes at the clause level include coordinating and hesitating particles – most of which derive from demonstratives – as well as interjections.

1.2.10.1.5. Clause types and clause structure

Clauses are either main (independent) or dependent. Main clauses are predicative or appositive. Dependent clause types are all based on predicative clauses. Appositive

clauses cannot be subordinated or otherwise made to depend on another clause, and do not in general host dependent clauses within their structure.

A main predicative clause obligatorily consists of a predicate plus its arguments, and may also include one or more oblique noun phrases, adverbials, and/or syntactically embedded dependent clauses. Noun phrase arguments may be followed by “Referential qualifying expressions”, which are appositive phrasal modifiers with the same argument function as the modified NP (i.e., a Referential qualifying expression which follows an Accusative-marked O NP will also be Accusative-marked). Predicate arguments may be freely ellipsed if pragmatically recoverable, but are always logically/underlyingly present. Transitivity is a robust feature of the Galo predicate, and is projected by the inherent, lexically-specified transitivity of the verbal or adjectival predicate head, following any alterations to basic transitivity made by one or more valence-rearranging/altering predicate derivations. Most predicate arguments are noun phrases, although a small number of clause complement-taking predicate types are also found, usually with non-prototypical constructional properties.

Appositive clauses are either verbless clauses, or copula clauses. Both types structurally consist of an equative or attributive apposition of two core arguments; while verbless clauses lack an obligatory predicating element, copula clauses are obligatorily headed by one of two uninflecting, non-verbal copulas (imperfective and perfective). In addition, while verbless clauses take only noun phrase arguments, in a copula clause the focal argument (Copula Complement) may be headed either by a nominal or by an adjectival.

Dependent clause types include non-final clauses (=medial, co-subordinate), temporally/episodically-subordinated clauses, adverbially-subordinated clauses, complement clauses, and nominalized clauses:

Non-final clauses form clause chains, and often consist of large numbers of non-recursively-embedded, non-final-marked clauses, followed by a single final clause. Normally, each clause of a clause chain denotes an independent event, with the overall chain usually denoting a thematically-connected chain of events in a narrative or procedural description. The final clause is obligatorily headed by a final (inflected) predicate, while inflection of non-final clause heads is relatively limited. There is no grammaticalized subject-continuity constraint in Galo clause-chains, although same-subject and switch-subject constructions are available for use in contexts of high referential density. Complex predicates are formed using the same basic structure as a clause chain, but exhibit more tightly-restricted constructional properties, and are (in

some if not all cases clearly) monoclausal. Subjects of clause chains are zero-marked (Nominative).

Temporally/episodically-subordinated clauses consist of final, inflected predicative clauses in non-perfective aspects only (including irrealis), which are individually (non-recursively, non-continuously) subordinated to a main predicative clause via one of a variety of postpositions. Temporally/episodically-subordinated clauses usually give contextual information (such as temporal or hypothetical content), and are often marked by the same types of postposition that would mark a semantically-relatable nominal (such as a time noun) in the same syntactic position. Subjects of most types of temporally/episodically-subordinated clauses are Genitive.

Adverbially-subordinated clauses are recursively embedded in a main clause, and consist of several subtypes with different types of head, different preferred syntactic positions, and different subordinate/main clause coreferentiality constraints. Generally speaking, subordinate clause subjects which are syntactically ellipsed tend strongly to be coreferential with main clause subjects, particularly when the subordinate clause follows the higher clause subject in the surface syntax (i.e., when it is “surface embedded”). However, subordinate/main clause subject-coreferentiality may be overridden either by overt subject use (with subordinate clause subjects once again in the Genitive) or via “disjunct” cross-clause coreference-constraining marking, or both.

Complement clauses are clearly identifiable as a structural type or types, but are relatively less important than other dependent clause types in the overall organization of Galo grammar. “Direct contents” complement clauses of cognition and locution are not overtly marked for dependency, but are identifiable in terms of the structure of the overall clause in which they appear. Modal complements of purpose and intention are marked by a complementizing predicate suffix.

Nominalized clauses are rich in Galo as in most Tibeto-Burman languages, and exhibit the usual TB nominalization-relativization syncretism. Four “primary” nominalization/relativization types are found, some of which are polyfunctional: 1) Subject 2) Realis event (action)/Non-subject 3) Irrealis event (action)/Non-subject 4) Locative/Oblique. Each may occur in headless, externally-headed and internally-headed relative clause types, although the internally-headed type exhibits certain structural restrictions (on all four nominalization types). Relativization may be on any major main clause constituent, including all core arguments and most types of oblique; relativization on phrase-internal constituents (such as possessors) is not generally possible. In addition to primary nominalizations/relativizations, a wide variety of “secondary” nominalizers

exist which form nominalizations/relativizations on concepts such as “time when *pred*”, “manner of *pred*” and “partner in *pred*”. Secondary nominalizations/relativizations participate in most, though not all, of the constructions available to primary nominalizations/relativizations. Nominalized clause subjects are always in the Genitive.

In addition to basic nominalizing/relativizing functions, primary nominalizations (not secondary nominalizations) may also occur in clausal nominalizations. In clausal nominalizations, which may be final, backgrounding, or framing (=recapitulative, head-tail linking), the nominalization is not relativized from any constituent, but instead stands alone in a main-clause-like structure and function, with an unmarked (Nominative) subject, and with its predicate potentially inflected. Clausal nominalizations generally convey a reified, fact-like information status value, and in some uses also interact with “conjunct/disjunct” subject person-sensitive aspect-marking.

1.2.10.1.6. Relational and referential marking

Subject (S/A alignment) is a clearly identifiable grammatical relation. Object (O, or O/E alignment) is a potentially supported grammatical relation, but is not as well-defined. Main clause subjects are unmarked (Nominative); dependent clause subjects are usually Genitive (see §1.2.10.1.5). O arguments of both main and dependent clauses are marked Accusative if definite, referential, and low in animacy. High animates, including proper names and other definite NPs referring to known humans, are marked Non-agentive when in O function. A wide variety of noun phrase types take Dative or Locative marking; Dative/Locative marked noun phrases sometimes have core (E) argument status, and other times seemingly have ~~non-core~~ oblique (non-core) status. The core or oblique status of a noun phrase is most effectively tested via accessibility to non-subject core versus oblique nominalization/relativization. Genitive, Accusative, Dative and Locative marking is primarily accomplished via a set of simplex, monosyllabic phrasal postpositions/enclitics. Additional oblique noun phrases realizing a wide variety of semantic roles are marked via disyllabic, usually complex and/or fused postpositions which are likely to have occurred at one time as sequences of case markers/postpositions (for example, Ablative/Partitive *lokə* from **lo* ‘LOC’ + **kə* ‘GEN’). Common noun phrases are marked for referential status by articles, including an individuator and topic marker (roughly but not completely corresponding to indefinite and definite NP-marking functions), as well as by demonstratives and by zero.

1.2.10.2. Notable linguistic features

1.2.10.2.1. Disconnect between “grammatical” and “phonological” words

In Galo, it is not always possible to clearly or consistently correlate grammatical and phonological criteria for “word”-hood. That is, although we can *independently* develop clear and consistent grammatical and phonological criteria for recognizing a unit “word”, these may, or may not, converge on identification of *the same* unit. Generally speaking, grammatical word-hood is defined in terms of a composition of grammatical head plus any immediate morphological (grammatical) dependents. Phonological word-hood is in turn defined in terms of a variety of phenomena, including prosodic specifications (single metrical foot with single stress, single surface TBU with single tonal value and contour...) segmental specifications (boundary effects, internal assimilation sandhi, external phonotactics...) and so on. Following these definitions, grammatical and phonological words *may* line up; for example, *takək* ‘body dirt’ is “a word” according to both grammatical and phonological criteria. Or, one grammatical word may contain two (or more) phonological words: *záp-làk-dùu-kú* ‘talk-CAP-IPFV-CMPL’ ‘starting to be able to talk’ is realized *zablâk duukù* (note the operation of regressive voicing assimilation across the first, phonological-word-internal, suffix boundary, but not the second, cross-phonological-word, suffix boundary). On the other hand, one phonological word may contain two grammatical words. Two monosyllabic postpositions, or a postposition plus a particle, which occur in immediate sequence and which constitute a well-formed metrical foot may be realized as a single phonological word, as *bə = cìn* ‘DAT=ADD’, which may be realized *bəcìn*. For further discussion, see §4.1.

1.2.10.2.2. “Double case” and “functor fusion”

As was mentioned in §1.2.10.1.6, it is common to find usually disyllabic sequences in Galo which either reflect a sequence of case markers/postpositions which is compositional/productive in modern Galo, or which (probably more often) reflects an earlier compositionality which has since fused into an indivisible unit. An example of a modern compositional case sequence is *əəm = nə* ‘ACC=NAGT’, a sequence which marks both O argument NPs and Irrealis temporal phrases (i.e., ‘at lunchtime tomorrow’). Compositionality is certain in this case since the Non-agentive marker is not obligatory,

but adds a basically intensifying value to the expression. An example of a modern disyllabic postposition which *cannot* be analysed as compositional in modern Galo (but which almost certainly was compositional at an earlier stage) is *lokə* ‘ABL; PART’.

Deriving almost certainly from the sequence **lo* ‘LOC’ + **kə* ‘GEN’, **kə* no longer occurs as a phrase-level genitive enclitic in Galo, having seemingly lenited to form the current Genitive enclitic *gə*. An earlier Genitive **kə* is reflected in the Galo pronominal Genitive suffix *-kə* ‘GEN’, as in *ŋó-kə* ‘1.SG-GEN’ ‘my’, as well as in the general Pagro Mising (pronominal and noun phrasal) Genitive (*k*)*kə*.

However, it is also possible to find cases which are difficult to clearly identify as compositional or fused. An example is *lobə* ‘LMT.RANGE’ which has the basic Dumessive sense ‘until (a ~~give~~ point within a range)’, as in *luɣɲɪ lobə* ‘next.year LMT.RANGE’ ‘until next year’. Clearly deriving from the simplex postpositions *lo* ‘LOC’ and *bə* ‘DAT’, and deriving its semantic value directly from the semantic values of its formatives (*lo* ‘LOC’ can mark future/irrealis time nouns, and *bə* ‘DAT’ often marks Extensive noun phrases as a limit in quantity, scope or range), there would appear to be a good argument for continuing compositionality. Furthermore, the Dative postposition could be removed, leaving *luɣɲɪ = lo* ‘next.year=LOC’ ‘(in) next year’, which would seemingly clinch the argument. However, it is *also* possible to mark *luɣɲɪ* ‘next year’ in the Non-agentive *nə* (in an irrealis punctual temporal marking sense). In *this* case, it is no longer possible to subsequently mark the expression in *lo* ‘LOC’ **luɣɲɪ = nə = lo* ‘next.year=IRR.TMP.PUNC=LOC’. However, it *is* possible to use the range-limiting postposition: *luɣɲɪ = nə = lobə* ‘next.year=IRR.TMP.PUNC=LMT.RANGE’ ‘until exactly next year’. Thus, it would seem that in at least some if not all functions, *lobə* ‘LMT.RANGE’ must be analysed as a fused unit; this and all similar phenomena must be approached and tested on a case-by-case basis.

lobə ‘LMT.RANGE’ illustrates a case of earlier postposition + postposition composition. Additional examples of seeming “functor fusion” with different compositional values include *gobə* ‘LMT.UNIT’ (< *go* ‘IND’ + *bə* ‘DAT’, article + postposition), *bolə* ‘DST.LOC.DOWN’ (< *bə* ‘DST.DOWN’ + *lo* ‘LOC’, demonstrative +

postposition), *bəree* ‘CJEC’ (< *bə* ‘DAT’ + *ree* ‘PQ’, postposition + particle) and *-gərə* ‘ACNC’ (< *-gə* ‘COMT’ (?) + *-rə* ‘IRR’ (predicate derivation + predicate inflection). Many more such examples will be adduced in passing throughout this work.

1.2.10.2.3. Classification

Galo exploits the semantics of classification in an unusually wide range of grammatical domains. In addition to a large system of numeral classifiers, which combine with both numerals and certain types of adjective to form enumerative and adjectival classifier expressions – Galo makes extensive use of a classificatory “generic-specific” template in word- and phrase-formation. For example, in *lɪpùm* ‘stone pile fish trap’, the initial formative root *lɪ-* ‘stone’ denotes a class of entity – things to do with stones – and *pùm-* ‘pile’ narrows the denotation to a specific class member. Often, the second formative may be repeated in a “root-pivotal” construction to form the classificatory head of a second term, as *lɪ-pùm = pùm-nì* ‘stone-**pile**=pile-two’ ‘two stone piles’. The classificatory principle applies at two levels in such constructions. On the *root* level, *lɪ-* ‘stone’ and *pùm-* ‘pile’ each stand as generic initial formatives within the grammatical words *lɪpùm* ‘stone pile’ and *pumnì* ‘two piles’, while *pùm-* ‘pile’ and *nì-* ‘two’ stand as specific final formatives. On the *word* level, *lɪpùm* ‘stone pile fish trap’ stands as a generic formative, denoting the concept of a type of entity in the world, while *pumnì* ‘two piles’ stands as a specific formative, fixing the overall reference in terms of a set of individuals. In many such types of word- and phrase-formation in Galo, the semantic concept of “classification” describes the underlying structure of linear arrangements more insightfully than would a more generalized, semantically-vague concept of “modification”

1.2.10.2.4. Use of noun phrase relational/case markers in clause-subordination

As in many other Tibeto-Burman languages, Galo makes use of noun phrase relational/case markers in clause-subordination. In certain types of clause-subordination, such as framing nominalizations (=tail-head linkages), the clause is quite clearly nominalized, and bears a noun phrase Topic marker in conjunction with its occurrence in

a pre-clausal “topic slot” in the syntax; such cases are perhaps unremarkable. In other types of clause-subordination, such as temporal/episodic subordination (*when John arrived...*), the clause is fully finite/inflected (in non-perfective aspects only), but is marked by a subordinating posposition such as *lo* ‘LOC’, and occurs in the syntactic position normally reserved for temporal or locative noun phrases. In most subtypes of temporal/episodic subordination, the subject is obligatorily in the Genitive; however, the predicate is *not* nominalized at the word-level, and there are no other indications of a nominalization-like clause structure. In most cases of temporal/episodic clause-subordination, the semantic value of the subordinating postposition is identical, or at least quite close, to its semantic value in oblique noun phrase-marking. The oblique noun phrase-marking/clause-subordinating syncretism even extends to seemingly idiosyncratic conventions which might not have been expected to necessarily occur in all available environments. For example, as was also mentioned in §1.2.10.2.2, the “double case” sequence $\partial\partial m = n\acute{e}$ ‘ACC=NAGT’ marks an O argument under a more or less intensive (highly affected as a participant, or well-individuated as a referent) construal. In temporal noun phrase marking, the same sequence $\partial\partial m = n\acute{e}$ ‘ACC=NAGT’ marks an Irrealis time nominal as highly precise in reference, as “in exactly next year (at no other time)”. Again, the same sequence marks an Irrealis/Hypothetical clause-subordination, as $n\acute{o}$ $c\grave{a}a-r\acute{o} = \partial\partial m = n\acute{e}$ ‘2.SG ascend-IRR=ACC=NAGT’ ‘right when/if you go up...’. In all three cases, use of the Non-agentive marker is optional, and serves to intensify the reference.

1.2.10.2.5. Predicate derivations

Galo has an extremely large and productive set (more than 320 members) of predicate derivations, or bound predicate stem-expanding formatives. Possibly deriving diachronically from proto-verb-serialization at the VP or sentence level, the modern system of Galo predicate derivations is entirely predicate word-internal. Applying with leftward scope over a predicate stem in an only partially-variable order (due to semantic scope restrictions), predicate derivations perform a wide array of modifying functions, listed in §1.2.10.1.4 above. The wide availability of predicate derivations has a profound effect on the organization of Galo grammar. Many functions coded by auxiliary verbs or serial verbs in other languages (such as modality, including concepts such as *want/need/must*, or *try to*) are handled by predicate derivations in Galo. In addition, many complex event-construals which are lexicalized as single words in other languages, such

as *kill* (to *cause* someone to *die*) are handled compositionally in Galo, as *mò-kə̀* ‘make-DEAD’ (reflecting the composition VROOT-PDER). Also many abstract concepts such as *time* or *manner* are not lexicalized in Galo, but instead are handled by nominalizing predicate derivations, as *mèn-kór* ‘speak-NZR:MANNER’ ‘way of talking’. Accordingly, it is not possible in Galo to form periphrastic expressions such as ‘their ways of talking’, in which ‘way’ and ‘talk’ can be independently modified; rather, the composition is entirely word-internal.

1.2.11. Number of speakers and degree of endangerment

By comparison with many languages, both in North-East India and elsewhere in the world, Galo’s degree of endangerment is not high. Access to the Galo area, and indeed most areas of Arunachal Pradesh, remains tightly restricted by the Government of India; and since the Galo remain overwhelmingly dominant in their area, their language is spoken daily and learned as a first language by a majority of children (though certainly not by all). No reliable survey on the number of Galo speakers (as opposed to Galo tribespeople, who do not always speak Galo) has to date been conducted. The 1981 Census of India put the number of “Adi Gallong” tribespeople at 8,999 (Hussain 1995). However, the 1991 census puts the figure at a bursting 45,616! This increase is clearly not solely due to population growth, but rather reflects the extreme difficulties of demarcating tribal and linguistic categories in North-East India, and the absence of any effective or commonly agreed-upon means for doing so. Depending on where lines are drawn, based on the current population of the “scheduled tribes” of West Siang district, 84,922 (West Siang District Economics and Statistics Department 2004) – the number of Galo speakers may be estimated at around 30,000-40,000 (or more, depending on where lines are drawn) with at least half of them being speakers of some form of Lare. These are relatively healthy-looking numbers when one considers that historically, the number of Galo speakers must have been much lower.

However, changes in this comfortable status quo are already apparent. With improvements in communication, economic opportunities, and the reach of regional, national and even international media into Arunachal Pradesh, Galo are increasingly relying on more widely spoken Indo-European languages – usually Hindi and Assamese, but also English – when leaving their immediate home surroundings. Families who can afford to invariably send their children away to boarding schools at an early age, since good quality government schools are not found in most Arunachali localities. These often

religiously-oriented boarding schools often actively discourage use of a child's native language (sometimes punishing those who speak their native language with their peers), with the result that children attending such boarding schools end up spending the bulk of their childhood speaking Hindi; naturally, such children will tend to control this language better than their "native" language by the time they are young adults. Complex technological or novel objects are invariably named in English or Hindi rather than in Galo. In certain Assamese contact areas in the foothills, loanword use is often extreme, to the point where native grammar has come to largely provide a partial shell for an almost wholly borrowed lexicon.

While this is not an unusual phenomenon among the tribal languages of India (and elsewhere), it is also perhaps not desirable from the point of view of the preservation of North-East Indian cultural heritage, and the preservation and vibrancy of Galo culture in particular. The structures of Galo and Indo-European grammars are vastly different, and are in many important ways incompatible; often, to adopt a borrowed structure is not to *alternate* with the native structure, but rather to *replace* it.

To take a simple example, it is practically impossible to integrate borrowed verb roots into the Galo system of morphological verb stem expansions (i.e. predicate derivations), due to differences in the semantic and functional ranges handled lexically and derivationally in Galo and in Indo-European languages. English *check* (VT.) – a frequently borrowed word – lexically incorporates the 'Tentative' aspect for which an independent native form *-káa* 'TENT' exists in Galo (thus, English *check* is most closely translated by the bi-morphemic Galo expression *káa-káa* 'look-TENT' (§11.2.3.1)). With aspect already lexically encoded by the loanword, native stem-expanding aspect markers not only are not used, they *cannot* be used: **cék-káa* 'check-TENT' is unacceptable. In this sense, use of a loaned verb does not simply substitute one word for another – a relatively benign and common enough thing in any language – it actually *precludes* use of an entire swathe of Galo grammar. To take a different sort of example, the relatively low salience and variability of tones in Galo means that many young people with limited exposure to their native language do not learn the tone system perfectly. Such speakers have been observed to deliberately and consciously use loanwords to replace one or more terms which are homophonous to them, but which in their parents' speech are minimal pairs on tone. The speech of some young Galo in high Indic contact areas may be described as almost completely atonal and, in this as well as in other ways, partially unintelligible unless loanwords are used.

Historically, the Galo are now at a turning point. There is no shortage of expert speakers in every Galo-dominated area, and given the relatively large number of Galo people and tight integration of their communities, there is every hope that the Galo language will continue to be spoken far into the future. However, making this hope a reality will require attention and efforts which must begin to be made today. This grammar, and the accompanying dictionary still in preparation, represent an initial step in the development of materials which will aid in preservation and maintenance of the Galo language. But to ensure the future of the language, we need writing conventions, textbooks, literature, websites, audiovisual materials, and above all, a broad awareness among young Galo of what is actually at stake – in the case of Galo, it is nothing less than the survival and vibrancy of a unique and complex language and culture which dates back hundreds if not thousands of years – and which could be substantially and irretrievably altered, if not lost, at the mere drop of a historical hat.

1.3. Previous studies of the Galo and their language

As already noted, this is the first large-scale study of Galo grammar yet attempted. In fact, very little serious linguistic or anthropological work of any scale has yet been conducted in Arunachal Pradesh. A more complete review of the major works attempted over the last 150 years on Tani languages more generally may be found in Sun (1993:§1.4). Here we review only those works with direct reference to Galo.

An Introduction to the Gallong Language by Das Gupta (1963) appears to have been written for the benefit of non-local Indian Government administrators who were posted in the Galo area at that time. As a book explicitly written for “everyday use”, it has proven to be of extremely limited value to linguists (to say nothing of the Galo people themselves). This is due as much to the almost innumerable errors of transcription, grammaticality, translation, and interpretation (often enough, all four) which are found in nearly every sentence example presented as it is to the author’s consciously haphazard admixture of at least three phonologically and grammatically divergent Galo dialects throughout the work. In short, it is an almost completely unreliable work both from the point of view of data and analysis, and has had no discernible impact on local development of the Galo language. Nevertheless, it has a certain historical value as the first ever published work (so far as I am aware) on Galo, and may for all I know have in fact served the specific community and purpose for which it was designed well enough.

Geoffrey Marrison, a missionary linguist who made a brief early 1960's stint in the former Sadiya mission of Upper Assam (later submerged by the rampaging Brahmaputra river), published a comparative wordlist in the "Adi" languages Gallong (Galo), Minyong, Padam and Miri (Mising) and the "Dafla" languages Tagen (Tagin), Yano, Palin and Apatani (Marrison 1988). Overall, his list is of surprisingly poor quality, and contains almost as many mistranscriptions as there are words. Particularly egregious among these are non-representation of contrastive vowel length (in word-initial as well as word-final syllables), merging of vowel qualities (/e/ and /ə/ are both written *e* and /i/ and /ɪ/ are both written *i*, which follows the general orthographic practice of Tani speakers themselves and suggests that he had consultants produce *written* rather than *spoken* translations of his wordlists), incorporation of grammatical morphemes into some purported roots, and representation of what seems almost certain to have been dialect mixture in Galo at least.²¹ Nevertheless, the article served a purpose in roughly demonstrating a close affinity among the Tani languages in an era prior to the infinitely more reliable work of Tian-Shin Jackson Sun (see below).

François Jacquesson, one of the longest-serving and most accomplished linguists ever to work in North-East India, included Galo among several languages treated in two well known papers on the comparative morphosyntax of North-East Indian Tibeto-Burman languages (Jacquesson 1996; Jacquesson 2001). While the treatments were necessarily limited in scope due to the survey-like nature of these works, it would appear that the Galo data and analysis are in the main reliable (with some possible exceptions discussed in §3.3 and §16.3.2.1).

The best treatment of Galo thus far was produced by the German scholar Alfons Weidert, who collected a wordlist in what was in the main a variety of Pugo Galo (although with some corruptions; see below),²² as well as in an unidentified dialect of Apatani, while researching the topic of tone in Tibeto-Burman languages at a Christian Bible College in Shillong, Meghalaya (Weidert 1987). Unlike previous researchers, Weidert consistently and, in my assessment, almost always correctly, transcribed all contrastive vowel qualities, tones, and word-internal vowel length. Due to the survey-like nature of his work, however (and, presumably, a limited timeframe), his data primarily

²¹ Admittedly, though, the latter is difficult to assess, since he provides no information regarding his consultants, their backgrounds, or the manner in which the data was obtained. If one is to surmise, it would appear that his consultant(s) hailed from among the *taïi(podia)* Galo – the majority of his forms correspond most closely to this dialect – and lived among the Padam and Mising, who are overwhelmingly dominant in the greater Sadiya region, long enough to have adopted some of their forms.

²² His Galo consultant is reported to have hailed from "Along village...of the Subansiri district" (sic – Along is the district headquarters of and largest town in the West Siang district, and had been since 1980).

reflected single-word elicitations and as such lacked the insight into underlying representations which can only be obtained in Galo inductively, through comprehension of the workings of Galo morphophonology. For example, underlying word-final vowel length is not transcribed by Weidert; this is because word-final vowel length is only discernible under enclisis, which is in turn only available at the phrase level; in isolation, word-final vowel length in Galo is phonetically neutralized (§4.1.4.4). Similarly, Weidert mistakenly assigned the three phonetic tones which he transcribed an equal tonemic status, apparently lacking an understanding of the sandhi-like behaviour emerging from the interaction of underlying morpheme tones in different word types, syllable shapes and contexts (§4.1.3.2). Also, certain (but not all) underlyingly voiceless finals were transcribed as voiced in Weidert's data; these forms correctly reflect the outcome of regressive voice assimilation rules under suffixation and enclisis, but as underlying forms are incorrect. Furthermore, due probably to his limited exposure to Galo dialects, Weidert incorrectly found free variation among [s] and [h] initials; these are in fact separate reflexes of Proto-Galo *ɕ- which are in complementary distribution among native lexemes in every Galo dialect I have yet encountered, albeit in different ways. Although Weidert couldn't have known this fact, he might perhaps have been more careful in the manner of his elicitation. The fact is that most Galo are able to control more than one dialect, and when freely alternating forms are provided by consultants, it is usually reflective not of free variation within a single dialect, but rather of cross-dialectal variation of which they happen to be aware; this was the case for Weidert's "/s ~ h/" initial (§3.2.4). Finally, and this moves somewhat beyond the Galo data, Weidert perhaps overambitiously chose morphologically *non-corresponding terms* to compare among his Galo and Apatani data, leading him to arrive at an absurdly large number of *nine tone categories*; such a figure could hardly be thought to reflect actual historical splits in the Tani languages, which are, all things considered, relatively conservative and slow-moving in terms of their historical phonology (a fact which should have been clear to Weidert, since he knew the segmental phonology of most of the Tibeto-Burman languages unusually well). When Post (2005) compared a more tightly constrained list of *fully corresponding* Apatani and Galo terms, a much more realistic-seeming set of two tone categories emerged, with very few exceptions; it is certain that Weidert would have easily discovered these if he had taken a more disciplined approach, since his core data were more than adequate to the task. These weaknesses notwithstanding, Weidert's work is among the five or six most reliable studies ever produced on Tani languages, and served

an important practical purpose as a complement to the core sources used by Sun in his groundbreaking (1993b) work.

Tian-Shin Jackson Sun, for reasons of inaccessibility, was unable to obtain reliable data of sufficient scale for any dialect of Galo, and so could not include Galo data among the core materials for his (1993b) magnum opus *A Historical and Comparative Study of the Tani (Mirish) Branch of Tibeto-Burman*. Nevertheless, he stands unchallenged as the founding father of Tani linguistic studies, and thereby deserves a special mention here. His work has served not only to form the foundation of Tani historical and comparative studies – on which I will build but only slightly here – it did so with uncompromising scholarly excellence, producing results which have held up to every possible scrutiny (except – and *only* except – when the data available to him, and to every other linguist in the world at that time, were inadequate to the task). It is my privilege to follow in the footsteps of such a masterful scholar, and my truly great fortune as a grammar-writer to be able to stand on such solidly-prepared historical-comparative ground.

Very rarely, a few mentions of Galo have popped up in works treating broader subjects. The *Ethnologue* (Gordon 2005) contains a brief typological profile based on unnamed sources, about 50% of which fails to match my data and seems to me to be in serious error.²³ LaPolla (1994) includes Galo among the languages surveyed in his well-known paper on parallel grammaticalization in Tibeto-Burman. In that paper, it is in my view dubiously reported that “Kombong Galo” has Anti-Ergative marking (in LaPolla’s sense; see §14.3.1), although since the data source is not cited it cannot be verified.

Locally, a small handful of Galo have begun efforts to represent the phonology, lexicon and grammar of their language, with varying levels of success. The Itanagar-based Galo scholar Toni Koyu has led an admirable attempt to develop a wholly indigenous script “Tani Lipi”, which is based primarily on Galo phonology but is claimed to represent the phonologies of all Tani languages. His efforts are supported by many Galo, but due largely to practical difficulties associated with learning and implementation, his script has not achieved broad usage as of this writing. Duri Taipodia, a poet and singer

²³ The description is short and concise enough to enable us to address its most serious errors: 1) “genitives after noun heads”: if “genitive” means “genitive phrase”, genitives are overwhelmingly *pre*-head in my data (§6.1.2.2.3) 2) “relatives after noun heads or without”: if “relative” means “relative clause”, *pre*-head relatives are statistically more common in my data, and post-head relatives may in fact be better analysed as internally-headed (§15.3.1.3) 3) “question word initial”: if “question word” indicates a “question marker”, these are obligatorily clause-final in my data; if “question word” indicates an “interrogative pronoun”, these typically occur in-situ, and/or in a focus construction (potentially preceded by other syntactic constituents) (§9.5.1) 4) “maximum prefixes 2”: there is at most one (usually non-productive) prefix on any Galo word in my data (§5.3.1.1) 5) “nontonal” is wildly wrong as an overall description of Galo, as has been clear since the well-known work of Weidert (1987) (§4.1.3.2).

residing in Likabali town and a native speaker of the Taipodia dialect, has produced an orthography and a small primer for use in local schools (with a grammar and dictionary reportedly in the works). He may be credited for making efforts to represent the vowels /i/ and /ə/ (using the symbols ɪ and ɛ respectively), and for representing vowel length in non-word-final syllables, both of which are usually ignored by casual writers of Galo. Nevertheless, the prospects of his work attaining any reasonable stage of completeness over the coming years are uncertain.

The capable Shillong-based Galo Reverend Gode Doke (*goodəə dokèè*) has, under the auspices of the Galo Baptist Christian Council, (GBCC) (partnering with the Bible Society of India (BSI) and the Christian missionary organization Summer Institute of Linguistics (SIL)), recently developed a Roman-based Galo script and a small number of school primers in the context of an ongoing Bible translation project. While the script is admirable in its representation of vowels *i* and *ə* (using symbols *ü* and *ě* respectively), the SIL operative(s) assigned to the task of advising the GBCC do not appear to have conducted a full study of Galo phonology, and have accordingly failed to offer the expert advice on some of the more difficult aspects of phonological representation (such as tonality, length contrasts, underlying versus surface aspects of phonological form, consistent representation of word boundaries, etc.) that would have justified their work with the Galo from a purely linguistic perspective. Beyond these technical concerns, however, there would seem to be larger and more worrisome social, cultural and political problems associated with sectarian sponsorship and facilitation of language development programs. The fact is that the GBCC/BSI/SIL project is *not* community-authorized, and in fact stands in open opposition to community-authorized, non-sectarian, literacy programs. Not in a position to conduct proper socio-linguistic surveys within Arunachal Pradesh, SIL is unable to justify its choice of “partners” in terms of the actual needs or desires of the broader community, and potential sources of intra-community conflict are thus not recognized, or if they are, they may be disregarded. Being a missionary organization, the ultimate goal of SIL is of course conversion of indigenous peoples to Christianity, and, in turn, encouragement of the obsolescence of traditional belief systems and associated cultural practices. Performing under-researched and under-committed linguistic work in partnership with explicitly sectarian organizations potentially threatens social cohesion and quite likely under-serves the actual literacy needs of the public; at the same time, it could be seen to accord quite well with SIL’s ultimate sectarian goals. Conversations with SIL’s area directors on behalf of the Galo Welfare Society (GWS) – the principal non-sectarian Galo representative body – have for now led to a moratorium on such activities as the GWS begins to mount its own, community-authorized and state-supported literacy

program. However, a full and permanent resolution remains elusive at the present time of writing.

Finally, a group of concerned Galo based in *dípó* (Dipa) village, *l̥h̥kàa-balíi* (Likabali) town and in the Arunachali capital, Itanagar, have with the assistance of this author developed a script which I believe to represent Galo phonology with sufficient accuracy for the first time, and which has recently been officially adopted (and further developed) by the Galo Language Development Committee of the Galo Welfare Society – the principal (non-sectarian, non-governmental) representative group of the Galo people. Some further comments on this topic are presented in §17.

1.4. Theoretical framework

The theoretical framework adopted in this description may be described as a hybrid of the Basic Linguistic Theory generally associated with R.M.W. Dixon and his colleagues at the Research Centre for Linguistic Typology (Dixon in preparation), and the functional-typological, diachrony-conscious approach developed in particular by Talmy Givón at the University of Oregon (Givón 1979; Givón 1995; Givón 2001 [1984]). These theoretical positions are in turn reinforced by the arealist approach to Mainland South-East Asian languages (and particularly, those of Tibeto-Burman stock) pioneered by James Matisoff at the University of California at Berkeley, and followed by his very many excellent and well-known students. All told, I aim to provide structural and functional accounts of the categories and relations which I believe are actively controlled by a native Galo speaker. I also aim to view these categories and relations in terms of those already identified in many other languages of the world, and in South-East Asia in particular; where possible, terminology which is already in use and generally-accepted will be adopted in this work. Where Galo seems to exhibit some unique, rarely-attested, or less well-described linguistic feature, novel terms will be judiciously introduced. In all cases, terminology used herein will be defined and justified principally on the basis of natural Galo data, in which “natural” is defined as context-inherent, non-elicited and non-translated from a second language.

However, I also view the structure of a human language grammar not as the discrete, bounded entity belied by the nature of a book, but rather as a dynamic system, part form, part process, always open-ended, and subject to perpetual evolution and change. Where relevant, and where possible, I will include references to the historical processes

which can help provide a more meaningful account of – and in many ways, to a large extent *explain* – the synchronic distribution of forms to be discussed.

Generally speaking, I eschew the often effervescent, data-strangling formalisms associated with the Chomskyan tradition, except when these are useful as a means of organizing and presenting data which might otherwise appear unwieldy and abstract (particularly in the description and notation of phonological processes). It is a sad fact of the late 20th century that much of the language description produced under the influence of Chomsky and his acolytes has already been left to the side, abandoned as much by the perpetual revisions and reframings of the theory they were based on as by later generations of scholars who found the treatments dated, obscure, and in short impossible to comprehend, much less use. If a professional linguist cannot comprehend a description of some aspect of a language which was written only fifteen years ago, of what value could it possibly be to anyone else? While no descriptive grammar can have an infinite shelf-life, we must do our best to aim at posterity, and above all, to render the data as accessible as possible to future investigators.

1.5. Fieldwork conditions and data collected

Data for the present description is primarily of three kinds: 1) elicited and naturally-occurring texts (both single-speaker and multi-speaker; see Appendix D) 2) entries from observational field logs 3) elicitations from native speakers in the context of text-translation and analysis (Figure 1.13). Pure elicitations, in the sense of direct, context-free translations from a lingua franca (usually English, but also Assamese), were also conducted in the course of my fieldwork for exploratory purposes, but are generally excluded from the database used for this description. For description of data sourcing in examples used in this grammar, see §1.6.5.

I collected my primary data during three field trips, the first from July 2004-March 2005 (nine months), the second from February 2006-June 2006 (four months), and the third during February 2007 (less than one month). During these trips, my primary field sites were at *dipó* (Dipa) and *hilí* (Sili) villages, about 10 and 15 kilometres to the east of *líkàa-balí* (Likabali) town respectively, in the lower West Siang district of Arunachal Pradesh, at *líkàa-balí* town itself, and at *daarí* (Daring) village, about 60 kilometres to the north of the Assam border (see Figure 1.10, p. 51). Additional fieldwork was conducted at *baahár* (Basar) town, about fifteen kilometres to the north of *daarí*, at



Figure 1.13 – Fieldwork with *igò ribàa*, *dipó* village

aalóo (Along) town, the West Siang district headquarters and centre of the Pugo dialect area, *gensii* (Gensi) town in the centre of the *gensii* dialect area (a Hills Miri contact region) and *l̥h̥rò-moobáa* (Liro Moba) village, to the extreme north-west in the Tagin contact area. Supplementary data were also obtained from Galo residents of Guwahati, Assam, Itanagar, Arunachal Pradesh, and Delhi, all of which are well outside the traditional Galo area.

The principal villages in which I worked, *dipó*, *hil̥h̥* and *daar̥h̥*, are inhabited primarily by speakers of some variety of *lar̥è* Galo. In *dipó* and *hil̥h̥* we find a handful of *puugóo* Galo or speakers of other Galo dialects or other Tani languages (usually, women from distant clans who have married men of the village – a normal occurrence in strictly exogamous, traditionally patrilinear Galo society) as well as a few Nepali or Bihari shopkeepers and their families and the occasional Naga missionary. *hil̥h̥* village was established in 1962 by emigrants from *daar̥h̥*, closely followed by emigrants from the nearby *z̥irdóo* village whose dialect differs from the variety of *lar̥è* described here. I have not visited *z̥irdóo* village myself, and the variety of *z̥irdóo* referenced at several points in this grammar refers to the speech of emigrants from *z̥irdóo* village encountered in *hil̥h̥*. *dipó* village is populated mainly by emigrants of *daar̥h̥* and *baahár* and their children,

although a handful of Galo from other areas may also be found. In general, I found the variety of *larèe* spoken in *dípó* to be relatively more uniform than that of *hilí*, in which some *zirdóo* ~ *larèe* dialect mixing would seem to be occurring, particularly in the speech of younger residents. I also spent about six weeks in *hikàa-balí*, a melting pot of *larèe* subdialects. Here again I worked principally with emigrants of *daarí*, but also with speakers of *taíí(podia)*, *gensii*, and *karkóo* dialects. The *taíí(podia)* are said to be native to the plains-bordering *hikàa-balí* area (and are, legendarily perhaps, thought to have originally been (Ahom) Tai), while the *gensii* are from the west, bordering Hills Miri and possibly Nyishi, and the *karkóo* from the remote north, bordering the highlands and, in places, some regions inhabited by Bori and Bokar tribespeople. *daarí* is an old and relatively large Galo village, is populated by speakers of an almost uniform variety of *larèe* and provides, in short, the benchmark for this description. In Guwahati, Assam, I worked with some *puugóo* Galo speakers, who were students at local universities there. These data were later used to corroborate the Galo data reported by Weidert (1987; see §1.3), with positive results. Additional *puugóo*, *gensii* and *karkóo* data were collected on my behalf in *aalóo*, *gensii* and *híró-moobáa* respectively by Palash Nath, a Gauhati University MA student in linguistics who was trained for the purpose. This was due to the fact that at the time, I was unable to obtain official permission to travel to those areas.

I wish to emphasize here that two distinct approaches were possible in the preparation of this thesis. Both were considered, and one was rejected. The first possible approach would have been to accept all varieties of *larèe* speech equally as a proper object of study, and to make only marginal notes when significant differences occurred. The second would have been to exclude all varieties except one, and marginalize the others for the purpose of this study. I chose the second approach, for the simple reason that differences among *larèe* subdialects are significant enough on phonological, lexical, and grammatical levels that a truly adequate comprehension of them would require a full-length study in its own right, and would well exceed the scope of this thesis. Whether it will be possible to expand this work into a more inclusive format in the future remains to be seen; I do, of course, have hopes that it will.

Related to this is the question of consultants. Many younger Galo, who are more mobile than their parents were in their youth and frequently live in multi-dialectal villages and towns, speak what is effectively a mixed and highly variable form of Lare. For such speakers, free variation among forms sometimes occurs which relates historically not to free variation within a single dialect, but rather to the differences between two subdialects (again, see §1.3). Although there is every possibility that a “standard dialect” will naturally emerge from this melting pot environment over the coming decades, the present situation would appear far too flexible to effectively contain. I therefore made the determination to base this description solely on data obtained from expert older (usually above 40 y.o.) native speakers of a *single subdialect*, limiting my consultations with younger speakers to matters of translation which were more easily controlled.

Text and conversation data were collected primarily on a Sony TCM-5000EV standard cassette recorder, using a high-quality Rode NT3 directional cardioid microphone. Some conversation data, and also some phonetic elicitation data, were recorded on a Sony ICD-S7 digital MP3 recorder with a relatively high 33.1 MHz sampling rate, but which of course recorded compressed sound files which are not adequate for archival or, in many cases, acoustic analysis purposes. A Sony ECM-T145 electret condenser (lapel) microphone was usually used in conjunction with this. Some material for phonetic analysis were also recorded directly onto an IBM laptop computer, using the aforementioned Rode NT3 microphone, at a 44.1 MHz sampling rate setting.

1.6. Conventions

As I have already mentioned, my hope is to make use of the most widely-accepted terminology and conventions of the field of descriptive linguistics whenever possible; unfortunately, it is a fact of language description that this is *not* always possible. There is far more diversity in human language than our present methods are able to capture cleanly with a single uniform formalism, and every language presents new challenges to analysis, and, equally, to representation. This section describes some of the less standard conventions adopted in this work, or those which may otherwise not be self-explanatory. Some of these points are mentioned in passing in the sections where they are most relevant below; this section is designed to serve as a general reference.

1.6.1. Structure of examples

All language data cited in running text are in *italics*. By convention, data containing complex morphology are always parsed in-line, followed by a ‘gloss’ and ‘translation’; for example, *ŋó bɛ̃=əəm cèn-dùu* ‘1.SG 3.SG-ACC know-IPFV’ ‘I know him’. More complex data are presented in numbered four-line sequence. The first (“surface”) line represents an approximation of the phonetic realization, following application of phonological rules such as assimilation sandhi and tone spreading. The second (“parse”) line represents the “underlying” forms of morphemes, and shows their division into grammatical words, clitics and affixes. The third “gloss” line labels each morpheme and the fourth line presents an approximate English translation (1).

- (1) *ŋó biəm cendù.*
ŋó bɛ̃=əəm cèn-dùu
1.SG 3.SG-ACC know-IPFV
‘I know him.’

1.6.2. Transcription

Transcription follows IPA except where *c* = [tɕ] and *z* = [dz]. These changes are made for practical reasons, since Galo exhibits extensive consonant gemination and gemination is cumbersome to represent using digraphs. Tones are transcribed using the traditional symbols *ˊ* for High, *ˋ* for Low and *ˊˋ* for (Rising-)Falling. An additional symbol *ˊˊ* is used for an Extra-high tone (or “intoneme”), mainly associated with emphatic particles such as *eí* ‘HIGH EMPHATIC’. Galo is a “word tone” language, which means that the surface domain of tonal realization (“surface TBU”) is the *phonological word* (as opposed to the syllable or morpheme, as in some more well-known tonal languages such as Thai and Chinese). However, phonological word tones are ultimately derived by rule from tones which are specified in the (arbitrarily assigned-to) underlying forms of individual morphemes. *Both* phonological word tones (in the surface line of examples) *and* underlying morpheme tones (in the parse line of examples) are notated in this work.

By convention, *underlying tones* of simplex, monosyllabic morphemes are marked over the syllable nucleus, as *-tó* ‘PFV’ and *-dùu* ‘IPFV’. In morphologically complex and/or polysyllabic words, tone is marked over the *final* syllable nucleus only, as *anə* ‘mother’. In words containing dissimilar vowels, tone is conventionally marked on the *second*

vowel, as *au* ‘grease; greasy’ and *kaí* ‘big’. This is because the vowel boundary in such cases is generally a historical syllable/morpheme boundary, as *a-ú* ‘PFX-grease’, resembling *a-nə* ‘PFX-mother’ in both its morphological and phonological structures.

There is evidence that in modern Galo, some if not all dissimilar vowel sequences may be realized as complex (diphthongal) nuclei; however, since there are numerous borderline or indeterminate cases, a conservative approach to their representation is taken in this work.

Marking of *phonological word* tone in the surface line of transcriptions generally follows the principles just outlined for underlying tone marking, but with one important difference: on the surface line, the “pitch peak” of a Low/Tense phonological word in phrase-medial position – which varies according to word-internal syllable structure – is marked by a diacritic $\hat{_}$ over the syllable in which the phonetic pitch peak actually occurs.

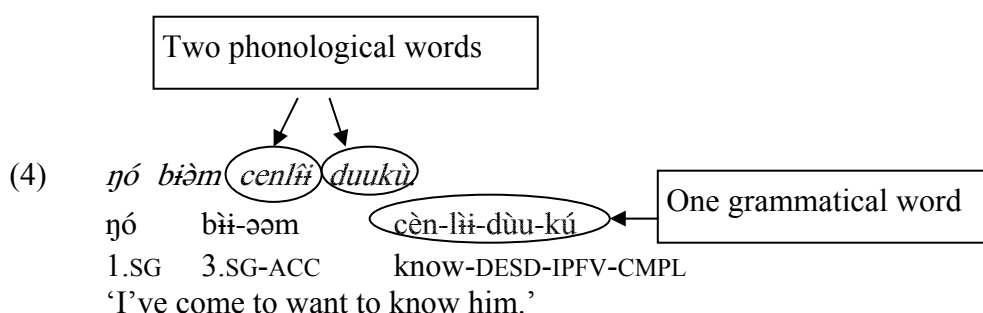
In (2), the phonological word *hɛ̃nə* has a heavy-light internal syllable structure [CVV.CV]; accordingly, the “pitch peak” is located on the initial, heavy syllable. In (3), the phonological word *rɪd̥u kú* has a light-heavy syllable structure [CV.CVV]. The “pitch peak” is accordingly located on the final, heavy syllable.

- (2) \downarrow
hɛ̃nə gò
 hɛ̃nə = go
 plant/tree=IND
 ‘a plant/tree’
- \downarrow
- (3) *rɪd̥u kú*
 rɪ-d̥u-kú
 do-IPFV-CMPL
 ‘finally doing it’

When the syllables of a disyllabic phonological word are balanced, the pitch peak is in theory located somewhere over the centre of the word. In practice, its location usually varies according to context and speaker style. Accordingly, some variability in tonal marking of phonological words with balanced syllable weights will be found in this grammar, since the majority of examples represent contextually-attested speech rather than elicitation.

1.6.3. Phonological and grammatical words

In Galo, there is often a difference between what constitutes a “phonological word” (on the surface) and a “grammatical word” (underlyingly). By convention, all word boundaries are notated with a space in this grammar; accordingly, when a given sequence of morphemes divides differently into phonological and grammatical words, word boundaries in the surface and parse lines do not match. This is illustrated in (4).



1.6.4. Dependent notation

Suffix and clitic boundaries in the parse line are notated in “-” and “=” respectively. The suffixal or clitic status of a morpheme is shown in the parse line of examples only; accordingly, since phonological word boundaries may or may not line up with grammatical word boundaries, as discussed above, it is possible (and common) for the initial syllable of a phonological word to be a grammatical suffix, as well as for a particular morpheme to be represented as a dependent phonological word formative in one sentence, and as an independent phonological word elsewhere. For example, compare the status of the Imperfective suffix *-dùu* in (1), in which it stands as the final syllable of a phonological word, with (4), in which it stands as the initial syllable of a phonological word, with (5), in which it stands as an independent phonological word (but where its grammatical status has remained unchanged throughout).

- (5)
- | | | | |
|-----------------------|----------|----------------|-----|
| ηό | bìəm | cɛnlɪ̃ | dù. |
| 1.SG | 3.SG-ACC | know-DESD-IPFV | |
| ‘I want to know him.’ | | | |

In addition to suffixes and clitics, a small number of (mostly emphatic) types of particle are capable of *interrupting* a grammatical word, generally at a phonological word boundary. This type of boundary, which is neither precisely a grammatical suffix boundary nor a word/clitic boundary, is represented in the parse line using the non-standard parsing notation “≡”, as in (6); note that the Completive suffix *-kú* is a grammatical suffix – not an independent grammatical word – as can be seen in (7).

- (6) *aǎgǎ ân-abó, gônku agomám jôogo cìn*
 aǎ = gǎ ân-abó gônku agóm = əm jòo = go cìn
 self=GEN mother-father classical.language speech=ACC what=IND ADD
centǎí kumáa nám.
 cèn-tà=(ǎ)ǎ=kú-máa na = m
 know-INCP≡EMPH≡CMPL-NEG DECL=RSOL
 ‘They won’t **even** learn a danged thing of our forefather(s’) classical language.’
 (LN, FYG 021)
- (7) *bûl cênku má.*
 bulù cèn-**kú**-máa
 3.PL know-CMPL-NEG
 ‘They don’t know anymore.’

In running text, grammatically bound lexical roots are notated with a final hyphen, as *cèn-* ‘know’. Free words (including clitics) are presented with no hyphen, as *hottúm* ‘bear’ and *əə* ‘TOP’. Suffixes and other word-level grammatical dependents (such as predicate derivations, which may be alternatively analysed as more-or-less suffixlike or rootlike; see §11.1) are noted with an initial hyphen, as *-máa* ‘NEG’. Lexical compounds are connected by a hyphen, as *hottúm-horǎ*, where possible, both formatives are glossed, followed by an overall translation, as *hottúm-horǎ* ‘bear-boar’ ‘wild animal’. Where the meanings of one or both of the individual formatives are unknown, only the overall translation is given, as *tǎkóm-pǎtǎk* ‘popping beetle’. Discontinuous lexical entries (lexemes or functors which constitute a single form-meaning unit, but which are composed of multiple discontinuously-realized constituents; see §10.5) include an ellipsis “...” between the constituents, as *dó-...tǎí* ‘eat...imbibe’ ‘sustain oneself’. Free translations of lexemes, phrases and sentences are presented in ‘plain text’; functional morphemes and grammatical constituent functions are glossed in SMALL CAPS.

1.6.5. Sourcing of data

The majority of data presented in this work are marked for source, via a code presented (in parentheses) following the translation line of examples (cf. (6)). Three main types of sourced data are presented: *recorded text*, *participant observation*, and *elicited*.

Recorded text data sourcing is of the form (XX, YY ###), where XX gives the initials of the speaker, YY gives a text code, and ### gives a line number. For example, (TR, FA 006) indicates that the example was spoken by *tomóo rí báa*, in the text “Forest animals” line 006. Text and speaker codes are defined in Appendix D.

Participant observation data sourcing is of the form (XX, OL#:##), where XX gives the speaker’s initials and OL indicates “Observation log”. In the numeral sequence, the first number gives the log number, and the second gives the page number. Unmarked log numerals indicate a log from my first field trip in 2004-2005, log numerals bearing a prefix B indicate a log from my second trip in 2006, and C indicates a log from 2007. For example, (MN, OLB2:34) indicates the speaker *miilhi podù*, sourced from the second observation log of my 2006 trip, page 34.

Elicited data sourcing usually follows the same format as participant observation data, except “OL” is omitted. A small number of elicited examples are of the form (XX, EM #-#-#); these refer to email elicitations, with numerals referring to the date of elicitation. Email elicitations were conducted with only two consultants, *ihí rí báa* and *bomcàk rí báa*. Both of these consultants participated in development of the Galo script developed in the context of this project, are currently engaged in the production of or re-transcription of literature using Galo script, and in short are both experts in phonetically-accurate transcription of Galo speech. That said, email elicitation is hardly ideal as a data source, and examples so obtained are kept to a minimum.

Where no code is presented (as in (7)), this means that the example was constructed by me for the purpose of illustrating a particular linguistic point; while all such sentences have been checked by native speakers (usually by reading the example in a draft of this grammar), they also lack the context which is usually built up even in the course of elicitation; they may accordingly be viewed as grammatically correct sentences, but also in most cases somewhat artificial.

1.7. Structure and organization

This work is divided into seventeen major chapters, with 8 appendices. Following this introductory chapter, §2 is a historical overview, and treats the evolution of Galo morphology and (mainly) phonology from Proto-Tani, to Proto-Galo, to the present dialects. §3 and §4 discuss aspects of modern Lare Galo synchronic phonology, from segmental/syllabic and word/phrasal perspectives respectively. §5 turns to the Galo lexicon, discussing the semantic and structural features of the major word classes. §6-§8 treat aspects of the noun phrase; §6 reviews noun phrase structure, and includes description of noun phrase constituents and their behaviour, as well as phrasal functions such as noun phrase coordination and apposition. §7 presents a more detailed overview of pro-forms and (other) shifters, including personal, reflexive and interrogative pronouns, and demonstratives. §8 reviews post-head nominal modifiers, including relator nouns, numerals, classifiers and qualifying nouns.

§9 turns to the clause, and discusses clause types and their internal structure. §10-§12 treat aspects of the predicate complex; §10 discusses possible predicate structures, and §11 and §12 discuss predicate derivations and inflections respectively. §13 discusses particles at the phrasal and clausal level, and rounds off the discussion of basic clause structure and clause constituents. §14 turns to grammatical, semantic and pragmatic functions of the noun phrase, including relational and pragmatic marking and marking variations, and also reviews the evidence for grammaticalization of high-level syntactic functions such as “subject” and “object” in Galo. §15 and §16 each discuss complex constructions; while §15 focuses on nominalization-based constructions, including nominalized/relative clauses and clausal nominalizations, §16 turns to multi-clause constructions which are *not* based on synchronic nominalizations, including complex predicates and clause chains, adverbial subordination and complementation. §17 is a postscript regarding the future of the Galo language.

Appendix A contains a list of approximately 1,400 Galo roots, together with a set of approximately 4,000 contexts (lexemes and other morphemes) in which they are instantiated in modern Lare Galo, as well as Proto-Tani reconstructions (where available). Appendix B contains a posited set of regular Proto-Tibeto-Burman – Proto-Tani – Proto-Galo – Lare and Pugo Galo segmental correspondences, centred around the Proto-Tani reconstruction of Sun (1993b). Appendix C contains a change table proving the set of rules posited in §2.4 to have occurred between Proto-Tani and modern Lare Galo, using a sample set of 43 illustrative lexemes. Appendices D-G present a description of the text

database used in this study, together with a sample set of 3 analyzed texts. Appendix H is a bibliography of works cited herein.

2. Historical development – From Proto-Tani to modern Galo dialects

The present chapter provides an introductory overview of a partially-reconstructed history of the Galo language. It focuses primarily on morphological and phonological developments from the Proto-Tani stage, to the Proto-Galo stage, to the present Galo dialects. It mostly ignores both pre-Proto-Tani stages within Tibeto-Burman (for which very little evidence exists in any case) and extra-Galo developments both within Tani and elsewhere (for example, areal phonology is almost completely disregarded). Comparative syntax is similarly marginalized, inasmuch as the quality of existing comparative Tani language description permits little more than conjecture on this account. Thus, although is hoped that the below description will serve to illuminate some aspects of modern Galo grammar and phonology which might otherwise appear arbitrary or idiosyncratic – namely, by suggesting some plausible hypotheses as to how they might have come about in terms of a very general overall background of historical change – it must be emphasized that we are not yet in a position to provide an exhaustive account of pre-Galo phonology and grammar, and a certain amount of speculation under such conditions is inevitable; *nothing* in what follows is presented as *fact*.²⁴

In what follows, §2.1-§2.3 discuss topics in historical (pre-)Galo morphological typology, while §2.4 turns to phonology. The reader may wish to refer at several points to Appendices B and C, which contain presentations of the set of regular PT (Proto-Tani), PG (Proto-Galo) and Lare and Pugo Galo segmental correspondences and change tables respectively, as well as to Appendix A, in which a list of modern Lare roots is given together with their PTs reconstructions (where available).

2.1. Morphological profile of Proto-Tani

Proto-Tani shows signs of having been, or having had a near ancestor which was, a basically “morphosyllabic”²⁵ language of the type found commonly in Mainland South-

²⁴ Note also that no serious claims are advanced here concerning time-depth, either of Proto-Tani or of any stage since then. I am not aware of the existence of any uniformly reliable method for determining linguistic time-depth in absence of written records, which in this case are unavailable.

²⁵ The useful term “morphosyllabic” was coined by Timothy Light (1978) in the context of tonogenesis theory, and was also used by Sun (1993b) with specific reference to Proto-Tani. Broadly speaking, a prototypical morphosyllabic language is strongly isolating and analytical, with a basic unity syllable=morpheme=word predominating. Very little well-grammaticalized material is found, with most grammatical functions coded by lexemes in particular constructions (such as serial verb constructions). Typically, morphosyllabic languages also exhibit relatively simple segmental phonology as well as lexical tones. Not all scholars have adopted this useful label; however the basic characteristics of the typology in question are generally agreed-upon.

East Asia (Light 1978; Norman 1988; Enfield 2005; Post 2006; Post 2007). The following subsections review the main evidence for this view.

2.1.1. Syllable structure and tonality

Proto-Tani had a relatively simple syllable structure of the form (C)(G)V(X) (where G is a glide and X is a nucleus-identical vowel or final consonant), with a relatively small segment inventory of 21 consonants and 7 vowels (see Appendix B, and also Sun (1993b)). Although a firm statement regarding Proto-Tani tonality cannot yet be made, evidence compiled in Post (in preparation-c) suggests that a two-place suprasegmental system of some kind (whether of register/voice quality or tone) is probably reconstructible to the PT stage. For additional remarks on this point, see §4.2.2.4.

2.1.2. Availability of monosyllabic roots as words in Proto-Tani

Lexemes in modern Tani languages are usually disyllabic; however, these disyllabic forms are almost always analyzable either as compounds of monosyllabic roots or as monosyllabic roots which bear a prefix. In many modern Tani languages (such as Mising), monosyllabic roots are always bound, whether in the sense of appearing only as a compound element or prefixed root – as with most nouns and adjectives – or in the sense of requiring a suffix – as with most verbs. However, in some Western Tani languages, monosyllabic roots may be realized as independent grammatical words. For example, in Apatani, verb roots may be realized as monosyllables with an inherent Perfective aspect (8)-(9).

(8) *ŋo* *lu*.
 1.SG say
 ‘I spoke.’

(9) *ŋo* *iŋ*.
 1.SG go
 ‘I went.’

(Abraham 1985:92. Transcription regularized by this author. Note that tones are present in Apatani, but are not consistently marked in the source)

Since it is in general rare for languages to simply discontinue the use of suffixes without leaving so much as a trace, it is likely that the pattern exemplified in (8)-(9) represents a conservation from the proto-grammar rather than an Apatani innovation.

Similarly, grammatical elements which may be expressed as suffixes or enclitics in other Tani languages (such as markers of aspect and case) may occur in Apatani as independent words (§2.2, ex. (11)-(12)). Again, it is likely that this syntactically “looser” formation reflects an Apatani conservation.

2.1.3. Productivity of prefixing and compounding in Proto-Tani

While compounding and root-prefixation has limited productivity in most modern Tani languages, there is evidence of greater productivity at earlier stages. For example, PTs **lap* ‘slippery’ has a modern Lare Galo adjectival reflex prefixed in *a-*, *alàp* ‘slippery’, also occurs in a noun with Diminutive prefix *ta-*, *talàp* ‘snot’, and is further found as a compound final in *olàp* ‘variety of slimy vegetable (Assamese *lapa*)’, together with initial root *ó-* ‘vegetable’. But not all roots share such a wide distribution among lexemes. *adùp* ‘chafing’ has no *ta-* prefixed nominal or compounded (adjectival or nominal) counterparts, and *tapàr* ‘dandruff’ has no modern adjectival counterpart or corresponding compounded forms. In effect, then, these represent earlier productive compositions which have to an extent idiosyncratically lexicalized on a form-by-form basis.

Furthermore, one can easily find lexemes in two or more Tani languages which have the same meaning and which obviously share the same root, but which differ in their composition. Consider the root *m̥-* ‘grass’ (Lare Galo form, no PTs reconstruction), which has the modern Apatani (Weidert 1987), Pugo Galo and Lare Galo forms *támì*, *h̥im̥* and *nəm̥* respectively.²⁶ The Apatani form represents a Diminutive prefixation in *ta-*, the Pugo form a compound in *h̥-* ‘wood/plant/tree’ and the Lare form a compound in *nó-* ‘leaf’. Or consider ‘road; way’ (PTs **lam*), with the modern Pagro Mising, Apatani (Abraham 1985), and Lare Galo forms *lambə*, *lenda* and *bədáa* respectively reflecting cognate-root patterns A-B, A-C and B-C (following regular language-internal phonological changes).

²⁶ My Pugo consultants gave the form *miipùr*; cf. Mising *pumii*, with the *puu-* root somewhat obscure (although PG **púu-* ‘flower’ is tempting, the expected Mising correspondence **punmii* ~ **pumii*, reflecting PTs **pun* ‘flower’, is not found).

It is clear that, insofar as variation among non-productive formations occurs in the modern languages, it must be attributed to variation among productive formations in one or more ancestral languages. It seems easiest to assume that prefixing and compounding was productive at the Proto-Tani stage, as well as perhaps at later stages, but that the resulting forms were progressively lexicalized by the modern languages as a basic disyllabism took over and productivity of these patterns declined.

2.1.4. Grammatical morphemes in modern Tani languages often reconstruct to PT lexical roots

Large numbers of grammatical morphemes found in modern Tani languages are easily reconstructible to lexical sources, whether because the source term still occurs in the modern language, or because it occurs in another Tani language. For example, the Galo Desiderative derivation *-lɿ* (§11.2.6.4) has no lexical counterpart in the modern language. However, in Pagro Mising the cognate verb root *lɿ* ‘want’ still occurs.²⁷ Similarly, Lare Galo Applicative *-rɿk* (§11.2.5.5) has no modern lexical counterpart but corresponds quite clearly with Mising *rɿk* ‘meet’. Within Galo, the full set of non-perfective suffixes *-dùu* ‘IPFV’ *-dó(o)* ‘STAT’ and *-dàk* ‘COS’ (§12.3.2) seem quite clearly to derive from posture/locative existential verbs *dúu* ‘sit’ *dóo* ‘lie down’ and *dàk* ‘stand’ – all of which continue to occur in the modern language (§5.2.4.4). Many more such examples will be identified in passing throughout this work.

The seeming ease with which it is possible to identify strong candidate source forms for so many functional morphemes in modern Tani languages, the seeming transparency of the semantic relation and the overall rarity of phonological changes potentially associated with grammaticalization of the functor reflex, taken together suggest relative recency of grammaticalization in a large set of cases. Accordingly, it is likely that many grammatical functions which are coded by affixes in the modern languages were coded by functional variants of lexical words (such as serial verbs or uninflecting auxiliaries) at the Proto-Tani stage or thereabouts; this is of course a common trait of morphosyllabic languages like Vietnamese and Thai (Diller 2001, among many others).

²⁷ The Galo reflex of PTP **lɿ* ‘want’ was fully replaced by Assamese loan *lagi* ‘want/need’ (< Asm *lag* ‘want; need; attach’ + *-i* ‘NF’); in Mising, *lagi* alternates with the native Tani form.

2.1.5. Large or complex grammatical terms often reconstruct as collocations of simplex terms

Many polysyllabic postpositions and other functional words in modern Tani languages are easily reconstructible to collocations of simplex, monosyllabic forms, such as demonstratives, postpositions, particles and, less often, lexical roots. For example, compare the Pagro Mising postposition *tolokə* ‘from eastward’ with Galo *tə* ‘Distal demonstrative (upward)’, Apatani *lo* ‘Instrumental postposition’ and Apatani *kɿ* ‘Genitive postposition’ (Abraham 1985).²⁸ Again, it seems more plausible here to assume that the Galo and Apatani forms are conservatively expressing simplex reflexes of forms which were also simplex in the proto-language than to suppose that they were analysed away from a complex whole; rather, the complex forms are more likely to represent innovative fusions.

2.1.6. Lack of morphophonological alternations or paradigmatic irregularities suggestive of obsolesced morphology

It may be supposed that, while modern Tani affixes have evolved relatively recently (as was argued in §2.1.4), *another* set of affixes could have occurred in Proto-Tani. But there is little if any evidence that this might have been the case. There are few of the telltale morphophonological alternations or paradigmatic irregularities in Tani languages that one finds in languages with a past history of lost or collapsed affixes.²⁹ No “irregular” verbs and/or stem alternations appear to have been reported for any Tani language, and while some vestiges of probable past morphological derivations are retained in the lexicon – such as a transitive/intransitive voicing alternation found among certain verb roots, as Lare *tɕɿ-* ‘break (TR)’ and *dɕɿ-* ‘break (VI)’ (cf. §2.4.2.1) – the facts that these are relatively few in numbers of exemplars and that we cannot find a segmental

²⁸ The ‘east ⇔ ‘up’ correspondence is explained by the fact that the pan-Tani deictic frame, which operates on motion verbs as well as locational postpositions and demonstratives, experienced a shift in Pagro Mising – though seemingly not in all Mising dialects – from ‘up/down’ to ‘east/west’ (§7.4.1.4). This correspondence probably has nothing to do with the rising and setting sun, but relates instead to the fact that the Mising migrated from the uplands, where the system evolved, to the plains, where no mountains (or even many small hills) are present – but where the Brahmaputra river, the new dominant feature of life, flows from east to west.

²⁹ Within Tibeto-Burman, a classic example of collapsed morphology leading to complex stem alternations would seem to be the Kiranti languages of the Western Himalaya (Genetti 1988). Such complexities are completely absent in Tani.

reflex of a putative ancestor morpheme in any of the daughter languages means that we cannot reconstruct an affix at the Proto-Tani stage (quite independently of whether the alternation itself was in fact a productive derivation).

2.1.7. Interim summary

To summarize the above sections, comparative analysis of modern Tani lexicons and morphologies – to the extent currently possible on the basis of the available data – in general points toward reconstruction of an ancestral language with a basically isolating morphological profile, and in which there was a basic unity syllable=morpheme=word. Few affixes occurred by comparison with most of the modern languages, but those which did occur – in particular, nominal and/or adjectival prefixes such as **a-* and **ta-* – appear likely to have been productive, and to have applied directly to roots. There was probably a simple syllable structure and segment inventory, and a simple but robust two-place supra-segmental system, whether of voice quality or tone.

2.2. Shift to greater synthesis in the modern Tani languages

Although some Western Tani languages such as Apatani and Bangni appear to retain at least a few morphosyllabic typological characteristics (cf. §2.1.2), the overwhelming trend in Tani has been toward *increased synthesis*. In Mising, phonological and grammatical words alike are often very large and very complex, even approaching a polysynthetic character. In the following example of a very common Mising expression, no pause is permitted at any point in the predicate, and no free syntactic words can interrupt it (10).

- (10) *ŋo ɡiladakkubon?*
 ŋo ɡi-la-dak-ku-bo-n
 1.SG go-ABIL-COS-CMPL-IRR-PQ
 ‘Can I go now (having finished the work)?’ (AD, 2:59)

Case-markers which are attested as independent words in Apatani (11) occur as suffixes in Mising (12).

- (11) *kago mo mi nasu-soda ho kapa*
 kago **mo** **mi** nasu-soda ho ka-pa
 NAME **3** ACC dance LOC see-ATTN/PFV
 ‘Kago saw him at a dance.’ (Abraham 1985:47, adjusted by this author)

- (12) *katokdəm ŋo bīm bito*
 katok-də-m ŋo **bi-m** bi-to
 knife-DEF-ACC 1.SG **3.SG-ACC** give-PFV
 ‘I gave him the knife.’ (OT, 2:95)

Both the 3rd person pronouns and the Accusative case markers in (11) and (12) are demonstrably cognate. It appears that what was at an earlier stage an independent grammatical word in some languages then became a phrasal enclitic (it remains an enclitic in Lare Galo; see §14.3.2.1) and ultimately, in Mising, a suffix.

The pan-Tani trend toward increased synthesis is also reflected in the lexicon. Although in the past, the tendency was to compound monosyllabic roots – which were probably, as was argued in §2.1.2, originally lexemes – the trend in modern languages is to compound these compounds. Consider examples (13)-(14) from Lare Galo (bound roots are modern Lare forms).

- (13) *kodée-deerfi* ‘plains’ < *kodée* ‘soil’ < *kó-* ‘earth’ + *dée-* ‘soil’
 < *deerfi* ‘plain’ < *dée-* ‘soil’ + *rí-* ‘flat land’
- (14) *homén-takár* ‘leopard’ < *homén* ‘tiger’ < *ho-* ‘PFX:HIGH ANIMAL’ + *mén-* ‘tiger’
 < *takár* ‘star’ < *ta-* ‘MDIM’ + *kár-* ‘star’

2.3. Evolution in the relative status of “roots” and “words”

The shift from a proto-lexicon probably dominated by simplex, monosyllabic lexemes to modern lexicons dominated by complex disyllables was of course not immediate, and in many ways is still ongoing. We have seen that in some modern Tani languages, roots are in at least some cases realized as grammatical words (§2.1.2). Even in those Tani languages in which roots are always or predominantly bound, such as Mising and Galo, roots are also sometimes productively engaged in grammatical word-formation (cf. §5.3.2.2, and elsewhere). The distinction between *root* and *word* is therefore of critical importance not only from a diachronic perspective, but from a synchronic perspective as well. At issue is not only the nature of developments in the evolution of Galo grammar, but the cognitive status of roots versus words as more or less basic units of the lexicon.

2.3.1. Lexical roots

Lexical roots, or “roots” for short, may be identified as semantically and phonologically indivisible forms – almost always monosyllabic – which probably occurred as free lexemes in Proto-Tani or pre-Proto-Tani, but which are more often bound in the daughter languages. Roots are not easily associated to a particular lexical class such as ‘noun’ or ‘verb’, but are instead frequently found spanning several classes. Recalling the example of PTs **lap* ‘slippery’ in §2.1.3, consider also the PTs root **t/dɬk* ‘spicy/chili hot’, with modern Lare Galo reflexes which run the whole lexical gamut: *dɬk* (VT) ‘complain; whine; irritate’, *adɬk* (ADJ) ‘irritating (to the skin *or* to the temper)’, *adɬk* (N) ‘burning sensation; irritation; annoyance’, *-dɬk* (PDER) ‘IRRITATING/BURNING RESULT’. Or, for a really promiscuous root, consider PTs **mik* ‘eye’ (PG **ɲɪk-*, Lare *ɲɪk-*) with the Lare Galo reflexes given in Table 2.1.

| Term | Gloss | Term | Gloss |
|----------------|----------------------------|---------------|---------------------------|
| <i>ɲɪk</i> | ‘eye’ | <i>ɲɪkcəə</i> | ‘blind’ |
| <i>ɲɪgbə̀k</i> | ‘right eye’ | <i>ɲɪgláa</i> | ‘tear(s)’ |
| <i>ɲɪkci</i> | ‘left eye’ | <i>ɲɪɲmə̀</i> | ‘eye hair (brow or lash)’ |
| <i>ɲɪktóm</i> | ‘eyebrow (area)’ | <i>ɲɪgrée</i> | ‘examination dance’ |
| <i>ɲɪgróm</i> | ‘lazy-eyed (abnormally)’ | <i>ɲɪglòr</i> | ‘coloured, of eyes’ |
| <i>ɲɪkpàm</i> | ‘blind person’ | <i>ɲɪkpìn</i> | ‘eyelid’ |
| <i>ɲɪgjàp</i> | ‘blink’ | <i>ɲɪkpòo</i> | ‘open eyes; open-eyed’ |
| <i>ɲɪkpúu</i> | ‘white of the eye’ | <i>ɲɪgrə̀</i> | ‘dust in the eye’ |
| <i>ɲɪgòr</i> | ‘spectacles’ | <i>ɲɪgzí</i> | ‘pupil of the eye’ |
| <i>ɲɪktóm</i> | ‘brow’ | <i>ɲɪkci</i> | ‘conjunctivitis’ |
| <i>ɲɪgbùm</i> | ‘non-recessed, of eyelids’ | <i>ɲɪgmìi</i> | ‘eyes slanted downward’ |

Table 2.1 – Occurrences of the Lare Galo root *ɲɪk-* ‘eye’

It is all but impossible to find a word with a relation to eyes which does not include the ‘eye’ root, and similarly large sets could be presented for the Lare Galo roots *lák-* ‘hand/arm’, *lə̀-* ‘foot/leg’ and *ɲɪ-* ‘person/human being’. A few things are to be noted here: First, there is relatively little evidence of semantic shift. Most of the listed words have very clear relationships to the concept ‘eye’, and none are to my knowledge used as metaphors, i.e., for non-eye-related concepts. If presented with two or three words drawn from sets such as that in Table 2.1, speakers are often able to quickly identify a common

core meaning, as well as the formative responsible for the meaning. So, roots probably have at least *some* cognitive reality to Lare speakers. But are they actually productively combinatorial elements of Lare grammar?

There is evidence suggesting that roots *do* have this status. While in the field, I devised a series of informal methods to test the productivity of roots by asking consultants to translate novel items into Galo. Among these were ‘green hair’, and the skin of a nonexistent animal which I gave the plausibly Lare-sounding name **hopík*. Many consultants – certainly not all – coined the novel terms *dumzèe* and *píkpin* respectively. The first term *dumzèe* was based on analogy with terms like *dumpúu* ‘white/grey hair’, and is composed of the roots *dúm-* ‘head hair’ (cf. *adúm* ‘head hair’) and *zèe* ‘grue (green-blue)’ (cf. *jazèe* ‘grue’). The second is based on analogy with terms like *dumpin* ‘deerskin’ and is composed of the analysed-out novel root **pík-* ‘novel animal’ and *pìn-* ‘skin’ (cf. *apìn* ‘skin’).

Clearly, then, there is some basis for believing that roots have a cognitive reality at a pre-word level, and some productive value in novel word-formation. However, not all speakers tested accepted the terms *dumzèe* and *píkpin* as valid, usually saying they had “never heard of such a word”. Such speakers insisted that a larger, word-word compound such as *hopík-apìn* ‘hopik skin’ should be formed instead.

And there is further evidence against uncritically assuming roots to be productive combinatorial elements of Lare grammar. Consider again the question of semantic shift. *ignè* ‘mature louse’ quite clearly consists of the roots *ík-* ‘louse’ and *nè-* ‘mother’. However, the resulting term does not denote a mother louse, nor even a female louse, but rather a *mature* louse of any gender. This association ‘mother’ > ‘large’ is echoed elsewhere in Galo, as *lìnè* ‘boulder’ (*lì-* ‘stone’ + *nè-* ‘mother’) and *lagnè* ‘thumb finger’ (*lák-* ‘arm/hand’ + *nè* ‘mother’).³⁰ Another root meaning ‘big’ is *tè-*, which as a verb root has the sense ‘swell; become big’ (it cannot have the sense ‘get big’, as e.g. of a child, except in the rare and seemingly lexicalized expression *təbāa!* ‘wow, he’s gotten big!’ < PG **tè-* ‘big’ + **bāa-* ‘fast’). *tè-* also occurs as a member of the small and seemingly closed class of “inner core” monosyllabic adjectival roots (§5.2.3), as well as in adjectives

³⁰ As well as elsewhere in Tibeto-Burman, and beyond; see Matisoff (1992).

such as *puktə* ‘bravery’ (lit., ‘big-heart’; cf. *aapùk* ‘heart’). However, it is also found in *hotə* ‘elephant’ (prefixed in *ho-* ‘PFX:HIGH ANIMAL’) – for semantic reasons which are obvious – and from this, terms like *təpìn* ‘elephant skin’ are formed. Although the innovated senses – ‘big’ in the case of *nə-* ‘mother’ and ‘elephant’ in the case of *tə-* ‘big’ – are now ostensibly analyzable as different senses of what remains synchronically the same root (or are at least related reflexes of the same etymological root), the locus of the innovations themselves seems to be the *lexical word*.

Also consider phonological changes. PTs **mə* ‘fire’, is a common root, occurring in modern Lare terms such as *əmə* ‘fire’, *mərəe* ‘ember’ and *mətùu* ‘semi-burnt wood’. Compare, however, *mikə* ‘smoke.’ It seems virtually certain that the initial syllable must reflect PTs **mə* ‘fire’ – but why is the vowel wrong? The answer seems to lie in an irregular but pervasive tendency for word-initial compound elements and root prefixes to harmonize with the word-final root-nuclear vowel (§2.4.3.1). The term *əmə* itself is an instance of Root-nuclear harmonization, being a harmonized reflex of pre-Proto-Galo **a-mə* (cf. Milang *ami* ‘fire’ (Tayeng 1976:36)). In the case of Lare *mikə*, the initial root *mə-* appears to have harmonized with the ‘smoke’ root, PTs **kɨ*, at some pre-Proto-Galo stage, leading to Proto-Galo **mikɨ*. Post-Proto-Galo, a second change then weakened word-final short **-ɨ* and **-a* vowels (§2.4.4.5), also affecting terms such as *tabə* ‘snake’ (< PTs **bɨ*, cf. Lare *birəm* ‘python’ and *bɨtə* ‘king cobra’). We will review more such changes shortly. The point here is that these changes operated at the *word level*, and introduced phonological discontinuities between various word-internal realizations of lexical roots; although this certainly does not demonstrate that the root held in common between, for example, *mikə* ‘smoke’ and *mərəe* ‘ember’ is not stored as a combinatorial unit in the Galo lexicon, and not available for novel word-formation, it does demonstrate that the *root level* is not the *only level* at which units pertaining to lexical storage exist. The *word level* is also relevant.

2.3.2. Lexical words

One argument in favour of considering *lexical words* to be the basic unit of lexical storage is that words are the *only* units of lexical storage of which most speakers are overtly aware. Very few speakers are able to consciously analyse-out the individual semantic contributions of the root components of a lexical word when asked to do so. A speaker who ventures to attempt this will usually refer to the prefixed (word) form of a root when they do this, saying that the meaning of *dumpúu* ‘white/grey hair’ “comes from” *adúm* ‘head’ and *japúu* ‘white’. When one or more of the constituent roots of a lexical word is rare, perhaps a one-off, it is not generally possible to simply ask a speaker what it “means.” The root may (probably did) have a clear sense at some historical stage; however, the independent sense of the root is no longer clear to most modern Lare speakers, who are generally only aware of the overall sense of the word in which the root occurs.

Furthermore, semantic, functional, phonological and distributional idiosyncrasies are found at the word level which would probably not occur if roots were the main lexical units available to Lare speakers. Consider the case of lexical sets. While the set illustrated in Table 2.1 exhausts the set of things related to eyes in my data, and represents the ‘eye’ root *ɲík-* each time, other sets exhibit idiosyncrasies. For example, while in some Lare subdialects *lɔ̀bàa* ‘leg haunch’³¹ is attested (< *lɔ̀* ‘foot/leg’ + *bàa-* ‘haunch’, cf. Lare *lagbàa* ‘arm haunch’), in the variety of Lare under description here it is emphatically rejected, with *arbàa* ‘leg haunch’ used instead (the *ár-* formative reflects PTs **far* ‘thigh’). Also consider the pair *kartə* ‘huge wedding’ and *karmik* ‘ordinary wedding.’ The first term derives from PG **kár-* ‘luminescence’ (cf. *takár* ‘star’) and the PG root **tə-* ‘big’ discussed above, while the final element of the second word is *mik-* ‘powder’ (< PTs **mik* ‘powder’). **karɲí* (reflecting PG **ɲí-* ‘small’) and **karjáa* (< PTs **jaɲ* ‘small’) are rejected, although they use roots which are more often antonymically opposed to *tə-* ‘big’ in the modern Lare lexicon.³² If words always represented actively-formed root-root constructions, such idiosyncrasies would be difficult to explain, and one would assume

³¹ ‘Haunch’ is used here in the sense of the Galo root – which is more general than the corresponding English word – to mean ‘upper portion of *either* limb, from mid-joint (elbow, knee), through the upper joint muscle (shoulder, buttock), to joint (shoulder joint, hip joint).’

³² Cf. *ɗutə* ‘loud sound’ vs. *ɗujáa* ‘low sound’, and *namtə* ‘big house’ vs. *namɲí* ‘small house.’

that formations such as **karpí* would at least be intelligible to listeners. Instead, it appears that the words reviewed here have been fully lexicalized and are not in fact based on active formations.

Finally, consider word class-membership. Although the Lare root *dɛk-* (above, this section) participates in all available classes, it provides the exception rather than the rule. *aró* ‘tongue’ has the verb root counterpart *ró-* ‘extend tongue’, but *apɛk* ‘eye’ has no verb root counterpart **pɛk-*. Why should this be? There may be a synchronic explanation, but the answer probably lies in the idiosyncrasies of historical processes of lexicalization.

2.3.3. Roots and words, together (forever?)

It would appear that units at *both* “root” and “word” levels have cognitive reality to Lare speakers, although probably not of the same nature or to the same degree. Rather than a clear lexeme/morpheme or simplex/compound distinction, what we find is instead a *cline* between the virtually infinite productivity and ready analysability of certain roots and the total non-productivity and un-analysability of others. Some roots disappear over time from the evolving list of entities which are cognitively accessible to Lare speakers, becoming frozen into individual lexemes, perhaps in (albeit slightly) different phonological forms. On the other hand, new roots can be created via structural reanalysis of native-sounding loanwords such as *nahór* ‘Ceylon ironwood tree (*Mesua ferrea*, family *Clusiaceae*) in new/white leaf’³³ (< Assamese *naxor*), *háa* ‘tea’ (< Assamese *sa*), and *pori* ‘read; study’ (< Assamese *porhi* < *porh-* ‘read; study’ + *-i* ‘NF’), which have given rise to the Lare Galo forms *horpùu* ‘white-leafed Ceylon ironwood tree’, *aapúu* ‘white (milk) tea’ and *rɛ-* (VT) ‘read; study’ respectively, among others. Such reanalyses, although they are rare, would be impossible unless at least some speakers were at least on some level aware of the root-based compositionality of lexical words.³⁴ It is as useless to suppose that roots are the only sort of unit represented in the Galo lexicon as it is to insist that words are.

³³ The expected tone for *nahór* is low, based on the regular patterns of compounded forms. Either the tone reported here and in my data is an error, or it represents an irregularity which awaits explanation.

³⁴ The possibility that these represent very old forms is also doubtful, since *Mesua ferrea* is (to the best of my knowledge) not native to the relatively cool highland jungles of the Tani area, being a tropical tree favoured in tea garden plantations. Galo have begun planting the strong, slow-growing *Mesua ferrea* only quite recently for use as house pillars and posts, as well as for decoration.

This slipperiness creates real difficulties in the analysis of Galo grammar; perhaps even greater difficulties than those found in the analysis of compounds in compound-rich Mainland South-East Asian languages like Chinese and Thai. Whereas in Chinese and Thai we can frequently resort to possible free word status and semantic shift to decide whether a compound should be analysed as compositional or unitary,³⁵ in Galo we have no such tests. Rather than adopt the practice of glossing roots only where I believe them to be compositionally productive, or glossing all available roots, obscuring the reality of lexical words and perhaps overstating the productivity and relevance of lexical roots, I will adopt the practice in the present work of glossing *lexical words only*. This decision reflects what I perceive to be the relatively greater cognitive reality of the word-meaning unit as opposed to the root-meaning unit in the minds of most Galo speakers, but has of course the drawback of obscuring potential sub-lexical aspects of the analysis. To partially compensate for this, a glossary of Lare Galo roots is provided in Appendix A, together with (when available) their Proto-Galo and Proto-Tani ancestral forms and a selection of attested uses (generally, as nouns, adjectives, verb roots or predicate derivations). Where a particular grammatical construction clearly reflects productive composition of sub-lexical roots, on the other hand (as in an Adjectival classifier expression; see §8.2.2.4), these will be consistently analysed and glossed.

In sum, I have sketched and tried to argue for a view of the evolution of pre-Galo morphology in which a basically isolating proto-language or languages has become progressively more synthetic and agglutinating, and in which a basically simplex, monosyllabic lexicon has become a basically complex, disyllabic lexicon. We will now turn to the evolution of Tani phonology, summarizing the changes that have occurred between Proto-Tani and Proto-Galo, and those which have occurred since that time.

2.4. The historical development of Galo phonology

2.4.1. Preliminary overview

In the phonological changes that have occurred between the Proto-Tani and Proto-Galo stages, one is struck by the fact that most changes occurred at the level of the *syllable*. This meant that changes that affected any given instantiation of a given root affected *all* instantiations of that root, regardless of whatever words or constructions it

³⁵ For example, in Chinese *jiào-xué* 教学 ‘teaching and learning’, both compound elements are available as free lexemes with the same meaning, but in e.g. *mù-dì* 目的 ‘purpose’ (< ‘eye’ + ‘target’) they are not. See Post (2007) for further discussion.

may have appeared in. Therefore, while phonological changes certainly introduced contrasts among previously homophonous roots across two *different* languages or dialects – increasing the diversity of the Tani languages as a whole – they did not, in general, introduce much opacity among roots *within* a given language. This fact may help explain why the at least *potential* cognitive reality of roots as combinatorial elements seems to have lingered in Tani languages like Galo long after the lexicon overall had shifted toward a larger basic lexical word shape: an overall persistence in phonological continuity kept the patterns of root distribution available for analysis and creative exploitation.

At the same time, however, certain other types of changes began to occur, both at pre-Proto-Galo and post-Proto-Galo stages, which operated on the level of the polysyllabic *word*. This meant that phonological discontinuities began to be introduced among iterations of certain roots in different word-positions. While these sorts of changes were relatively few, they have potentially far-reaching implications for the extent to which language learners (as well as linguists!) are able to analyse etymologically-related forms as being synchronically related.

The following sections review these changes. A chronological approach is taken as far as possible; however, not all of the changes observed provide evidence of ordering, and indeed, certain of them seem to more closely resemble ongoing, cyclical processes which recur time and time again. A more precise set of ordering hypotheses will only become possible when more and better comparative Tani language data are made available.

2.4.2. Pre-Proto-Tani

There is very little evidence available to shed light on the nature of any post-Proto-Tibeto-Burman, pre-Proto-Tani ancestor language(s). The nearest languages likely to be relatable are the “Mishmi” languages Idu, Digaru and Miju (in that order);³⁶ certainly, there are strong lexical and morphological resemblances between Mishmi and Tani languages, as well as close cultural resemblances and of course areal proximity to consider. However, due largely to the ongoing lack of reliable Mishmi data it is not currently possible to state whether these resemblances are more likely to be (or to be primarily) owing to common ancestry, to substrate influence (on one side or the other), or simply past and, in a few areas, ongoing contact.

³⁶ Judgement is based on my own armchair impression following a casual survey of mostly very unreliable secondary sources, as well as Sun (1993b).

Regular PTB-PT phoneme correspondences were convincingly established by Sun (1993b), drawing primarily from Benedict's (1972) reconstruction (cf. Appendix B); it is primarily on the basis of PTB etyma that the possibility of PT or pre-PT medial *-w- and final *-s are (tentatively) proposed by Sun. When it becomes possible to move with any confidence to a pre-Proto-Tani stage, these topics are among the first that must be addressed.

Among Galo roots, we find several types of alternation which quite likely do not reflect productive processes at the Proto-Tani stage, but which more probably reflect pre-Proto-Tani processes (whether at the PTB stage, after it, or before). These alternations are discussed in the following subsections:

2.4.2.1. Initial stop voicing alternation

Around ten pairs of roots have been found in which the first member carries a voiceless oral stop initial and the second member carries a voiced oral stop initial. When not visible in modern Lare, the alternation is visible at the PT stage (where reconstructions exist). Generally speaking, the voiceless alternant tends to be higher in transitivity, although this is not true for all pairs; presumably, some if not all would reflect the PST **s-* causative (LaPolla 2003) (Table 2.2).

| Lare | PT | Gloss |
|------|-------|---|
| tír- | *tír | ‘break (VT)’ |
| dír- | *dír | ‘break (VI)’ |
| púk- | -- | ‘burst/pop (as knuckles) (VT)’ |
| búk- | -- | ‘burst/pop (VI)’ |
| pó- | -- | ‘male (animal)’ |
| bó- | *bo | ‘father’ |
| pù- | *pu | ‘pluck’ (Galo ‘tug (VT)’) |
| bù- | -- | ‘uproot (VT)’ |
| ír- | *hír | ‘wash (Galo ‘spread with hand (VT)’) |
| ír- | *fír | ‘bathe (Galo ‘sweat (VI)’) |
| cír | *pjil | ‘CLF:PELLET’ |
| -zír | -- | ‘INTO SMALL PIECES RESULT’ |
| ká- | -- | ‘scrape with claws (VT)’ |
| gá- | -- | ‘scale; climb on (VI)’ |
| tùu- | -- | ‘bring into contact; prop against; secure (VT)’ |
| dùu- | *duŋ | ‘sit (VI)’ |

Table 2.2 – Initial voiceless-voiced stop alternation among roots

2.4.2.2. *-ŋ ~ *-k alternation

Six or seven root pairs are found in Lare in which a long final vowel $-V_iV_i$ (or short vowel $-V_i$ which seems to have had a long PG ancestor $-V_iV_i$) usually reflecting PT $*-ŋ$ alternates with a rhyme in $-V_ik$. In general, the stopped alternant appears to be more active/transitive (Table 2.3).

| Lare | PT | Gloss |
|--------|-------------------------|--|
| n̄i- | -- | ‘nudge (VT)’ |
| n̄ík- | *n̄ík | ‘punch or stab (VT)’ |
| -là(a) | *laŋ | ‘ABILITY’ |
| -làk | -- | ‘POSSIBILITY’ |
| gáa- | *gaŋ | ‘scratch (VT)’ |
| gák- | *gak | ‘grab hold (VT)’ |
| ḡi- | *giŋ | ‘pillar; stab into ground (VT)’ |
| -ḡík | -- | ‘IMPALE RESULT’ |
| lódə- | -- | ‘swing (VT)’ |
| lók- | -- | ‘manipulate a flat thing; leaf through (VT)’ |
| k̄i- | -- | ‘slice (VT)’ |
| k̄ík- | *k̄íʔ (?) ³⁷ | ‘pound with a tool (VT)’ |
| -r̄ə | -- | ‘MARK RESULT’ |
| -r̄ək | -- | ‘SYMBOL RESULT’ |

Table 2.3 – $*-ŋ \sim *-k$ alternation among roots

³⁷ The PTs form is glossed ‘punch (downward using fist)’, and does not regularly correspond. It is being included as a possible alloform for reference only.

2.4.2.3. *-ŋ ~ *-r alternation

Six or seven root pairs are found in which a long Lare final vowel $-V_iV_i$ usually reflecting PT $*-V_iŋ$ alternates with a rhyme in $-V_i r$. In some cases, the closed alternant appears diminutive; in others, possibly more active/transitive. Most of the affected forms are found in modern Lare nouns or adjectives (Table 2.4).

| Lare | PT | Gloss |
|----------------------------|----------|--|
| <i>uu-gíi</i> | -- | 'back' |
| <i>uu-gír</i> | -- | 'hunchback' |
| <i>a-bíi</i> | *bíŋ | 'elder (brother)' |
| <i>a-bír</i> | *bír | 'younger sibling' |
| <i>a-tíi</i> | *tíŋ | 'group' |
| <i>a-tír</i> | -- | 'group' |
| <i>a-hòo</i> | *çonŋ | 'long/tall' |
| <i>a-hòr</i> | -- | 'long' |
| <i>hòr-</i> | -- | 'make a line across a space with a rope' |
| <i>ta-bó</i> | *bí | 'snake' |
| <i>bər-táa</i> | *bír-taŋ | 'viper' |
| <i>a-jáa</i> | *jaŋ | 'small; cute' |
| <i>a-jàr</i> | -- | 'long thing; lengthwise' |
| <i>rí-gée</i> | -- | 'reciprocal labour' |
| <i>a-gér</i> ³⁸ | -- | 'work; labour (N)' |

Table 2.4 – *-ŋ ~ *-r alternation among roots

³⁸ Form is reported by my consultants to be a Minyong loan, seemingly arriving via Pugo Galo. This has not yet been investigated.

2.4.2.4. Vowel length alternations

Six or seven root pairs are found in which a long Lare final vowel $-V_iV_i$ usually reflecting PT $*-V_i\eta$ alternates with a short rhyme $-V_i$. Although most of the candidate forms currently lack PT reconstructions, and those that do exist suggest the short vowel form may be diverse in origin. If there is a semantic basis to the alternation, it may be that the short form is more active/transitive (Table 2.5).

| Lare | PT | Gloss |
|-------|------|---|
| pù- | -- | ‘tug; pull at something with force (VT)’ |
| púu | -- | ‘tie (shoes) (VT)’ |
| gù- | *gu | ‘burn (VI)’ |
| a-gúu | -- | ‘kettle handle’ |
| hè- | -- | ‘pull (VT)’ |
| hèe- | -- | ‘take apart; unravel; unmake; undo (TR)’ |
| rú- | *rju | ‘bury (VT)’ |
| rúu- | *ruŋ | ‘(make) hole (VT)’ |
| dá- | -- | ‘feel around using foot; advance foot (VI)’ |
| dáa- | -- | ‘step high (VI)’ |
| gá- | -- | ‘scale; climb on (VI)’ |
| gáa- | *gaŋ | ‘scratch using all fingers/claws (VT)’ |
| lè- | -- | ‘flick (VT)’ |
| lóa- | -- | ‘swing (VT)’ |
| dì- | *dɪ | ‘drip (VI)’ |
| dìi- | *diŋ | ‘flog (VT); cascade (of water) (VI)’ |

Table 2.5 – Vowel length alternations among roots

2.4.2.5. Tone alternations

A relatively large number of segmentally homophonous roots exist which are minimal pairs on tone, and which may be semantically relatable. Unfortunately, roots are not reconstructed for the majority of the attested alternations, and it is possible that in at least some cases roots which Sun (1993b) had believed to represent unitary forms at the PT stage (such as ‘CLF:STICK’ and ‘long/tall’) were tonally, but not segmentally, contrastive, and should in fact be reconstructed as distinct forms (Table 2.6).

| Lare | PT | Gloss |
|--------------|-------------------|--------------------------------------|
| <i>a-hóo</i> | *çon | ‘CLF:LONG, STICKLIKE THING’ |
| <i>a-hòo</i> | *çon | ‘long; tall’ |
| <i>tá-</i> | *tat ² | ‘listen; hear (VT)’ |
| <i>tâ-</i> | -- | ‘obey (VT)’ |
| <i>kúu-</i> | -- | ‘weigh (VT); TONS OF RESULT’ |
| <i>kùu-</i> | -- | ‘be thin (animate); be brittle (VI)’ |
| <i>rúu-</i> | *run | ‘hole’ |
| <i>-rùu</i> | *run | ‘INTO HOLE RESULT; ear’ |
| <i>túm-</i> | -- | ‘entrap (VT)’ |
| <i>tùm-</i> | -- | ‘fold (VT)’ |
| <i>-kók</i> | -- | ‘OPEN RESULT’ |
| <i>-kòk</i> | -- | ‘SPLITWISE/ STRADDLING’ |
| <i>lók-</i> | -- | ‘leaf through/do in stages (VT)’ |
| <i>lòk-</i> | -- | ‘slide (VT)’ |
| <i>-lák</i> | -- | ‘MISS RESULT’ |
| <i>-làk</i> | -- | ‘POSSIBILITY’ |
| <i>gíi-</i> | -- | ‘structure; pillar; back; neck’ |
| <i>gìi-</i> | -- | ‘bludgeon; axe’ |
| <i>pén-</i> | -- | ‘break off (VT)’ |
| <i>-pèn</i> | *pan | ‘SEPARATE RESULT’ |
| <i>híi-</i> | *çin | ‘grow; live a life (VI)’ |
| <i>hìi-</i> | *çin | ‘wood; plant’ |
| <i>nén-</i> | -- | ‘progenerate; filter rice beer (VT)’ |
| <i>nèn-</i> | *len | ‘exit (VI)’ |
| <i>pák-</i> | -- | ‘care about (VT)’ |
| <i>pàk-</i> | -- | ‘reject (VT); dispose (VT); garbage’ |
| <i>jáa-</i> | *jan | ‘rot(ten); bad (VI)’ |
| <i>-jàa</i> | -- | ‘DESTROYED RESULT’ |
| <i>-jáa-</i> | -- | ‘MUCH’ |

Table 2.6 – Tone-based alternations among roots

| Lare | PT | Gloss |
|---------------|-------------------|------------------------------------|
| <i>-jàa</i> | *jan | ‘COMP’ (‘more’) |
| <i>-jəə</i> | *rjan | ‘SLANTING; TO ONE SIDE’ |
| <i>jəə-</i> | *rjan | ‘slant; keel over (VI)’ |
| <i>zéK-</i> | -- | ‘prune (VT)’ |
| <i>zèK-</i> | -- | ‘rip (VT)’ |
| <i>ga-rók</i> | -- | ‘notch’ |
| <i>-rək</i> | -- | ‘MARK/SYMBOL RESULT’ |
| <i>gée-</i> | -- | ‘seal; heal over (VI)’ |
| <i>a-gèe</i> | -- | ‘gap’ |
| <i>í-</i> | -- | ‘big; grow (VI)’ |
| <i>ì-</i> | -- | ‘small; last; youngest’ |
| <i>píi-</i> | -- | ‘suffice; be enough (VI)’ |
| <i>pìi-</i> | *pin | ‘reach; arrive (VT)’ |
| <i>jár-</i> | *nil | ‘laugh (VI)’ |
| <i>-jír</i> | -- | ‘LAUGHABLE MANNER’ |
| <i>ta-húm</i> | -- | ‘shellfish’ |
| <i>hùm-</i> | -- | ‘enclose (VT)’ |
| <i>bíK-</i> | *bit ¹ | ‘flow (VI)’ |
| <i>bìK-</i> | -- | ‘pass (through time/process) (VI)’ |
| <i>cák-</i> | -- | ‘grow (archaic) (VI)’ |
| <i>càk</i> | -- | ‘jerk upward (VT)’ |
| <i>góo-</i> | -- | ‘encircle (VT)’ |
| <i>gòo-</i> | *grun? | ‘bulge (of sphere); throat (VI)’ |
| <i>a-ír</i> | *hír | ‘sweat (N)’ |
| <i>ír-</i> | *hír | ‘sprout (N); sweat (VI)’ |
| <i>pée-</i> | *pee | ‘cut (VT)’ |
| <i>pèe-</i> | -- | ‘part; clear path (VT)’ |
| <i>túp-</i> | -- | ‘shovel (VT)’ |
| <i>tùp-</i> | -- | ‘cup (N)’ |

2.4.3. Proto-Tani to Proto-Galo

The following subsections discuss phonological changes from Proto-Tani to Proto-Galo. In them, changes are described as “ordered” or “unordered”. “Ordered”, in this sense, indicates changes for which either language-internal or cross-language evidence for ordering exists. “Unordered” indicates changes for which no particular ordering must be posited on language-internal grounds, and for which cross-language evidence for ordering has not yet been adduced. It is of course possible and likely that additional comparative Tani research will motivate an ordering which is different from the more or less arbitrary order of presentation in which “unordered” changes are shown here.

Following the title of each section, a numeral appears in (parentheses) which refers to the numeral assigned to each change in the change table of Appendix C.

2.4.3.1. PPG Stage A: Prefixation and Root-nuclear harmonization (1)-(3)

It was argued in §2.1.3 that *prefixation* of lexical roots was probably productive at the Proto-Tani stage. Interestingly, however, we find differences among prefixes as to whether or not they were subjected to vowel shifts and/or Root-nuclear vowel harmonization.

Among the most common Proto-Tani prefixes, Masculine and Feminine diminutive prefixes **ta-* and **ja-* only very rarely exhibit nuclear vowel variation and/or harmony with the root nucleus (cf. §5.3.1.1). **ca-* ‘Higher animal prefix’ always has the Lare reflex *ho-* (§5.3.1.1.5); PT short **a* → Galo *o* is irregular in Lare, but is found commonly (and possibly regularly in at least some environments) in northern dialects such as Karko; it is possible that the modern Lare reflex is irregularly associated with this process (cf. §5.3.1.1.5).

PTp **pV-* ‘Bird/flying prefix’ (§5.3.1.1.4) tends strongly to exhibit irregular root-nuclear vowel harmony, as *pokòk* ‘blackbrowed tree pie (*Dendrocitta frontalis*)’ and *pítár* ‘chicken coop’. When not nucleus-harmonized, it usually (certainly not always) has the reflex *pə-*, as in *pəbéé* ‘parrot (generic)’ and *pətáá* ‘bird (generic)’. PTs **a-*, the most frequent and important prefix by far (§5.3.1.1.1), very often exhibits root-nuclear vowel harmony, as in *iríí* ‘ten’ (< PTs **a-rjiŋ* ‘ten’) and *opòò* ‘liquor’ (< PTs **a-poj* ‘liquor’).

Although it is not a watertight criterion, the tendency is for formations which retain a certain amount of synchronic activity/productivity to retain the proto-vocalism [a]; for example, the citation forms of most Galo classifiers, all of which are prefixed in *a-* (with an Individuating function), usually resist harmonization, as *adáa* ‘CLF:STICK’ and *ahú* ‘CLF:FOURS’ (§8.2.2).

Intuitively, then, it seems likely that relatively *older* formations, and/or those which underwent lexicalization at an earlier stage, exhibit modern harmonized reflexes. Relatively *younger* formations, and/or those which retained or may continue to retain productivity, resisted harmonization. However, we must also accept the possibility that a more predictive – but currently unknown – conditioning factor may eventually be found.

Among compounds, extremely little vowel harmonization has occurred in the history of Galo, although occasional exceptions such as *míkə* ‘smoke’ (< PTs **mə* ‘fire’ + **kɨ* ‘smoke’) are found (§2.3.1).³⁹

Schematically, then, we can represent “Stage 1” as the initial prefixation and/or lexicalization of those prefixed forms which eventually vowel-harmonized (i.e., it is a morphological rather than phonological “stage” as such). “Stage 2” then describes the eventual harmonization of prefixal vowels with the root nuclear vowel. “Stage 3” then again describes the prefixation of roots and/or lexicalization of prefixed roots which did *not* undergo vowel harmony. Ultimately, though, this is simply a shorthand for what seems very likely to have been a sporadic and/or cyclical process, which applied at several points in time and affected different areas of the lexicon differently.

Finally, we can note that root-nuclear harmonization has been noted by Donegan and Stampe to be associated in various languages by the development of a trochaic (falling) metrical foot (see Donegan and Stampe (1983; 2004), with particular reference to the Mundan branch of Austro-Asiatic). Although we are not yet in a position to reconstruct Tani historical prosody, it seems very plausible indeed that what is being viewed here in diagnostic terms as a matter of prefixal lexicalization may in fact be better represented as the rise of a trochaic metrical foot. Future research will most certainly address this question.

³⁹ Inasmuch as prefixes almost certainly derive historically from compounded roots (in Galo as in most languages), it might also be possible to take harmonization in this case as evidence that Galo *mə-* ‘fire’ may be, or may have been, developing prefixal status.

2.4.3.2. PPG Stage B: Segment losses and syllable erosion

Most of the phonological changes which took place in Stage B (changes 4-8) involve losses and mergers of segments and consequent erosion and simplification of the Proto-Tani syllable canon. They seem mainly to have affected Eastern Tani languages such as Mising and Minyong, but not Western Tani languages like Apatani, Nyishi and Bokar. Their prevalence in Galo would thus suggest an early Eastern Tani areal (if not genetic) affinity.

2.4.3.2.1. Non-palatal fricative deletion (4)

In this well-attested unordered change, the PTs non-palatal fricatives **f*, **v*, **h* and **ɦ* were lost. No evidence of secondary effects of the deletions has been found.

Informally: [+frx, -pal] → Ø.

In Table 2.7, and in all the ensuing illustrative tables, note that the “PTs” column indicates the Proto-Tani form reconstructed by Sun (1993b). “PPG” indicates a pre-Proto-Galo form, in effect the PTs form post-change. “PG” indicates the Proto-Galo form, and includes any prefixes and/or compound environments known to have lexicalized by that stage; it is of course possible the same forms were prefixed or compounded at an earlier stage, but at the current stage of knowledge very little can be proposed with confidence. “Lare” indicates the modern Lare Galo form. In the Gloss column, “*” indicates that the marked lexical item did *not* undergo the change, and is being provided for comparison only.

| Gloss | PTs | PPG | PG | Lare |
|--------------|-------------|------------|--------------|-------------|
| ‘fat/grease’ | <i>*fú</i> | <i>*u</i> | <i>*a-ú</i> | <i>a-ú</i> |
| ‘blood’ | <i>*vii</i> | <i>*ii</i> | <i>*ìi</i> | <i>ìi</i> |
| ‘distribute’ | <i>*hor</i> | <i>*or</i> | <i>*ór-</i> | <i>ór-</i> |
| ‘child’ | <i>*ɦo</i> | <i>*o</i> | <i>*a-ò</i> | <i>a-ò</i> |
| * ‘water’ | <i>*çi</i> | <i>*çi</i> | <i>*i-çì</i> | <i>i-sì</i> |

Table 2.7 – Illustration of Non-palatal fricative deletion

2.4.3.2.2. Final liquid merger (5)

In this well-attested unordered change, syllable-final **-r* and **-l* merged to *-r*. Initials were unaffected (Table 2.8).

| Gloss | PTs | PPG | PG | Lare |
|-------------|-------------|-------------|----------------|---------------|
| ‘earthworm’ | <i>*dol</i> | <i>*dor</i> | <i>*ta-dòr</i> | <i>ta-dòr</i> |
| * ‘ignite’ | <i>*par</i> | <i>*par</i> | <i>*pár-</i> | <i>pár-</i> |

Table 2.8 – Illustration of Final liquid merger

2.4.3.2.3. Final nasal merger (6)

Final nasal merger is a poorly-attested, unordered change which applied to PT **-im* rhymes which merged to *-in*. It is only supported by a single Galo form (Table 2.9).

| Gloss | PTs | PPG | PG | Lare |
|---------------|-------------|-------------|-------------|--------------|
| ‘cooked rice’ | <i>*pim</i> | <i>*pin</i> | <i>*cin</i> | <i>a-cín</i> |

Table 2.9 – Illustration of Final nasal merger

2.4.3.2.4. Voiced fricative devoicing (7)

This well-attested unordered change may have affected all fricatives in the PT inventory, or only those remaining following Non-palatal fricative deletion. Galo language-internal criteria provide no evidence for ordering these two changes. In Voiced fricative devoicing, all extant voiced and voiceless fricatives merged to the voiceless set (Table 2.10).

| Gloss | PTs | PPG | PG | Lare |
|-----------|-------------|-------------|-----------------|----------------|
| ‘nail’ | <i>*zin</i> | <i>*cin</i> | <i>*lak-cín</i> | <i>lak-sín</i> |
| * ‘water’ | <i>*çi</i> | <i>*çi</i> | <i>*i-çi</i> | <i>i-sì</i> |

Table 2.10 – Illustration of Voiced fricative devoicing

2.4.3.2.5. Initial cluster simplification 1 (8)

In this ordered change, medial **-j-*, if it existed, was deleted following **g-* only. Initial cluster **gj-* is in fact poorly-attested in Tani, and is supported mainly by Apatani *grju* sequences corresponding to *gu* sequences in other languages where, if the PT form in fact contained an **-r-* medial, the expected Bengni and Nyisu forms should contain a medial **-j-* reflex (but do not) (Sun 1999b:137). However, it is also possible that sporadic palatalization in the environment of high vowels is exhibited in Apatani. In any case, if the initial cluster **gj-* existed, this change is required in order to remove these clusters

which would otherwise be subject to a Palatalization change in stage 9 (§2.4.3.3), but were not (Table 2.11).

| Gloss | PTs | PPG | PG | Lare |
|------------|----------------------------|---------------------------|--------------|------------|
| ‘cut/reap’ | * <i>gjaɬ</i> ² | * <i>gaɬ</i> ² | * <i>gá-</i> | <i>gá-</i> |

Table 2.11 – Illustration of Initial cluster simplification 1

2.4.3.3. PPG Stage C: Regressive palatalization (9)

Regressive palatalization was a very important ordered change affecting a large number of roots, which played out differently in different Tani languages and led to salient phonological contrasts among them. The Tani language which we find to have undergone Regressive palatalization changes which most closely resemble those reflected in Galo is Bengni, a language of the Western branch (Sun 1993b). Hence, we may find here evidence of a shift in areal affinity of a pre-Galo ancestral language.

In Regressive palatalization as it is reflected in modern Galo, we find that all bilabials and velars became palatals before *-*i*, *-*e*, and *-*j*, *except* bilabial stops before *-*e*, which were unchanged. In addition, clusters consisting of bilabial and velar initials and palatal medials became palatals before *-*i* and *-*e*, with the medial glide deleted. Coronals were unaffected. Schematically, {+lab, +vel} → [+pal] / _ [+pal] (except *b*, *p* / _*e*, and where *e* is marked as [+pal]). Since **gɣ*- clusters (if they existed) were simplified prior to this change (§2.4.3.2.5), they were not affected (Table 2.12).

| Gloss | PTs | PPG | PG | Lare |
|------------------|--------------|--------------|-----------------|----------------|
| ‘cooked rice’ | <i>*pim</i> | <i>*cim</i> | <i>*a-cín</i> | <i>a-cín</i> |
| * ‘bean’ | <i>*pee</i> | <i>*pee</i> | <i>*pee-rén</i> | <i>pee-rén</i> |
| ‘steal’ | <i>*pjoŋ</i> | <i>*cjoŋ</i> | <i>*cáo-</i> | <i>cáo-</i> |
| ‘give’ | <i>*bi</i> | <i>*zi</i> | <i>*zí-</i> | <i>zí-</i> |
| * ‘monkey’ | <i>*bee</i> | <i>*bee</i> | <i>*ço-bée</i> | <i>ho-bée</i> |
| ‘float; swim’ | <i>*bjaŋ</i> | <i>*zjaŋ</i> | <i>*záa-</i> | <i>záa-</i> |
| ‘eye’ | <i>*mik</i> | <i>*nik</i> | <i>*a-ník</i> | <i>a-ník</i> |
| ‘sister (elder)’ | <i>*me</i> | <i>*ne</i> | <i>*a-ní</i> | <i>a-ní</i> |
| ‘soft’ | <i>*mjak</i> | <i>*nak</i> | <i>*rə-nàk</i> | <i>rə-nàk</i> |
| ‘pain(ful)’ | <i>*ki</i> | <i>*ci</i> | <i>*a-cì</i> | <i>a-cì</i> |
| ‘know’ | <i>*ken</i> | <i>*cen</i> | <i>*cèn-</i> | <i>cèn-</i> |
| ‘spittle’ | <i>*kjul</i> | <i>*cjur</i> | <i>*ta-cúr</i> | <i>ta-cúr</i> |
| ‘clothes’ | <i>*ge</i> | <i>*ze</i> | <i>*e-zè</i> | <i>e-zè</i> |
| ‘laugh’ | <i>*ɲil</i> | <i>*nir</i> | <i>*nír-</i> | <i>nír-</i> |

Table 2.12 – Illustration of Regressive palatalization⁴⁰

2.4.3.4. PPG Stage D: Initial cluster simplification and vowel shifts

The changes in these stages are easily ordered with respect to other stages, but are extremely difficult to order among themselves; it is possible that they were occurring more or less simultaneously over a period of time, or among closely related dialects in which some dialect mixing may have led to irregularities. However, most of the data agree with the ordering represented here.

2.4.3.4.1. Initial cluster simplification 2 (10)

This ordered change occurred widely in the Tani area, affecting all the Eastern languages, though not some Western languages such as Apatani. It removed the glide position from all obstruent-initial syllables (such as ‘steal’ and ‘ginger’ in Table 2.13). Since nasal-glide sequences had earlier reduced to PPG **ɲ-* via palatalization rules (cf. §2.4.3.3), this change effectively left PPG **ɲj-* as the last remaining exemplar of the PPG

⁴⁰ The sequences ***gi*, ***ne* and ***ɲj-* are not attested in my data. Note also that the change PTs **mj-* → PPG **ɲ-* could also be understood as → **ɲj-*, which would be formally simpler since it retains a cluster (which is later removed following obstruents, but not sonorants). This would introduce homophonous [nj] and [ɲ] elements in the PPG segment inventory which, while not an absolute phonological absurdity (though it would seem to be phonetically absurd), would require expanding the modern Lare syllable canon by one position. It is simpler to assume a global condition, not presented here in the interest of brevity (and since it is fairly self-evident), in which [nj] sequences automatically reduce to [ɲ].

four-position syllable canon (PTs **lj-* is unattested). The preservation of PPG **rj-* (as in ‘tongue’ in Table 2.13) had important consequences for the future development of Galo dialects. Informally, $*C \rightarrow \emptyset / [-son] _$.

Note that Initial cluster simplification 2 cannot be grouped with Initial cluster simplification 1; unlike Initial cluster simplification 1, Initial cluster simplification 2 must be ordered after Regressive palatalization, since it created PPG **Ci* and **Ce* sequences which would have been subject to Regressive palatalization, but were not (such as ‘ginger’ in Table 2.13).

| Gloss | PTs | PPG1 | PPG2 | PG | Lare |
|------------|--------------|--------------|-------------|----------------|---------------|
| ‘steal’ | <i>*pjɔŋ</i> | <i>*cjoŋ</i> | <i>*coŋ</i> | <i>*cóo-</i> | <i>cóo-</i> |
| ‘ginger’ | <i>*kree</i> | <i>*kree</i> | <i>*kee</i> | <i>*ta-kée</i> | <i>ta-kée</i> |
| * ‘tongue’ | <i>*rjo</i> | <i>*rjo</i> | <i>*rjo</i> | <i>*a-rjó</i> | <i>a-ró</i> |

Table 2.13 – Illustration of Initial cluster simplification 2

2.4.3.4.2. Vowel fronting and raising (11) – (13)

This fairly uniform-looking change probably actually involved a series of ordered changes which occurred differently, over time, across many Tani languages. It affected most vowels preceding coronals **-n* and **-tʰ*. The importance of Sun’s (1993b) **-tʰ/*-t²* distinction⁴¹ becomes clear for the first time during this change, because **-t²* in most (probably all) cases was not a conditioning environment.

The main patterns found are **a, *o → e / _ *n, *tʰ* and **i, *u → i / _ *-tʰ*; however, **i → i / _ *n*, only; **u* was unaffected here (see ‘wound’ in Table 2.14). **ən* and **ət* sequences are unattested and sparsely attested respectively; however, there is evidence that insofar as they occurred, they followed the shift to *e* (see ‘lie down’ in Table 2.14).

It is necessary to order the changes in terms of the vowels affected, because of an intermediate Raising change which affected some but not all of the conditions that would have been available if the changes were uniform. In particular, **e* sporadically raised to *i* following labials, affecting, for example, both PTs **me* sequences and PPG **me*

⁴¹ **-tʰ* and **-t²* indicate proto-forms with *t* reflexes in some languages, but with different reflexes in other languages, and for which evidence is insufficient to reconstruct the precise nature of the proto-difference. However, Sun (1993b) speculates, and I agree, that the most likely form for **-tʰ* is **-ɕ*. For discussion of the unusual behaviour of the modern Lare Galo **-tʰ* reflex, see §3.4.2.

sequences which were innovated through the fronting of PTs **mon* terms.⁴² However, it did not affect PPG **me* sequences innovated through fronting of PTs **man* terms. Thus, it is necessary to order the changes as:

1) Vowel fronting 1 (11)

2) Labial/palatal raising (12)

3) Vowel fronting 2⁴³ (13)

Note also that the Vowel fronting changes must have occurred subsequent to Regressive palatalization, since they created {+lab, +vel}{i, e} sequences which would have been subject to Regressive palatalization, but were not.

Broadly speaking, then, the vowel fronting changes observe the general pattern [+back] → [-back] / _ [-back], with [+high] and [-high] specifications remaining constant; as noted, however, this is not without complications.

| Gloss | PTs | PPG | PG | Lare |
|------------|--------------------------|-------------------------|----------------|---------------|
| ‘one’ | <i>*kon</i> | <i>*ken</i> | <i>*a-kèn</i> | <i>a-kèn</i> |
| ‘filth’ | <i>*kot^l</i> | <i>*ket^l</i> | <i>*ta-kèk</i> | <i>ta-kèk</i> |
| ‘meat’ | <i>*dɪn</i> | <i>*din</i> | <i>*a-dín</i> | <i>a-dín</i> |
| ‘undress’ | <i>*prɪt^l</i> | <i>*pit^l</i> | <i>*pìK-</i> | <i>pìK-</i> |
| * ‘wound’ | <i>*un</i> | <i>*un</i> | <i>*un-ɔ</i> | <i>un-ɔ</i> |
| ‘blow’ | <i>*mut^l</i> | <i>*mit^l</i> | <i>*míK-</i> | <i>míK-</i> |
| ‘lie down’ | <i>*grət^l</i> | <i>*get^l</i> | <i>*géK-</i> | <i>géK-</i> |

Table 2.14 – Illustration of Vowel fronting 1

| Gloss | PTs | PPG1 | PPG2 | PG | Lare |
|---------|-------------|-------------|-------------|--------------|-------------|
| ‘chase’ | <i>*mon</i> | <i>*men</i> | <i>*mín</i> | <i>*mín-</i> | <i>mín-</i> |

Table 2.15 – Illustration of Labial raising

⁴² The data are mixed with regard to PTs **b(r)e* sequences. Certain PPG **be* sequences innovated by Initial cluster simplification 2 have modern Galo [bi] reflexes (e.g. Lare *hobìn* ‘goat’, < PTs **bren* ‘taken (*Budoras taxicolour*)’), but others retain [be] (the coda has been ruled out as a uniform condition since it did not condition in all cases, and some vowels affected by raising (such as ‘elder sister’ in Table 2.12) occur in open syllables).

⁴³ Note that the high vowel changes, since they don’t produce PPG **e* vowels, can be located either in Vowel fronting stage 1 or stage 2; they are arbitrarily grouped in stage 1 here.

| Gloss | PTs | PPG | PG | Lare |
|----------|-------------------------|-------------------------|--------------|-------------|
| ‘say’ | <i>*man</i> | <i>*men</i> | <i>*mèn-</i> | <i>mèn-</i> |
| ‘escape’ | <i>*kat^l</i> | <i>*ket^l</i> | <i>*kéK-</i> | <i>kéK-</i> |

Table 2.16 – Illustration of Vowel fronting 2

2.4.3.4.3. *æ/oo*-shortening (14)

This well-attested ordered change shortened all long central, non-front vowels in the PPG inventory. Roughly, **-æ/oo* → *-ə/o*. Note that PPG forms which retained velar nasal codas such as PPG **(lak-)**cəŋ*** ‘finger’ – and which later lost them, creating long *æ/oo* vowels (Table 2.18) – were not affected at this stage (Table 2.17).

| Gloss | PTs | PPG1 | PPG2 | PG | Lare |
|----------------------------------|-----------------|----------------|---------------|----------------|---------------|
| ‘buy’ | <i>*ræə</i> | <i>*ræə</i> | <i>*rə</i> | <i>*rə́-</i> | <i>rə́-</i> |
| ‘woman/wife’ | <i>*mji-mæə</i> | <i>*ji-mæə</i> | <i>*ji-mə</i> | <i>*ji-mə́</i> | <i>ji-mə́</i> |
| ‘night’ | <i>*joo</i> | <i>*joo</i> | <i>*jo</i> | <i>*a-jo</i> | <i>a-jò</i> |
| ‘1 st person pronoun’ | <i>*ŋoo</i> | <i>*ŋoo</i> | <i>*ŋo</i> | <i>*ŋo</i> | <i>ŋo</i> |

Table 2.17 – Illustration of *æ/oo*-shortening

2.4.3.4.4. *ə*-centralization (15)

This poorly-attested change affected a small number of palatal-initial syllables which were not affected by the Labial/palatal raising change, perhaps because that change was irregularly blocked by the presence of a velar nasal coda. Roughly: **-eŋ* → *-əŋ*. Note that *ə*-centralization must be ordered after *æ/oo*-shortening, because it creates [əə] sequences which would be subject to *æ/oo*-shortening, but were not (Table 2.18).

| Gloss | PTs | PPG1 | PPG2 | PG | Lare |
|----------|-------------|-------------|-------------|-----------------|----------------|
| ‘finger’ | <i>*keŋ</i> | <i>*ceŋ</i> | <i>*cəŋ</i> | <i>*lak-cəə</i> | <i>lak-cəə</i> |

Table 2.18 – Illustration of *ə*-centralization

2.4.3.4.5. Non-palatal *i*-lengthening (16)

This well-attested change lengthened all PTs **-i* rhymes in non-palatal onset environments; schematically, *i* → *ii* / [-pal]_.. Note that Non-palatal *i*-lengthening must

be ordered *after* Regressive palatalization, since Regressive palatalization introduced palatal initials which blocked Non-palatal *i*-lengthening (e.g. ‘give’) (Table 2.19).

| Gloss | PTs | PPG1 | PPG2 | PPG3 | PG | Lare |
|------------|-------------------|----------------|----------------|----------------------|-----------------|---------------|
| ‘guts’ | * <i>kri</i> | * <i>kri</i> | * <i>ki</i> | * <i>kii</i> | * <i>a-kíi</i> | <i>a-kíi</i> |
| ‘mountain’ | * <i>di</i> | * <i>di</i> | * <i>di</i> | * <i>dii</i> | * <i>a-dìi</i> | <i>a-dìi</i> |
| ‘four’ | * <i>pri</i> | * <i>pri</i> | * <i>pi</i> | * <i>prii</i> | * <i>a-píi</i> | <i>ap-píi</i> |
| ‘seed’ | * <i>li</i> | * <i>li</i> | * <i>li</i> | * <i>lii</i> | * <i>a-lìi</i> | <i>a-lìi</i> |
| ‘brain’ | * <i>pV(k)-ni</i> | * <i>pV-ni</i> | * <i>pV-ni</i> | * <i>pV-nii</i> | * <i>pi-nìi</i> | <i>pi-nìi</i> |
| * ‘pain’ | * <i>ki</i> | * <i>ci</i> | * <i>ci</i> | * <i>ci</i> | * <i>a-cì</i> | <i>a-cì</i> |
| * ‘give’ | * <i>bi</i> | * <i>zi</i> | * <i>zi</i> | * <i>zi</i> | * <i>zì-</i> | <i>zì-</i> |

Table 2.19 – Illustration of Non-palatal *i*-lengthening

An apparent exception to Non-palatal lengthening is ‘navel’, PT **kri-ni*, with Lare reflex *kii-nə* (with the final ə reflecting the outcome of post-PG Word-final weakening; cf. §2.4.4.5; the initial is ‘guts’ (Table 2.19)). It is possible that Non-palatal lengthening only affected syllables which either occurred word-initially or when following a weak ((C)V) syllable within a phonological word; or, it is possible that ‘navel’ irregularly resisted Non-palatal lengthening. Unfortunately, on the basis of only one exceptional form, we can do no more than speculate.

2.4.3.5. PPG Stage E: Coda-simplifications and the emergence of Proto-Galo

The two-to-three very important changes in this section, in which *-*tʰ*/*-tʰ* and *-*ŋ* codas are lost, may or may not have occurred prior to the Proto-Galo stage. Although there is no direct internal evidence from Galo dialects for positing an ancestral Galo language which retained these segments – i.e., there is no known modern Galo dialect⁴⁴ which preserves them – there is indirect evidence from place-names and exonyms. For example, the Galo are generally known by outsiders as *Gallong*, including a velar nasal coda which does not occur in any Galo dialect. Furthermore, two very important Galo

⁴⁴ In fact, the changes are so salient that were they not reflected in a particular Galo dialect, it would probably not be considered a “Galo” dialect by most Galo speakers, whatever the perceived lineage and/or affiliation of the speakers themselves. On this account, it is interesting to note that in East Siang district, along the Galo/Minyong border area, there are said (by many of my consultants) to be “Galo people who speak/are influenced by Minyong”. Although I have not been able to investigate the matter, as a point of speculation it would make perfect sense if such “Minyong-like Galo” in fact spoke a genetically *Galo* dialect which conserved the PT finals (retained also in Minyong) which most other Galo dialects have lost!

towns – *aalóo* and *daarɨ* – are generally known as *Along* and *Daring* respectively.

Although the Galo themselves believe this practice of “adding *-ng*” is due to influence from the neighbouring Minyong (Lare Galo *ɲipóo*), it is not the case that Minyong speakers themselves “add *-ng*” to open syllables; for example, the Pasigat Minyong reflex for PTs **loŋ* ‘bone’ is *aloŋ*, however PTs **lo* ‘salt’ has the Pasigat Minyong reflex *alo* (data from my field notes).

For this reason as well as for reasons which will be discussed shortly, it may be wiser to assume that “Proto-Galo” – indeed, much like Proto-Tani – represented not one punctual moment at which a single, uniform language was spoken, but rather a period of relative stability, in which a group of closely related dialects (harbouring some variation among them) had sharply diverged from other related dialects, but had not yet begun to diverge sharply from amongst themselves.

2.4.3.5.1. Final coronal stop deletion (17)

This important ordered change affected reflexes of PTs **-t¹* and **-t²*. **-t¹* was restructured as an underspecified consonant *-K*, whose value is predictable according to its environment in the word: word-finally and word-medially when preceding a vowel, it surfaces [k]; word-medially when preceding a consonant, it fully assimilates to that consonant (see §3.4.2). **-t²* codas, on the other hand, simply dropped off. Informally, **-t¹* → *C_i / _ C_i*; → *k* / *else*. **-t²* → *∅*.

Note that Final coronal stop deletion must be ordered after Vowel fronting 1 and 2, because it removes one conditioning environment for those changes (Table 2.20).

| Gloss | PTs | PPG1 | PPG2 | PPG3 | PG | Lare |
|---------------|-----------------------------|----------------------------|-----------------------------|------------------------|-----------------|----------------|
| ‘kidney’ | <i>*krat¹</i> | <i>*kret¹</i> | <i>*ket¹</i> | <i>*kek</i> | <i>*a-kèk</i> | <i>a-kèk</i> |
| ‘honey’ | <i>*ɲut¹-laŋ</i> | <i>ɲit¹-laŋ</i> | <i>*ɲit¹-laŋ</i> | <i>*ɲil-laŋ</i> | <i>*ɲil-láa</i> | <i>ɲil-láa</i> |
| ‘listen/hear’ | <i>*tat²</i> | <i>*tat²</i> | <i>*tat²</i> | <i>*ta</i> | <i>*tá-</i> | <i>tá-</i> |

Table 2.20 – Illustration of Final coronal stop deletion

2.4.3.5.2. Final velar nasal deletion (18)

This ordered change, while perhaps unremarkable to a linguist, is the single most important change in Galo historical phonology from the point of view of Galo speakers,

insofar as it represents to them the most salient phonological feature distinguishing Galo from the Eastern Tani languages. As mentioned in §2.4.3.5, Galo frequently refer to the nearby Minyong and Mising as people who “add *-ng*” to words in which it should not occur. Although some syllable-final enigmas have been secondarily reintroduced into Galo (particularly in the Pugo dialect) via word-internal assimilation processes, no word-final *-ŋ* codas have been observed among native Galo lexemes, and neither would there seem to be any signs of secondary reintroduction word-finally.

In this change, syllable-final *-ŋ* was deleted, leaving a compensatorily lengthened vowel in its stead; schematically: $-V_i\eta \rightarrow -V_iV_i$. Note that Final velar nasal deletion must be ordered after *əə/oo*-shortening (§2.4.3.4.3), because it creates secondary [əə] sequences which would have been subject to *əə/oo*-shortening, but were not (Table 2.21).

| Gloss | PTs | PPG | PG | Lare |
|----------|--------------|--------------|------------------|----------------|
| ‘ascend’ | * <i>caŋ</i> | * <i>caa</i> | * <i>càa-</i> | <i>càa-</i> |
| ‘horn’ | * <i>rəŋ</i> | * <i>rəə</i> | * <i>rəə-búu</i> | <i>rəə-búu</i> |

Table 2.21 – Illustration of Final velar nasal deletion

2.4.4. Proto-Galo to modern dialects

The preceding sections have detailed changes which occurred before or at the Proto-Galo stage. As noted above, Proto-Galo is probably not best characterized as a sharp punctuation, but rather by a set of changes which gradually led to differentiation among the set of dialects it represented. Similarly, in the following changes, some are shared by more than one Galo dialect, and some are represented in only one dialect; others are represented in more than one dialect, but in different ways. It is in this sense that we can understand the unfolding of Tani historical phonology overall: as waves of changes spreading within a set of more or less related languages or dialects, rather than as strict branching points and divisions.

In this section, we will not treat all changes occurring in all Galo dialects, for the simple reason that adequate data is not yet available for all of them. Instead, we will treat only those changes observed in the majority Lare and Pugo dialects, making reference to other dialects where possible and/or necessary.

An important point that will also be mentioned in passing below is that, while the domain of most previous changes was the *syllable*, the most significant post-Proto-Galo change domain became the *word*.

2.4.4.1. Post-PG Stage A: *rj*-split, vowel shifts/reductions and gradual differentiation

2.4.4.2. *rj*-split (19)

Just as Final velar nasal deletion was the most important change from the point of view of differentiation of Galo from neighbouring Tani languages, *rj*-split is one of the two most important changes from the point of view of differentiation of the Galo dialects themselves. In this change, syllable-initial **rj*-clusters split two ways in the Galo dialects, with the larger group (including Lare, Zirdo, Karka-Gensi and Taipodia) retaining **r*- and the smaller group (Pugo and its immediate neighbours) retaining **j*.⁴⁵ Following this change, no vestige of the proto-glide position remained, and the Galo syllable canon was effectively reduced to three positions (Table 2.22).

| Gloss | PTs | PG | Lare | Pugo |
|----------|-------------|---------------|-------------|-------------------------|
| ‘tongue’ | <i>*rjo</i> | <i>*rjo</i> | <i>a-ró</i> | <i>a-jó</i> |
| ‘bury’ | <i>*rju</i> | <i>*rju</i> | <i>rú-</i> | <i>jú-</i> |
| ‘IRR’ | -- | <i>*-rjɔ́</i> | <i>-rɔ́</i> | <i>-jɛ⁴⁶</i> |

Table 2.22 – Illustration of *rj*-split

2.4.4.3. Palatal fronting and raising (20)

In this ordered change, most Galo dialects fronted short **u* and raised short **e* to *i* in *non-word-initial* open syllables following palatal consonants. Taipodia Galo tends to preserve the PG form (where data exists). A second and possibly cotemporaneous change raises **a* vowels to *e* following palatals *only when* preceding syllable-final **k*. Note again that this change occurs on the level of the word, rather than the syllable; qualifying word-initial forms such as *jumáa* ‘dream’ and *jasi* ‘urine’ are unaffected. (Table 2.23).

⁴⁵ Possibly, this would reflect areal influence of Minyong – which also retains **j* – on Pugo Galo.

⁴⁶ The Pugo form reflects the outcome of palatal fronting and raising; see §2.4.4.3.

| Gloss | PTs | PG | post-PG | Lare | Pugo | Taipodia |
|---------------------------------|--------------|-----------------|-----------------|----------------|----------------|-------------|
| ‘spirit’ | <i>*ju</i> | <i>*u-jù</i> | <i>*u-jì</i> | <i>u-ì</i> | <i>u-ì</i> | <i>u-jù</i> |
| ‘elder sister’ | <i>*me</i> | <i>*a-né</i> | <i>*a-ní</i> | <i>a-ní</i> | <i>a-ní</i> | -- |
| ‘REFL’ | <i>*-çu</i> | <i>*-çu</i> | <i>*-çi</i> | <i>-hi</i> | <i>-si</i> | -- |
| ‘flesh’ | <i>*jak</i> | <i>*din-ják</i> | <i>*din-jék</i> | <i>din-jék</i> | <i>din-jék</i> | -- |
| ‘(natural) fiber’ ⁴⁷ | <i>*pjak</i> | <i>*ta-càk</i> | <i>*ta-cèk</i> | <i>ta-cèk</i> | -- | -- |

Table 2.23 – Illustration of Palatal fronting and raising

2.4.4.4. Rhotic-adjacent backing (21)

In this ordered change, which is attested in Lare but which data for other dialects are insufficient to fully verify (but which existing data do not contradict), short **i* and **e* are backed to *ɨ* and *ə* respectively, when they occurred adjacent to **r* (usually when following, but sometimes also when preceding). Since Lare had freshly innovated a large number of [(V)rV] sequences (but Pugo had [(V)jV] for these), it is easy to see why the change is better-attested in Lare. Note, then, that Rhotic-adjacent backing must be ordered after *rj*-split, since *rj*-split innovated conditions for Rhotic-adjacent backing which did not previously exist, and in which Rhotic-adjacent backing is observed (Table 2.24).

| Gloss | PTs | PG | Pre-Lare 1 | Pre-Lare 2 | Lare | Zirdo | Pugo |
|----------|----------------|-----------------|---------------|---------------|---------------|---------------|-------------|
| ‘pig’ | <i>*rjek</i> | <i>*e-rjék</i> | <i>e-rék</i> | <i>ə-rék</i> | <i>ə-rék</i> | <i>ə-rék</i> | <i>e-ék</i> |
| ‘python’ | <i>*bi-rem</i> | <i>*bi-rém</i> | <i>bi-rém</i> | <i>bi-rém</i> | <i>bi-rém</i> | -- | -- |
| ‘wind’ | <i>*rji</i> | <i>*doo-rjí</i> | <i>doo-rí</i> | <i>doo-rí</i> | <i>doo-ré</i> | <i>doo-rí</i> | <i>do-í</i> |

Table 2.24 – Illustration of Rhotic-adjacent backing

2.4.4.5. Word-final weakening (22)

In this ordered change, which is shared among Lare and Pugo, but not among most other dialects, word-final short **a* and **i* vowels weaken to *ə* post-consonantly. Note that this change must be ordered after Rhotic-adjacent backing (§2.4.4.4), since Rhotic-adjacent backing innovated *-i* rhymes in Lare which were subject to Final weakening (e.g. ‘wind’ in Table 2.24 above). Note also the importance of “word”, rather

⁴⁷ In northerly Tani languages, this form generally denotes ‘wool’, while in the southern languages, the sense is ‘cotton.’

than “syllable”, in this change, in that word-initial syllables such as the ‘snake’ root *bɪ-* in *bɪrám* ‘python’ are unaffected (Table 2.25).

In some dialects, including the variety of Lare under description here, a possibly associated change is **u* → *o*, which is often then reduced to *ə* (and from *ə*, sometimes to *Ø*) via a synchronically active weakening/syncope rule (cf. §4.1.4.5). It may be possible to view the entire set of changes as part of an overall chain of word-final vowel shifts and reductions which may be more or less active at any given point in a given dialect’s history, as *u(> o)/o/a/ɪ > ə > Ø*.

| Gloss | PTs | PG | Lare | Pugo | Zirido |
|-------------|----------------|---------------|--------------|--------------|--------------|
| ‘wild boar’ | <i>*ra</i> | <i>*ho-rá</i> | <i>ho-rɔ</i> | <i>ho-rɔ</i> | -- |
| ‘snake’ | <i>*bɪ</i> | <i>*ta-bɪ</i> | <i>ta-bɔ</i> | <i>ta-bɔ</i> | <i>ta-bɪ</i> |
| ‘warm/hot’ | <i>*g(j)u?</i> | <i>*a-gù</i> | <i>agò</i> | <i>agò</i> | <i>agù</i> |

Table 2.25 – Illustration of Word-final weakening

Certain function words and other marked lexical items appear to have resisted Word-final weakening. Most prominent among them is Speaker-proximate Individuative demonstrative *hɪgɪ* ‘SPRX.IND’, which never seems to reduce to the expected form **[hɪgə]* (although syncopated forms in *[hɪg]* occur in regularly syncopated contexts; see §4.1.4.5). Interrogative pronoun of quantity *jadɪ* ‘how much/many’ exhibits seemingly free variation *jadɪ* ~ *jadə*, reflecting both unweakened/conservative and weakened/innovative forms (§7.3.3.1). Time nominalizer *-dɪ/ə* ‘NZR:TIME’ is usually weakened to *-dɔ* when occurring in a metrically weak position, but variation among *[dɪ ~ də]* is observed in metrically strong positions. Finally, the lexeme *gonkù* ‘classical language’ irregularly retains short final *-u*, probably “iconically”, in some sense, reflecting the conservative function of *gonkù* itself in Galo society (cf. §1.2.6).

2.4.4.6. Intervocalic glide deletion (23)

This ordered change is very well-attested in Pugo (cf. ‘pig’ in Table 2.24 above) and found to a limited extent in Lare, but is not found in some other Galo dialects, such as

the highly conservative *taíi(podia)* dialect of the Assam border area to the West of *líkàa-balíi*. In this change, a palatal glide is deleted inter-vocalically, when preceding a palatal vowel *i* or *e*. Note that Intervocalic glide deletion must be ordered after Palatal fronting and raising, since Palatal fronting and raising (both varieties) creates [ji] and [je] sequences which are subject to Intervocalic glide deletion. Note also that Intervocalic glide deletion occurs at the *word* level rather than at the *syllable* level (Table 2.26).

| Gloss | PTs | PG | Pre-Lare | Lare | Pugo | Taipodia |
|-------------------|-------------|----------------|----------------|--------------|--------------|-------------|
| ‘leprosy’ | <i>*jit</i> | <i>*ta-jìk</i> | <i>*ta-jìk</i> | <i>ta-ik</i> | <i>ta-ik</i> | -- |
| ‘fox-tail millet’ | <i>*jak</i> | <i>*ta-jak</i> | <i>*ta-jak</i> | <i>ta-èk</i> | -- | -- |
| ‘demon’ | <i>*ju</i> | <i>*u-jù</i> | <i>*u-jì</i> | <i>u-ì</i> | <i>u-ì</i> | <i>u-jù</i> |

Table 2.26 – Illustration of Intervocalic glide deletion

A notable outcome of this change was its effect on the grammatical differentiation of some Galo dialects. In particular, disyllabic forms which resulted from morphological fusion of a particle or enclitic to the PG Irrealis suffix **-rjə* ‘IRR’ (with Lare and Pugo reflexes *-rə* ‘IRR’ and *-jə* ‘IRR’ respectively) or to the PG Polar question particle **rjee* ‘PQ’ (with Lare and Pugo reflexes *ree* ‘PQ’ and *jee* ‘PQ’) were subjected to a collapse into monosyllables in Pugo, but not in Lare. This was because *rj*-split (§2.4.4.2) in Pugo created numerous environments which qualified for Intervocalic glide deletion which were not created in Lare. Among the affected forms identified to date are the Additive concessive suffix (Lare *-gərə* ‘ACNC’, Pugo *-gée* ‘ACNC’) (§16.4.4.3), Conjectural particle (§13.3.3.4) (Lare *bəree* ‘CJEC’, Pugo *bee* ‘CJEC’) and Dubitative particle (§13.3.3.2) (Lare *laree* ‘DUB’, Pugo *lee* ‘DUB’). Although the grammatical categories which these forms mark remain, as far as I can see, basically identical, the phonological differences which now exist sometimes create difficulties in cross-dialectal comprehension.

2.4.4.7. Post-PG Stage B: Fricative splits and separate ways

The changes in this section reflect the increasing differentiation of Galo dialects, and bring us up to the present day. The main changes concern fricatives and affricates, introducing an important split which occurred differently in different dialects, and again were sensitive to the position of a segment in the word.

2.4.4.7.1. Pugo Deaffrication, and Fricative splits (24)

In Pugo Galo, a Deaffrication change preceded an important series of Fricative split changes, creating segments which were later subjected to Fricative splits. In this change, reflexes of PG **ɕ-* (phonetically [tɕ]; cf. §3.2.1) were deaffricated to pre-Pugo **ɕ-*. This created a salient contrast between Pugo and Lare which, together with the outcome of the **ɾj-* split (in which Lare retained *r* and Pugo *j*), in part leads to the colloquial characterization of Pugo as “softer” and “more suitable for songs” than the “rougher” sounds of Lare (a view which is popular among Lare and Pugo speakers alike). A split then occurred in the pre-Pugo fricative **ɕ-*, in which word-initial fricatives were lenited to *h*, and non-word-initial fricatives were fortified to *s*.

Meanwhile in Lare, which (together with most other Galo dialects) resisted the Deaffrication change, a different and more complex Fricative split was taking shape. In the Lare split, PG/pre-Lare **ɕ-* was lenited to *h* word-initially, and when onset of a heavy syllable. Post-consonantly, and when onset of a light syllable, PG/pre-Lare **ɕ-* was fortified to *s* (see also §3.2.4). In most other Galo dialects, PG **ɕ-* was preserved (Table 2.27).

| Gloss | PTs | PPG | PG | pre-Pugo | Lare | Pugo | Zirido |
|---------------|--------------------------|--------------------------|-----------------|-----------------|---------------|---------------|---------------|
| ‘tens’ | * <i>cam</i> | * <i>cam</i> | * <i>a-cám</i> | * <i>a-çám</i> | <i>a-cám</i> | <i>a-sám</i> | <i>a-cám</i> |
| ‘throw spear’ | * <i>cut^l</i> | * <i>cit^l</i> | * <i>cíK-</i> | * <i>çíK-</i> | <i>cíK-</i> | <i>híK-</i> | <i>cíK-</i> |
| ‘net’ | * <i>cap</i> | * <i>cap</i> | * <i>ə-çáp</i> | * <i>ə-çáp</i> | <i>ə-háp</i> | <i>ə-sáp</i> | <i>ə-çáp</i> |
| ‘river’ | * <i>buŋ</i> | * <i>buu</i> | * <i>çi-búu</i> | * <i>çi-búu</i> | <i>hi-búu</i> | <i>hi-búu</i> | <i>çi-búu</i> |
| ‘water’ | * <i>çi</i> | * <i>çi</i> | * <i>i-çi</i> | * <i>i-çi</i> | <i>i-sì</i> | <i>i-sì</i> | <i>i-çi</i> |

Table 2.27 – Illustration of Deaffrication in Pugo and Fricative splits in Pugo and Lare

2.4.4.7.2. Lare lowering (25)

In a change possibly associated to Word-final weakening (§2.4.4.5) which is, however, seemingly only observed in Lare, high central vowels are lowered in a heterogeneous set of environments. This change is certainly not found in Pugo, but more data is required before its status with respect to other Galo dialects may be assessed (Table 2.28).

| Gloss | PTs | PG | Lare | Pugo |
|---------------|--------------|-----------------|---------------|------------|
| ‘think’ | * <i>mɨŋ</i> | * <i>mí</i> | <i>méo-</i> | <i>mí-</i> |
| ‘first child’ | * <i>bɨŋ</i> | * <i>bíi-tó</i> | <i>bəə-tó</i> | N/A |
| ‘chest’ | * <i>kɨŋ</i> | * <i>aa-kí</i> | <i>aa-kəə</i> | N/A |

Table 2.28 – Illustration of Lare lowering

2.4.4.7.3. Lare Palatal-adjacent backing (26)

In a seemingly quite recent change in Lare, PG **i* became *ɨ* following palatal consonants in *closed syllables only*; informally: *i* → *ɨ* / [+pal] _ C. Note that this change must be ordered after Intervocalic glide deletion (§2.4.4.6), since Intervocalic glide deletion removed certain conditioning environments in words where Lare palatal-adjacent backing was in fact not observed (such as PG **tajik*, Lare *taik* ‘leprosy’; cf. Table 2.26).

| Gloss | PTs | PG | Lare | Pugo |
|---------|--------------|----------------|--------------|--------------|
| ‘laugh’ | * <i>ɲil</i> | * <i>ɲír-</i> | <i>ɲɨr-</i> | <i>ɲír-</i> |
| ‘eye’ | * <i>mik</i> | * <i>a-ɲík</i> | <i>a-ɲɨk</i> | <i>a-ɲík</i> |
| * ‘two’ | * <i>ɲi</i> | * <i>a-ɲì</i> | <i>a-ɲì</i> | <i>a-ɲì</i> |

Table 2.29 – Illustration of Lare palatal-adjacent backing

Although I cannot say it with certainty, my impression is that Palatal-adjacent backing may be incipient in some non-Lare Galo dialects (such as in Zirido, though *not* in

Pugo), or may perhaps be better described in such dialects as *i ~ ɨ* free variation post-palately. However, the change would appear to be complete in the *daarɨ* variety of Lare which is the primary focus of this description; in *daarɨ*, [aɲík] ‘eye’ is simply not heard.

2.4.4.8. Post-PG Stage C: The present day

2.4.4.8.1. Word-internal assimilation sandhi

Word-internal assimilation sandhi remain active synchronic processes in most Galo dialects, as discussed in §4.1.3.7. An important point in the present context, however, is the fact that they apply differently in different dialects, affecting speakers’ perceptions of the underlying forms of lexemes. For example, while regressive Manner assimilation affecting word-medial consonants in Lare is generally restricted to voicing (although nasality assimilation is also sporadically observed), in Pugo Manner assimilation extends to *obligatory* nasality assimilation in nasal environments. A similar case involves regressive Place assimilation; in Lare, place assimilation does not affect velar nasals in labial environments, while in Pugo it does. Table 2.30 illustrates Pugo and Lare speakers’ different assessments of the “correct forms” of various cognate lexemes.

| Gloss | PT ⁴⁸ | Lare | Pugo |
|------------------|------------------|---------|---------|
| ‘arm hair’ | *lak-mít | lag-mə | laŋ-mə |
| ‘sow (fem. pig)’ | *rjek-nə | rəg-nə | jeŋ-nə |
| ‘cheek/face’ | *???-moo | ɲuŋ-mòo | ɲum-mòo |

Table 2.30 – Illustration of Word-internal assimilation sandhi

2.4.4.8.2. Irregular medial gemination

An irregular but pervasive feature of certain Galo lexemes is *gemination* of a word-medial consonant. Since forms exhibiting irregular medial gemination are somewhat inconsistent from dialect to dialect (cf. Pugo *pəttáa* for Lare *pətáa* ‘bird’, reflecting PTs **pV-* ‘PFX:FLYING’ + **taŋ* ‘bird’), it seems that at least some gemination changes occurred after the Proto-Galo stage; however, the majority probably occurred before.

⁴⁸ PT forms here represent corresponding roots. It is not known whether the cited compounds were indeed active or not at the PT stage.

As a rule, medial gemination affects disyllabic words with an etymological weak-strong ([(C)V.(C)VX]) syllable structure, and may be at least in part motivated by the rise of a strong-weak metrical foot (similar and probably related processes are observed in Triggered foot-strengthening (§4.1.4.6) and Initial gemination (§4.1.5.1)). However, not all qualifying terms are affected, and the semantic values of the terms affected are seemingly diverse (several, such as *attór* ‘hard’ are, for semantic or pragmatic reasons, potentially subject to emphatic mentions which could explain the gemination in terms of iconicity, whereas others, such as *allò* ‘tomorrow’ are seemingly not). Ultimately then, it would appear necessary to identify medial gemination in terms of irregular lexicalizations of a sporadic and probably recurring, but ultimately unpredictable, process of change (Table 2.31).

| Term | Gloss | Formative 1 | Gloss | Formative 2 | Gloss |
|---------------|------------|---------------|-------------------|---------------|------------------|
| <i>hottúm</i> | ‘bear’ | <i>ho-</i> | ‘PFX:HIGH.ANIMAL’ | <i>túm-</i> | ‘bear’ |
| <i>appíi</i> | ‘four’ | <i>a-</i> | ‘PFX’ | <i>píi-</i> | ‘four’ |
| <i>an̄nó</i> | ‘five’ | <i>a-</i> | ‘PFX’ | <i>n̄nó-</i> | ‘five’ |
| <i>akké</i> | ‘six’ | <i>a-</i> | ‘PFX’ | <i>ké-</i> | ‘six’ |
| <i>accí</i> | ‘fraction’ | <i>a-</i> | ‘PFX’ | <i>cí-</i> | ‘Diminutive’ (?) |
| <i>accòo</i> | ‘quiet’ | <i>a-</i> | ‘PFX’ | <i>còo-</i> | ‘quiet’ |
| <i>attór</i> | ‘hard’ | <i>a-</i> | ‘PFX’ | <i>tór-</i> | ‘hard’ |
| <i>add̄i</i> | ‘strong’ | <i>a-</i> | ‘PFX’ | <i>d̄i-</i> | ‘strong’ |
| <i>allò</i> | ‘tomorrow’ | <i>a-</i> | ‘PFX’ | <i>lò-</i> | ‘sun; day’ |
| <i>un̄nàa</i> | ‘baby’ | <i>ò- (?)</i> | ‘child’ (?) | <i>n̄nàa-</i> | ‘baby’ |
| <i>əppə</i> | ‘fart’ | <i>a-</i> | ‘PFX’ | <i>p̄i/ə-</i> | ‘fart’ |

Table 2.31 – Illustration of Irregular medial gemination (Lare Galo only)

2.5. Conclusion

The phonological changes observed in the stages leading from Proto-Tani to Proto-Galo to modern dialects (§2.4) tend, in general, to agree with the evidence from comparative morphosyntax reviewed in §2.1-§2.2, supporting an overall view of a progression from basic morphosyllabism at the Proto-Tani stage to increasing morphological synthesis and a larger lexical and phonological word at the Proto-Galo stage and beyond. That is, just as early grammatical and word-formation processes focused on the monosyllabic root/morpheme level, while later processes seemed to focus on a larger word, early phonological changes mainly focused on syllable properties, while

later changes were sensitive to the position of a segment in a polysyllabic phonological word. Following Donegan and Stampe (1983; 2004), my suggestion here is that both phenomena may ultimately be explainable in terms of the development of a trochaic (head-first) rhythmic pattern.

Although the same general trend can be observed throughout the Tani languages, it certainly has not played out identically. There is no apparent correlation, for example, between such factors as extent of syllable-erosion and extent of synthesis or retention or loss of tones, and although some Eastern Tani languages such as Mising seem to see no limit to the bounds of phonological word size, there are indications that in Galo – in Pugo, in particular, but also, as we shall see, in Lare – a retreat to monosyllabism and fresh coda-innovations via rhythmically-motivated final vowel-deletions (§4.1.4.5) is well underway. With such dynamic and diverse movements exhibited by such a relatively large and intermixed field of languages and dialects, it is certain that the Tani languages will remain an exciting and fertile ground for comparative typological research for many years to come. It is hoped that this simple introduction will provide both basic comparative materials and some suggestive lines of research.

3. Phonology I – Segment to syllable

Two chapters address aspects of synchronic Galo phonology. The present chapter discusses segments (§3.1-§3.4) and syllables (§3.5). §4 concerns the word level and above.

3.1. Summary overview

Like most other modern Tani languages (Sun 1993b), Galo has a relatively simple segmental phonology.⁴⁹ Voiced and unvoiced oral stops and voiced nasals are found at four places of articulation. There are three liquids and two fricatives, and seven oral vowels (five front and central unrounded, and two back rounded).⁵⁰ Table 3.1–Table 3.2 summarize the attested segments; [bracketed] segments reflect phonetic realization where my transcription differs from IPA, and (parenthesized) segments are “marginal” phonemes, to be discussed in §3.4.

| | Bilabial | Apico-alveolar | Lamino-(alveo)palatal | Dorso-velar | Glottal |
|--------------|----------|----------------|-----------------------|-------------|---------|
| Oral stops | | | | | |
| Voiceless | p | t | c [tɕ] | k | (ʔ) |
| Voiced | b | d | z [dʒ] | g | |
| Nasals | m | n | ɲ | ŋ | |
| Approximants | | l | j | (w, ɥ) | |
| Trills | | r | | | |
| Fricatives | | s | | | h |

Table 3.1 – Lare Galo consonant phonemes

⁴⁹ Most neighbouring languages, whether Indic or Tibeto-Burman, have significantly larger segment inventories, sometimes including typologically marked realizations (such as voiced aspirated and retroflexed stops, as well as complex affricates) which are generally lacking in Tani languages. For a good general description of Assamese segmental phonology, see Goswami and Tamuli (2003). For a very basic description of the phonology of Sherdukpen, a nearby Tibeto-Burman with much more complex segmental phonology, see Dondrup (1988).

⁵⁰ Jacquesson (2001: fn6) briefly mentions his perception of nasalized vowels in Galo, but does not transcribe vowel nasalization in the majority of data presented in that paper; nor is vowel nasalization transcribed in the Galo data of Jacquesson (1996). I am unable to confirm the existence of contrastively nasalized vowels in any Galo dialect so far encountered; sporadic, non-contrastive nasalization of *u* has been occasionally observed, but this is of course nothing unusual cross-linguistically. See also the discussion of non-Tani loanword use in §3.6.

| | Front | Central | Back |
|------|-------|---------|------|
| High | i | ɨ | u |
| Mid | e | ə | o |
| Low | | a | |

Table 3.2 – Lare Galo vowel phonemes

There are two primary lexical tones “High/Plain” and “Low/Tense”,⁵¹ which are phonetically realized as pitch contours over a phonological word. The exact nature of the contour varies, depending on factors such as phonological word size and internal syllable weight, as well as contextual effects (including boundary effects and adjacency).

Generally speaking, High/Plain words tend to be realized with a relatively high, level pitch contour, while Low/Tense words tend to be (rising-)falling. Table 3.3 presents the categories as transcribed in this grammar; (parenthesized) categories are non-phonemic and/or contextually-determined. More detailed description of the phonetics and phonology of Galo tones may be found in §4.2.2.

| | Plain | | Tense | |
|--------|-------|---------------|-------|------------------|
| | High | (Downstepped) | Low | (Rising-Falling) |
| Symbol | á | (ā) | à | (â) |
| Value | 44 ↑ | (33↓) | 21 ↓ | (51↘ ~ 451 ↘) |

Table 3.3 – Lare Galo tonemes⁵²

The following subsections §3.2-§3.4 provide more detailed phonetic descriptions of Galo segments. Acoustic analyses supporting these descriptions are based on a randomized list of 30 words read by four native speakers of Lare Galo, two women and two men, all above the age of 30. The words selected are maximally similar, all High/Plain nouns (verbs are presented in citation form, nominalized in *-nam* ‘NZR:RLS’), except where Low/Tense tones were the target of analysis (Table 3.4).

⁵¹ “Tense” here refers not to the traditional tense/lax vowel distinction, but rather to the added vocal fold tension associated with this tone. See §4.2.2.

⁵² Numerals refer to Chao pitch heights, 1/low to 5/highest (Chao 1968).

| Word | Gloss | Word | Gloss | Word | Gloss |
|----------------|--|----------------|-------------------------------|---------------|-------------------|
| <i>paanáam</i> | ‘to hover’ | <i>taajáp</i> | ‘fan (N)’ | <i>camúm</i> | ‘thirty’ |
| <i>kaaníi</i> | ‘opium’ | <i>baaké</i> | ‘ <i>Solanum sp.</i> ’ | <i>daahák</i> | ‘single stick’ |
| <i>zamnám</i> | ‘to chew’ | <i>garék</i> | ‘arrow notch’ | <i>maalíí</i> | ‘sweet potato’ |
| <i>naaré</i> | ‘ <i>Macroneurus cavacius tengra</i> ’ | <i>jaméé</i> | ‘daughter-in-law’ | <i>ɲarsí</i> | ‘dew’ |
| <i>lakcéé</i> | ‘finger’ | <i>jaamée</i> | ‘boy’ | <i>rabgúr</i> | ‘doorjamb’ |
| <i>marsáa</i> | ‘ <i>Aster sp.</i> ’ | <i>haanáam</i> | ‘to clench the inner muscles’ | <i>iibúu</i> | ‘beak’ |
| <i>iitúu</i> | ‘toothless’ | <i>uugíí</i> | ‘back’ | <i>teeló</i> | ‘brass disc belt’ |
| <i>óo</i> | ‘vegetable’ | <i>təənám</i> | ‘to chop’ | <i>aapám</i> | ‘fog’ |
| <i>abó</i> | ‘father’ | <i>akò</i> | ‘old (inanimate)’ | <i>tabé</i> | ‘snake’ |
| <i>tabè</i> | ‘sugar cane’ | <i>hínám</i> | ‘to urinate’ | <i>hínàm</i> | ‘to press’ |

Table 3.4 – Elicitation list for phonetic analyses

For each word, speakers produced three repetitions, followed by the same word in the frame sentence: *ɲó ____ go káa-tó* ‘1.SG ____ IND look-PFV’ ‘I saw a/some ____.’

Recordings were monaural, made directly into an IBM x20 laptop set at 16-bit, 44.1 kHz sampling mode using a high-quality Rode NT3 microphone. The recording environment was an open-air veranda setting with the microphone table-mounted at a 45-degree angle, as close as comfortably possible to the speaker’s mouth. The resulting digital .wav files were analysed using Praat 4.0 software;⁵³ Praat also generated the waveforms and spectrograms presented below.

3.2. Consonants

3.2.1. Stops and affricates

Voiceless unaspirated and voiced unaspirated oral stops occur at four places of articulation, bilabial, apico-alveolar, lamino-palatal and dorso-velar: /p, t, c, k/ and /b, d, z, g/. Phonetically, /c, z/ are in fact alveo-palatal affricates [tʃ] and [dʒ]. However, they pattern phonologically like stops in Lare Galo, and are therefore described as members of the same series here. The following segmental minimal pairs establish the phonemic status of the stop series.⁵⁴

⁵³ Praat speech analysis software is developed by Paul Boersma; it may be downloaded free of charge at <http://www.fon.hum.uva.nl/praat/>.

⁵⁴ Tone quality does not correlate with any segmental features in modern Lare Galo; tonal non-correspondences here and elsewhere can therefore be disregarded. Here and below, word-initial contexts are

| | | | |
|---------------|-----------------|---------------|-----------------------|
| <i>páanam</i> | ‘to hover’ | <i>báanam</i> | ‘to bake’ |
| <i>tàanam</i> | ‘to undo/untie’ | <i>dàanam</i> | ‘to stumble and fall’ |
| <i>cáanam</i> | ‘to ascend’ | <i>zàanam</i> | ‘to swim’ |
| <i>káanam</i> | ‘to look’ | <i>gáanam</i> | ‘to scratch’ |

To assess the contrastive qualities of Lare voiced and voiceless stops, Voice Onset Time (VOT) was determined by means of waveform analysis (following Lisker and Abramson (1964)). For this study, the first eight words listed in Table 3.4 (reading across first, then down) were taken as data, yielding word/syllable-initial tokens in the same vocalic environment *_a* for all Lare stops. Three repetitions and one framed iteration were analysed per stop for each of four speakers, yielding a total of sixteen tokens per stop. Results are presented in Table 3.5.

| -V | Avg. | St. Dev. | +V | Avg. | St. Dev. |
|----------|------|----------|----------|------|----------|
| <i>p</i> | 8 | 3 | <i>b</i> | -89 | 23 |
| <i>t</i> | 12 | 3 | <i>d</i> | -98 | 28 |
| <i>c</i> | 43 | 7 | <i>z</i> | -87 | 16 |
| <i>k</i> | 26 | 2 | <i>g</i> | -74 | 29 |

Table 3.5 – Average Voice Onset Times (VOT) for Lare Galo voiceless and voiced unaspirated stops and affricates (Ms), with standard deviations (average across 4 speakers, 4 tokens per speaker)

In general, voiceless unaspirated stops tended to have a very brief VOT, with high consistency across speakers. As in many languages, VOT was highest among back articulations, and lowest among front articulations. Affricate *c* had the greatest overall VOT, as would be expected (see below for additional discussion). Bilabial articulations in general had a negligible VOT, often effectively registering at zero (Figure 3.1).

used to prove the phonemic status of segment unless otherwise noted. This is because the greatest number of segmental contrasts are found word-initially (in Galo as in most languages). For discussion of Galo phonotactics, see §4.1.3.6.

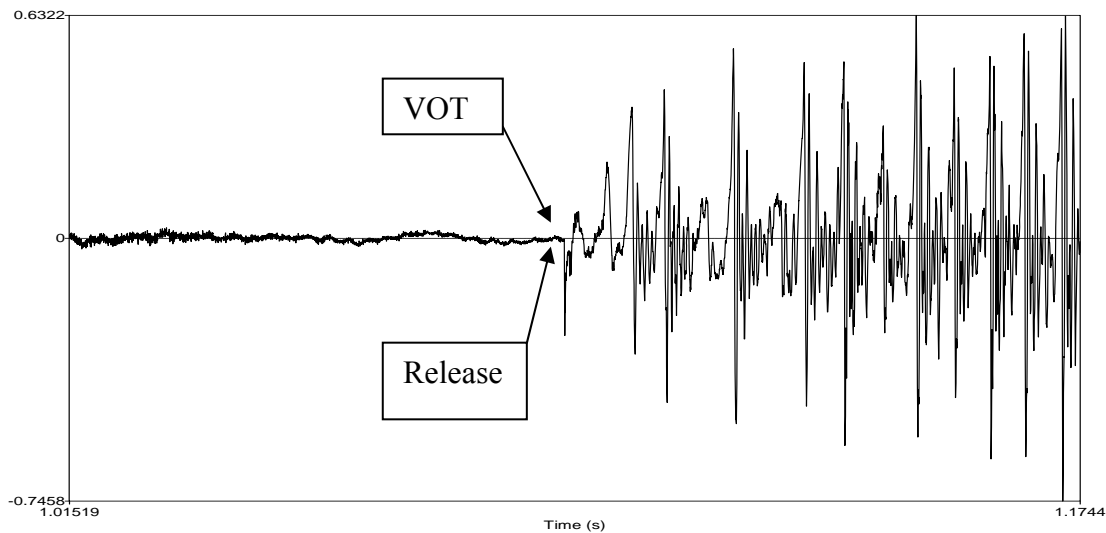


Figure 3.1 – Illustration of voiceless unaspirated stop VOT, 1Ms (*paanám* ‘to hover’; speaker: IRw).

Voiced unaspirated stops exhibited more variability both within and across speakers in terms of the duration of pre-voicing. In general, however, they showed clear, consistent and relatively extensive pre-voicing (Figure 3.2).

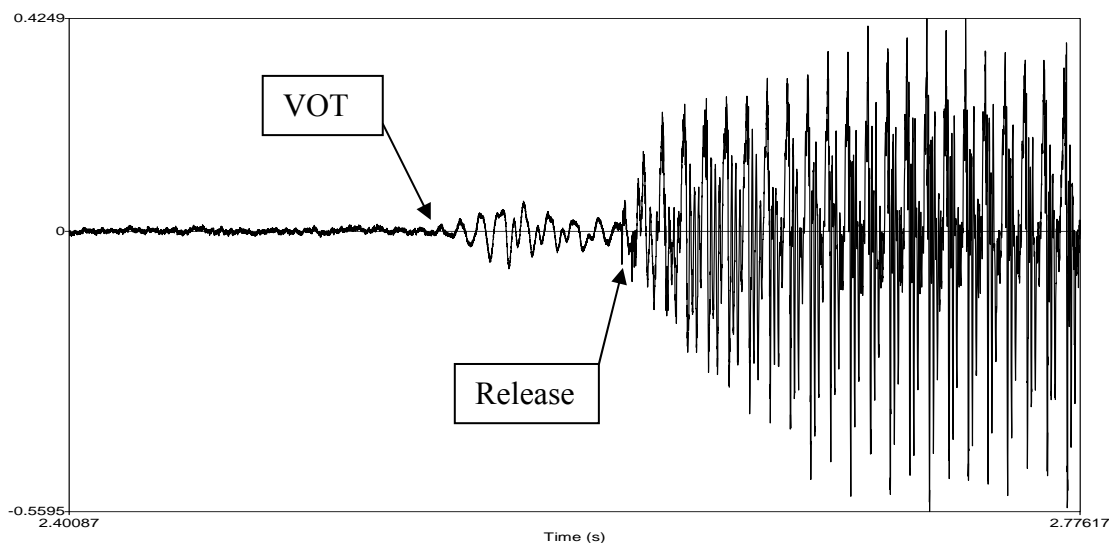


Figure 3.2 – Illustration of voiced stop pre-voicing, -66 Ms (*daahák* ‘single stick’, speaker: IR)

Voiceless and voiced affricated stops alike exhibited a post-burst period of affrication. Among voiced affricated stops the extent of overlap of voicing and frication varied considerably. Sometimes, overlap was complete; other times, there was no voicing during the period of post-burst frication. This fact would suggest that pre-voicing is the principle cue to voiceless/voiced affricate contrast. Examples of voiceless and voiced affricates are given in Figure 3.3-Figure 3.4.

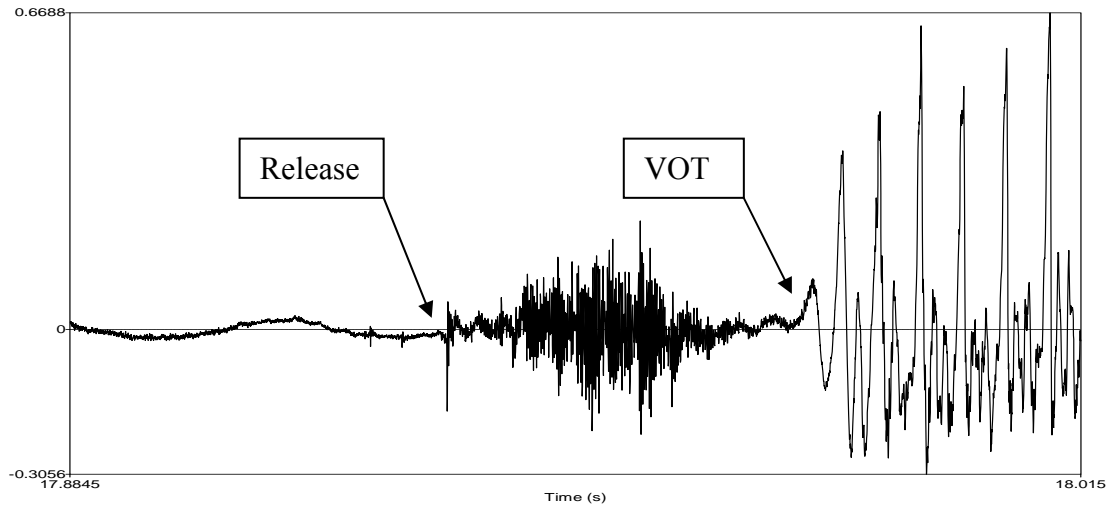


Figure 3.3 – Illustration of voiceless affricate, 44 Ms VOT (*camúm* ‘thirty’, speaker: IRw)

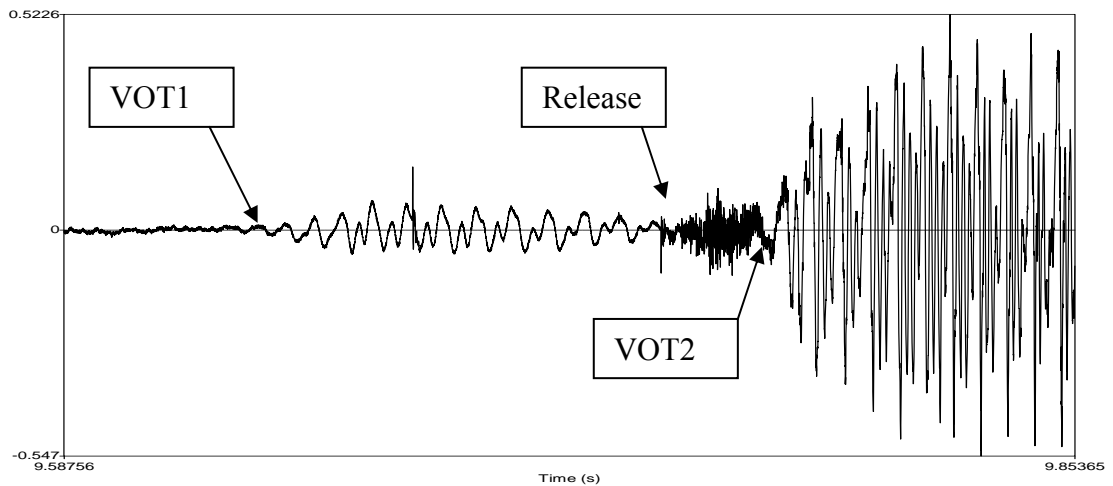


Figure 3.4 – Illustration of voiced affricate, -92 Ms pre-voicing, 26 Ms post-release VOT (*zamnám* ‘to chew’, speaker: IR)

3.2.2. Nasals

Voiced nasal consonants occur at bilabial, alveolar, palatal and velar places: /m, n, ɲ, ŋ/. The following segmental minimal pairs establish the phonemic status of the nasal series:

màanam ‘to dream’

ɲàanam ‘to pierce underhand’

náanam ‘to throw overhand’

ŋàanam ‘to waste’

Galo nasals are voiced throughout, and tend to exhibit a duration which is comparable to that of voiced stop pre-voicing. The perception of a burst, then, is one cue to stop/nasal contrast; another cue is the relative amplitude of a higher formant structure (F1, F2, and F3) to nasals by comparison with stop pre-voicing (in which, in general, only F0 and possibly F1 are at any strength of amplitude) (Figure 3.5-Figure 3.6).

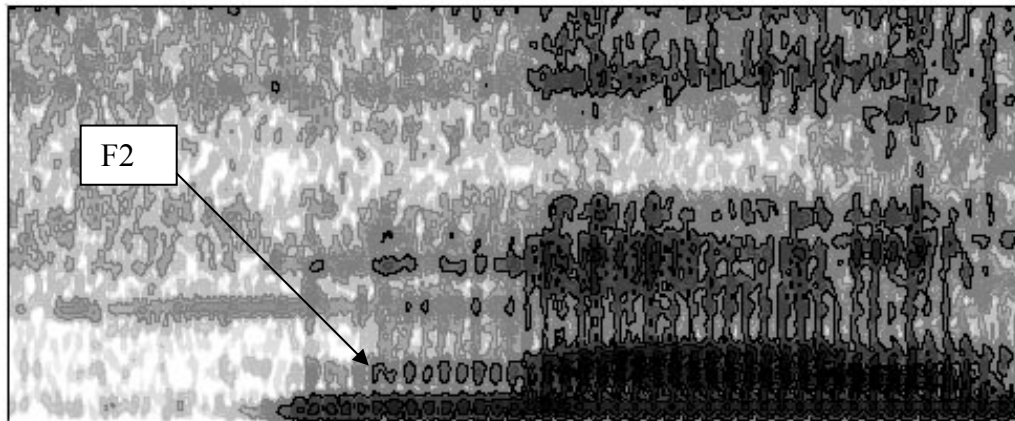


Figure 3.5 – Spectrogram illustrating formant structure of nasal *m* (*maali* ‘sweet potato’; speaker: IRw)

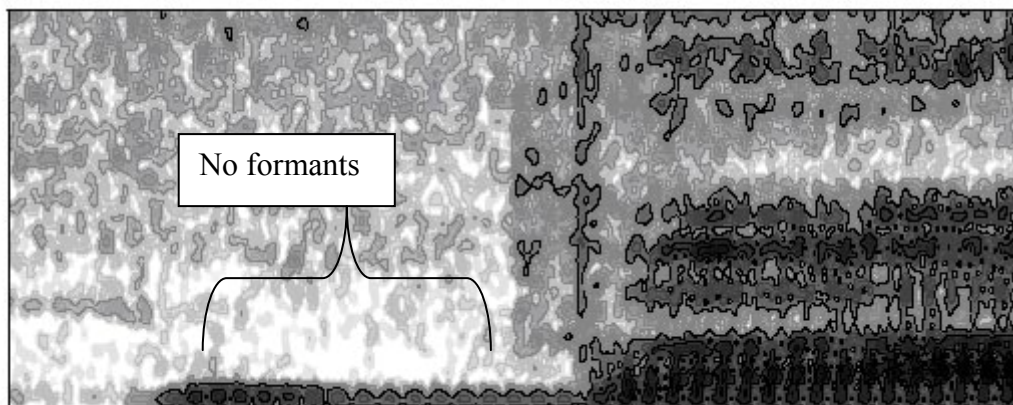


Figure 3.6 – Spectrogram illustrating lack of formant structure to pre-voiced *b* (*baakɔ* ‘Solanum sp.’; speaker: IRw)

Although I had intended to investigate the place properties of Lare Galo nasals via analysis of their respective “zero” positions in the frequency spectra (i.e., frequencies which are subtracted from the signal due to waveform cross-cancellation resulting from interaction between oral chamber and nasal chamber resonances), in the majority of recordings background noise proved too high to permit consistent measurements across

speakers. This then remains a topic for future analysis pending data collection under more favourable conditions.

3.2.3. Non-nasal continuants

Alveolar lateral and palatal approximants are phonemic in Lare, as is an alveolar trill. The following segmental minimal pairs prove the phonemic status of each:

| | |
|---------------|----------------|
| <i>làanam</i> | ‘to take’ |
| <i>jáanam</i> | ‘to rot’ |
| <i>ràanam</i> | ‘to be virile’ |

The trill often occurs as a flap, particularly in intervocalic position. In initial position, trills are often preceded by an anticipatory, non-phonemic schwa and/or oral pre-voicing. In final position, trills are often partially devoiced. Figure 3.7 illustrates both of these phenomena.

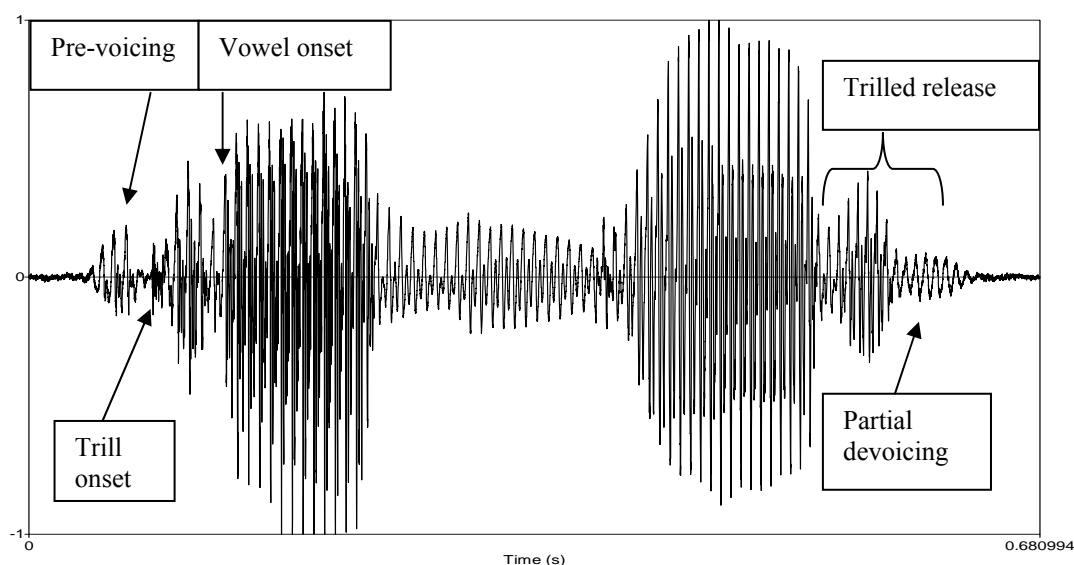


Figure 3.7 – Illustration of Lare Galo trill *r* in word-initial and word-final positions (*rabgúr* ‘doorjamb’; speaker: IR)

3.2.4. Fricatives

Fricatives are among the least stable segments in Tani historical phonology, and they continue to exhibit certain volatilities in several modern Tani languages (§2.4.3.2.1, §2.4.3.2.4, §2.4.4.7.1; also cf. Sun (1993b: §2.2.2.1)). The variety of Lare under description here exhibits two fricatives at alveolar and glottal places of articulation: [s] and [h]. Among native Galo words, both reflect PG **ɕ* and, as such, are in complementary distribution: [h] is found *word-initially* and *postvocally* when forming a *heavy syllable onset*; [s] is found *postconsonantly* and *postvocally* when forming a *light syllable onset*. The following examples illustrate the basic distribution of [s] and [h] in native words (the first example also proves the phonemic status of the fricative set by comparison with previous examples, such as *laanàm* ‘to take’):

| | | | |
|---------------|------------------------------|--------------|-------------|
| <i>háanam</i> | ‘to tense the inner muscles’ | <i>iksàp</i> | ‘hair clip’ |
| <i>ohóo</i> | ‘cane; rattan; rope’ | <i>isì</i> | ‘water’ |

Given this distribution, from a strictly structuralist perspective, we should posit the existence of a single underlying phoneme with two environmentally-conditioned allophones. Unfortunately, it is not obvious which form should more closely reflect the “underlying” form, /s/ or /h/; from a traditional generative perspective, one might say that each change (/s/ → [h] or /h/ → [s]) requires the same number of rules, and the naturalness of the different rules is comparable.⁵⁵ Assuming underlying /ɕ/ (or an underspecified fricative /H/) would also be possible – in effect, recapitulating history – but would require a larger number of rules and would not correspond well to the intuitions of Lare speakers.

And still further complications exist when we turn to loanwords. For example, [s] may be found word-initially as a heavy syllable onset in recent Indic loanwords such as *sár* ‘male teacher’ (ultimately <Eng *sir*); the more native Galo-like **hár* is in fact not found. In addition, older loans which have traditionally reflected the native Lare

⁵⁵ Informally, for example, we can generate [h] by (where “.” represents a syllable boundary) 1) /s/ → [h] / #_ and 2) /s/ → [h] / V.(C)_ {C/V}. and generate [s] by 1) /h/ → [s] / C_ and 2) /h/ → [s] / V.(C)_.

phonology, such as *hàa* ‘tea’ (< PG **çàa* < Asm *sa*, cf. Pugo *sàa*), have also more recently been re-borrowed into Lare, as *sàa* ‘tea’ – in line with the Assamese pronunciation; the two forms *hàa* and *sàa* now freely alternate for many Lare speakers.⁵⁶ And, adding to these loanword-induced difficulties is the fact that Lare speakers commonly converse with speakers of Galo dialects in which PG **ç* reflexes are differently-distributed (for example, in Pugo, /s/ becomes [h] word-initially only; postvocally, *s* is found, as in Pugo *əsàp* ‘net’ (Lare *əhàp*); cf. §2.4.4.7.1), and commonly adopt “non-Lare” pronunciations when speaking with them. And finally, the usual tendency among modern Lare speakers when pronouncing Galo or Assamese place-names whose fricative placements violate the native Lare distribution is to adopt the local pronunciation. For example, *hil#* village, while a predominantly Lare village, also includes numerous speakers (including some prominent community members) of Lare subdialects in which PG **ç* is retained. To many younger speakers, this pronunciation is learned as [s], wherewith *sil#* has, in my experience, become the more commonly-used pronunciation even among speakers of “pure” Lare.

Thus, from the perspective of the lexicon, we would probably wish to say that **ç* → {s/h} reflects a *historical* process which is now complete. Although this process has left a robust set of patterns in its wake, there is in modern Lare Galo in fact a set of *two* fricatives with psychological reality to Lare speakers, and which must be posited as two distinct phonemes.

But our difficulties do not end here. Not only does the native *lexicon* reflect complementarity of [s] and [h], *synchronically productive morphophonological processes* also reflect the same pattern. Thus, for example, Irrealis/Obligative nominalizer *-há* can be suffixed to a predicate stem of any syllable structure and of widely varying size, and its phonetic realization as [ha] or [sa] reflects the distribution discussed above; in (15), note that *-há* is realized [s] when following a consonant and as [h] when occurring as the initial consonant of a phonological word (for discussion of the grammatical/phonological word distinction in Galo, see §4.1).

⁵⁶ For further discussion of loanword phonology, see §3.6.

(15) *insáa bəré inmáa háa bəré?*

ín-**há** = əə

bəree ín-máa-**há** = əə

bəree

go-NZR:IRR=COP.IPFV

CJEC go-NEG-NZR:IRR=COP.IPFV

CJEC

‘Should I go or not?’ (lit., ≅ ‘Might it be a case of my pending-going or might it be a case of my not-pending-going?’) (IR, B5:49)

Thus, we are left with the following, complex state of affairs: it is simultaneously true *both* that Lare Galo has two fricative segments *s* and *h* – each with psychological reality to speakers – *and* that both lexical and morphophonological patterns exist in the language which motivate identification of a single fricative consonant which predictably alternates as [s] or [h] in different contexts. Within the constraints of structuralist phonology,⁵⁷ it might be possible to view one set of facts in terms of one “constraint domain” and the other in terms of another (as in the approach of Itô and Mester (1995) to a similar set of problems in Japanese). A less ad-hoc solution, and one much-better-attuned to what is known about category-acquisition in general, might be to simply view these patterns in the data as what they are: patterns in the data, which are learned and probabilistically implemented by Galo speakers in their own linguistic performance. The set of domains in which each set of norms is used forms a component of the speaker’s knowledge of his language, and where domains overlap we may – indeed do – find differential implementations. For further discussion on these points, see Bybee (2001), and, with specific reference to loanword phonology Henderson (1951); for the purposes of this description, however, it should simply be understood that there are two fricative phonemes *s* and *h*, which systematically vary in some, but not all, conditions. Where they do vary systematically, *h* is treated as the “underlying” form (as with Irrealis/Obligative nominalizer *-há* in (15)). However, this should be understood as an arbitrary decision of convenience motivated principally by the relatively greater statistical frequency of *h*; it would have been equally possible to present the “underlying” form as *s*, or to posit an underspecified fricative *H*.

To investigate the phonetic properties of fricatives in Lare, peak spectral frequency amplitudes were measured from the temporal midpoint of the fricative duration. Peak spectral frequency is generally viewed as an index of fricative place, reflecting the

⁵⁷ I include here more contemporary extensions such as generative phonology and even so-called optimality theory, which despite their pretensions to departure from the structuralist tradition seem to me to persist (inexplicably, in view of the mountain of evidence to the contrary) in viewing synchronic phonology exclusively in terms of the finite structure of a finite state.

size of the resonating chamber anterior to a point of constriction (Svantesson 1986). When recording the tokens, it was hoped that context might be regularized to include only word-medial articulations (in which both *s* and *h* occur in the native lexicon); however, since it was found that intervocalic *h* very often (though not always) was realized with vowel-coarticulatory voicing as [h], it was decided to use word-initial *h* tokens, which are realized without voicing in isolation (for the same reason, frame sentence tokens were discarded due to coarticulation with the preceding word-final vowel). A total of three tokens per speaker per target were obtained. The fricative portion of voiceless affricate *c* was also analysed in this context. Because average deviations between speakers among *s* and *c* realizations contain significant overlaps (see below discussion), a by-speaker table is given, with all-speaker figures in **bold**.

| Speaker → | IR | | IRw | | LN | | MN | | All | |
|---------------|------|---------|------|---------|------|---------|------|---------|-------------|------------|
| Form ↓ | Avg. | St. Dv. | Avg. | St. Dv. | Avg. | St. Dv. | Avg. | St. Dv. | Avg. | St. Dv. |
| <i>haanám</i> | 1537 | 49 | 1570 | 39 | 1446 | 252 | 1341 | 49 | 1473 | 103 |
| <i>marsáa</i> | 5234 | 122 | 6220 | 355 | 5384 | 207 | 6736 | 731 | 5894 | 710 |
| <i>camúm</i> | 4058 | 104 | 4529 | 275 | 4966 | 373 | 4189 | 367 | 4436 | 405 |

Table 3.6 – Peak spectral frequencies (Hz) of Lare Galo fricatives and affricates (three tokens per speaker per term)

Generally speaking, it was found as expected that the glottal fricative had a relatively low peak spectral frequency, perhaps lower than what might be expected cross-linguistically (Ladefoged and Maddieson 1996:§5.4). The alveolar fricative and alveo-palatal affricate were in general quite distinct, and basically in line with what is expected across languages; however, tokens from speaker LN – the oldest speaker of the group – overlapped significantly. Although there is not enough data here to say anything of a definitive nature, it is entirely possible that LN’s speech exhibits a relatively less distinct alveolar/alveo-palatal contrast, which (if our reconstruction is correct) would more closely resemble speech from an earlier stage of the language, and thus could represent a generational difference. To be quite clear, I am not suggesting here that speaker LN does not have a place contrast among *s* and *c*; there are speakers of Galo dialects other than Lare who have these consonants at the same place [ç] and [tç], and LN is not one of them. Rather, I am suggesting that the *ç* → *s* change may have taken place gradually, and that LN’s realizations of the *s/c* place distinction may not be as robustly contrastive as those of

younger speakers. This question would seem to be a potentially fruitful topic for further phonetic research.

3.3. Vowels

Galo exhibits the basic seven-vowel system found in Proto-Tani and most of its descendants: high and mid vowels are found in front, central (unrounded) and back (rounded) positions *i/e*, *ɨ/ə*, and *u/o*, with only one central (unrounded) vowel *a* in the low position (cf. §3.1, Table 3.2; also see Appendix B for comparison with the PTs set).

Most stable among the vowels are *a* and *e*, which at least in modern Galo exhibit virtually no variation or change in quality. *i* and *ɨ* are also relatively stable, except when following palatal consonants in which the distinction is sometimes neutralized (a few interesting historical cases of seemingly random “exchange” in which **i* → *ɨ* / [+pal] _ and **ɨ* → *i* / [+pal] _ may also be noted; cf. §2.4). In some Lare subdialects, [u ~ o] variation is found among word-final reflexes of PTs short **-u*, reflecting a recent Lare sound change which, for some speakers, would appear to be incomplete;⁵⁸ the trend appears to be toward consolidation of the change, with the more conservative [u] pronunciation usually considered to be non-standard among my consultants.

Finally, /ə/ freely varies [ə ~ ɛ], with the target region seemingly somewhere in the middle. Historically, there have been some cases of ə ~ ɨ interaction or change (see for example §2.4.4.7.2), but little if any evidence of interaction between ə and e, despite their being phonetically quite close in the region of [ɛ]. The following examples prove the phonemic status of Lare vowels:

⁵⁸ E.g., for some speakers [agò ~ agù] ‘warm/hot’ (< PTs **g(j)u* ‘warm/hot’), or [adó ~ adú] ‘sound’ (< PTs **du*² ‘sound’) but [atò] (*[atù]) ‘grandfather’ (< PTs **to* ‘grandfather; father-in-law’). Interestingly, however, when the same roots appear in word-initial position, the proto-value is retained and variation is not found; *adó dū-nam* ‘sound make.sound-NZR:RLS’ is the usual pronunciation of ‘to make a sound’; **adó dó-nam* is unacceptable.

| | | | |
|---------------|---------------------|---------------|-----------------------|
| <i>píinam</i> | ‘to prick’ | <i>péenam</i> | ‘to cut with a knife’ |
| <i>píinam</i> | ‘to steam in bamboo | <i>péenam</i> | ‘to fart’ |
| <i>púunam</i> | ‘to spread out’ | <i>pòonam</i> | ‘to cover’ |
| <i>páanam</i> | ‘to hover’ | | |

All seven vowels may be short or long in open syllables, with the exception that *e*, *i*, and *a* do not occur in an open, short rhymes in word-final positions. Sometimes, open rhyme length contrasts reflect length contrasts at the Proto-Tani stage, as *pá-* ‘chop’ (< PTs **pa* ‘chop’) versus *pàa-* ‘get’ (< PTs **paa* ‘get’). More often, they are secondary, reflecting the outcomes of historical changes; for example, modern Lare long rhymes typically reflect compensatory lengthening following loss of velar nasal codas at or around the Proto-Galo stage (§2.4.3.5.2), and some modern Lare short rhymes reflect a pre-Proto-Galo shortening rule (§2.4.3.4.3); for example, *méə-* ‘think’ (< PTs **mih* ‘think’) versus *mé-* ‘cheat/lie’ (< PTs **məə* ‘cheat/lie’).

An interesting phonetic property of certain vowels is the sporadic and seemingly idiosyncratic presence of *breathiness*. While it is usually not noticeable in running speech, in careful pronunciation many (certainly not all) Lare speakers produce a voiceless, breathy (=aspirated) release of short *o*, *ə* and, sometimes, *u* vowels in *high tone words only*, viz. *abó* ‘father’, phonetically [abo^h] and *tabé* ‘snake’, phonetically [tabə^h]. When followed by a morpheme with the same basic rhyme type in the same phonological word, breathiness has also been observed to transfer to word-final position, as *abó=go* ‘father=IND’ ‘a father’, realized [abogo^h].⁵⁹

In a different but possibly historically relatable case, long *ə* vowels in open syllables (in *both* tones) often have (voiced) breathy phonation over the length of the vowel, as *adéə* ‘short’, which is realized by some speakers as [adəə̤].⁶⁰

While my experience with Galo dialects found to the North and West of *aalóo* (Along) is limited, having not yet gained permission to travel so far into the “interior”, my impression from the few contacts I have had with speakers from these areas is that breathy phonation may be (or, to put it differently, may historically have been) a more

⁵⁹ *go* ‘IND’, if spoken alone, does not exhibit a breathy release.

⁶⁰ A few speakers also exhibit breathy phonation in [ee] vowel sequences.

prevalent feature of the Galo language in the broad sense than I am able to report here. Certainly, there is every chance that the modern tone system either evolved from, or was otherwise associated to, a register system of some kind. Although it is perfectly clear that no such register system exists in modern Lare Galo, it is equally possible that some vestigial residue of an earlier register system is in evidence here. Be that as it may, and until further research on more “interior” Galo dialects and other Tani languages can be carried-out, this mysterious phenomenon will remain largely that: a mystery.

To investigate the phonetic properties of Galo vowels, F1 and F2 were measured. F1 provides an index of vowel frontness vs. backness; F2 provides an index of vowel height (Ladefoged and Maddieson 1996:§9). Only word-initial long vowels in high-toned words were selected, since this is the environment in which all seven vowels contrast. The words selected were *aapám* ‘fog’, *iitúu* ‘toothless mouth’, *uugí* ‘back’ *teelóo* ‘belt of brass discs’, *óo* ‘vegetable’, *təənám* ‘to chop’, and *hínám* ‘to urinate’. Measurements were taken at temporal midpoints, with four tokens per speaker. Across-speaker averages were then taken from within-speaker averages for each vowel, and standard deviations calculated. Since women and men tend to have different absolute vowel spaces, due to the relatively larger male vocal tract, men and women were grouped separately. Figure 3.8 plots the vowel space of our male speakers; Figure 3.9 plots the vowel space of our female speakers. Bullet points represent across-speaker averages; error bars represent across-speaker standard deviations.

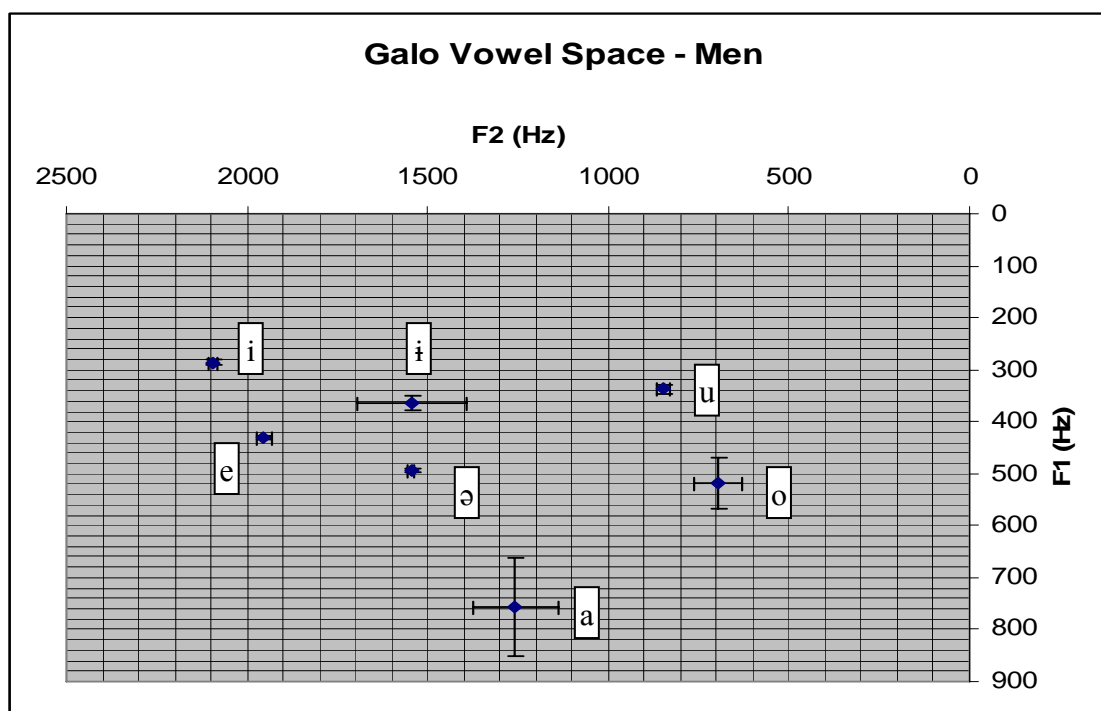


Figure 3.8 – Galo vowel space, men (data points represent four tokens times two speakers)

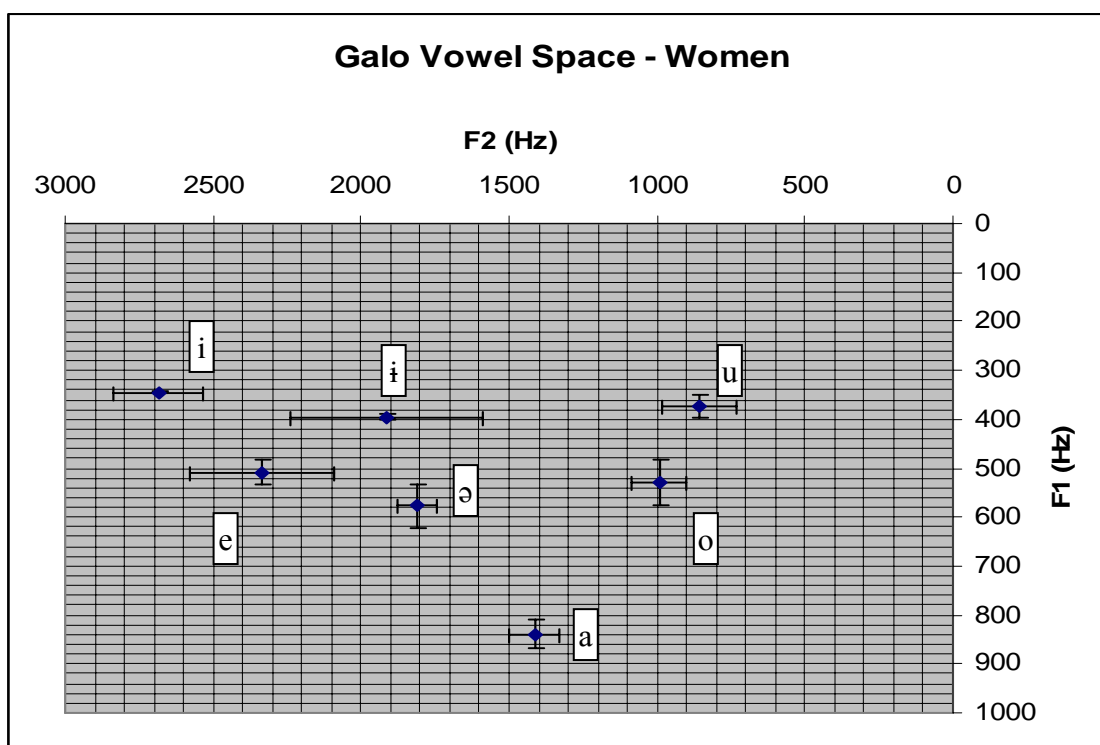


Figure 3.9 – Galo vowel space, women (data points represent four tokens times two speakers)

Generally speaking, the relative vowel spaces of our male and female speakers are closely comparable. There is in general more front-back variation than there is height variation, across all speakers. *ɨ* is firmly established as a high, central unrounded vowel, and not a high, back unrounded vowel *u* (*contra* some previous descriptions). Both *ɨ* and *ɘ* are front relative to *a* which, however, exhibits considerable freedom of movement. The other vowels pattern more or less as would be anticipated.

3.3.1. Diphthongs

The occurrence or non-occurrence of diphthongs in Galo is a vexing question. Diphthongs do not seem to have occurred at the Proto-Tani stage, and are thus not generally found in the underlying representations of monosyllabic Galo roots and other morphemes. However, as a result of historical processes of compounding and prefixation, as well as sound changes,⁶¹ a few heterorganic V_iV_j sequences have emerged which may or may not have the same prosodic status as long vowels (i.e., as V_iV_i sequences) in

⁶¹ Compounding and root-prefixation in themselves created opportunities for short vowel adjacency; these opportunities were also enhanced by the pre-Proto-Galo loss of most initial fricatives, which left many previously “shielded” short vowel nuclei “exposed”. For example, consider *aú* ‘fat/grease’ < PTs **a-fu* ‘PFX-fat/grease’.

modern Galo. Table 3.7 represents the majority of discontinuous vowel sequences attested to date.

| Final | Ex. | Gloss | Final | Ex. | Gloss |
|-------|-------------|---------------------------|-------|------------|----------------------------|
| -i | <i>aí</i> | ‘heavy’ | -o | <i>buò</i> | ‘baby rodent’ |
| | <i>uì</i> | ‘spirit’ | | <i>aò</i> | ‘child’ |
| | <i>oì</i> | ‘last child’ | | <i>hìò</i> | ‘seventh month’ |
| | <i>ceì</i> | ‘pinky’ | | <i>təò</i> | ‘elephant baby’ |
| | <i>nəì</i> | ‘youngest brother’s wife’ | -u | <i>aú</i> | ‘fat/grease’ |
| -ə | <i>hoó</i> | ‘cattle’ | | <i>loù</i> | ‘light’ |
| | <i>ɲíə</i> | ‘year after next’ | -i | <i>oí</i> | ‘low’ |
| | <i>taók</i> | ‘fan palm’ | | <i>aí</i> | ‘body/self’ |
| -e | <i>gəén</i> | ‘loom backstrap’ | -a | <i>poà</i> | ‘rice beer storage basket’ |

Table 3.7 – V_iV_j sequences

In determining whether V_iV_j sequences such as those found in Table 3.7 count as (disyllabic) vowel sequences or as (monosyllabic) long vowels, basically two types of evaluation criteria are available. The first concerns native speaker intuition, as to whether a particular V_iV_j sequence “sounds” more like some given, unproblematically monosyllabic word or more like a disyllabic word. The second concerns morphophonological processes; does the language “treat” a V_iV_j sequence the same way it treats monosyllables with long vowel nuclei, or does it treat it like a disyllable.

Evidence collected to date has been mixed. When asked to compare the forms in Table 3.7 with unambiguous monosyllables such as *ɲí* ‘person’ and *máa* ‘no’, and unambiguous disyllables such as *abó* ‘father’ and *tabó* ‘snake’, most of my consultants felt that distant (polar) pairs such as in *aú* ‘fat/grease’ were closer to monosyllables, while closer pairs such as in *ɲíə* ‘year after next’ were more like disyllables.⁶² However, there was considerable disagreement among my consultants in many cases.

In terms of morphophonology, evidence comes from the (seemingly stress-motivated) morphophonological rule of Triggered foot-strengthening. In this case, evidence seems to point to a bimoraic (monosyllabic) analysis: *aú* = əə

⁶² It is perhaps also worth noting that potentially diphthongal forms such as *aú* always have a clear (non-breathy/aspirated) release (see §3.3). While not a decisive criterion in itself, this fact would tend to support a view of such forms as long vowels/single syllable nuclei rather than as short vowel/disyllabic sequences; if [u] in *aú* had the phonological status of a short vowel/syllable nucleus, it should seemingly exhibit a breathy/aspirated release.

‘fat/grease=COP.IPFV’ is resyllabified [au.wə]. See §4.1.4.6 for additional discussion and examples.

In short, the existence of diphthongs in modern Lare Galo can at present be neither confirmed nor denied. Given the relatively small number of candidate forms (relative, that is, to unambiguously monosyllabic or disyllabic forms), it is possible that this represents a “less stable” area of the phonology, or a less robust pattern over which language learners are able to generalize rules. Along the same lines, it is possible that the morphophonological rule discussed here – while certainly productive in modern Galo – nonetheless has its origins in a “pre-diphthongal” phonology, in which forms such as *aú* ‘fat/grease’ more closely resembled disyllables in their realization than do the modern forms. This is of course only speculation; ultimately, it would seem that the possible emergence of diphthongs in Tani languages would represent a fruitful area for cross-linguistic phonological research.

3.4. Marginal phonemes

3.4.1. Glottal stop

The phonemic or non-phonemic status of glottal stop in South-East Asian languages (as well as elsewhere) is a topic which is perhaps as often disagreed-upon as it is discussed. The problem surrounds the facts that, while a glottal stop onset to otherwise vowel-initial syllables (and, in some languages, also a coda) is often more salient, more often realized, and potentially, more phonologically *relevant* than it is in many other languages, glottal stop nonetheless frequently exhibits some deficiencies in its distribution which would argue against assigning it the same status as other consonants. For example, in her Thai-English Student’s Dictionary Mary Haas (1964) finds a phonemic glottal stop in word-initial and final positions, but Robert Noss, writing around the same time, was able to assign glottal stop to a “stress” phoneme, in light of the fact that *unstressed* terms in Thai tend to *lack* a glottal stop (Noss 1964:9). Alec Coupe, analysing the Mongsen dialect of Ao (Naga), acknowledges that while syllable-final glottal stop must be specified in the underlying representation of many terms, its deletion before suffixes (as well as non-occurrence in syllable-initial position) shows that it cannot not have phonemic status on a par with other consonants (Coupe 2007). Similarly, Genetti (2007:50) argues that

although glottal stop has relevance to the phonological patterning of certain other phonemes (notably *o*), evidence is insufficient to assign it independent phonemic status.

Glottal stops rarely have the salience, obligatoriness, and cognitive reality to native speakers of South-East Asian languages that other consonants have. At the same time, they are often persistent, and correct use can in part mark one as a good or poor non-native speaker. The question of whether or not to assign phonemic status is not only an academic question of adding another element to the inventory, however. As Coupe (2007:53) also points out, the presence or absence of glottal stop can provide crucial evidence for phonological word boundaries.

In Galo, glottal stop is almost completely absent in word-final position, generally occurring only as a marker of emphatic speaker attitude (as in the disagreement interjection *máʔ* ‘no (your presupposition is incorrect)’ (§13.7.3). Word-internally, glottal stop is never found. In word-initial position, however, glottal stop figures prominently. Vowel-initial words are usually realized with a glottal stop onset in clear speech, blocking onset-loan from the final consonant of a preceding term (as *apək-arək* ‘perfect-RDUP’ ‘intelligent’, syllabified as [ʔa.pək.ʔa.rək], not *[a.pə.ka.rək]). In running speech, furthermore, vowel-initial words are usually realized with a glottal stop onset, leading to a staccato-like patterning which is often striking to a non-native speaker (16).⁶³

- (16) *porók-luggóm ʔuudʔ lá...ʔaʔigó ʔalókə dollòm*
 porók-lugó = əəm úu-dó(o)-là(a) = ʔ aʔi = gə alák = əə dollò = əəm
 fowl-crow=ACC awake-STAT-NF=NFI1 self=GEN hand/arm=TOP paddy=ACC
ʔidú...
í-dùu = ʔ
 pound-IPFV=NFI1
 ‘After waking up at the cock’s crow...they pound the paddy with their own hands...’ (LN, GMW 004)

Thus it would seem that presence or absence of glottal stop can provide supporting evidence for locating word boundaries in Galo (§4.1.3.3), as in Ao Mongsen (Coupe 2007).

However, the fact remains that the tendency for speakers to realize glottal stops before vowel-initial morphemes is nowhere near as strong as the tendency to realize any of the other consonants discussed above. Omission of glottal stop in e.g. *kaí-nà* (?)*ikii*

⁶³ My impression, both as results from the texts used for this study and from general observation, is that this is more true for the speech of women than in that of men, although why that should be escapes me.

‘big-NZR:SUB dog’ ‘big dog’ is accepted by speakers as correct (if a little bit lazy or sloppy-sounding), whereas *kaí-nà *(p)əzáp* ‘big-NZR:SUB duck’ ‘big duck’ is impossible without an overt [p].

Furthermore, it is possible to find segmental minimal pairs on the presence or absence of glottal stop – for example, *əə* ‘bamboo’ is generally realized with an initial glottal stop onset, but *əə* ‘Topic marker’ almost never is – however, this fact seems to relate to the clitic status of the Topic marker – which is a function word – while *əə* ‘bamboo’ is a lexeme; it is not possible to find pairs of vowel-initial lexemes, one of which has an underlying glottal stop and one of which does not.⁶⁴

Thus, glottal stop ultimately seems to be best analysed as a *word prosody* in Galo, cuing the boundary of an otherwise vowel-initial word. Certainly, then, glottal stop qualifies as an aspect of a native speaker’s phonological knowledge, but not at the level of a segmental phoneme.

3.4.2. Underspecified syllable-final consonant -*K*

Underspecified consonant -*K* is the Galo reflex of an unknown Proto-Tani syllable-final segment, reconstructed by Sun (1993b) as **-tʰ*. Possibly ultimately reflecting Proto-Tani or Pre-Proto-Tani **-s/ç*,⁶⁵ **-tʰ* reflexes contrast with those of **-tʰ* in some modern Tani languages (such as Galo), although both are reflected as *-t* in others (such as Mising). Unfortunately, the Galo facts do not seem to bring any further evidence to bear on the historical dimension of this problem.

In modern Lare Galo, **-tʰ* reflex -*K* has the following set of realizations:

⁶⁴ Very late in my research – after the submission of this thesis, in fact, but before the library binding – I was able to work with several speakers of northern Galo dialects who were able to produce clear minimal pairs on the presence or absence of initial glottal stop in the underlying forms of lexemes; for example: *ʔá-* ‘dry-fry’ and *á-* ‘keep’. With few exceptions, however, my Lare consultants were unable to recognize or reproduce these differences, at least in isolation. Accordingly, an immediate priority for ongoing research will be to determine the distribution of this (presumably phonemic) glottal stop in northern Galo dialects, and to determine whether there are any correlations to be found in the realization of corresponding lexemes in Lare Galo discourse.

⁶⁵ Tani-internal evidence is sufficient to reconstruct a PT **ç/s--* initial, but not a **-ç/s* final. However, a **-ç/s* final is supported in the few cases where cognate PTB reconstructions are found; see Sun (1993b: §4.3.2.3) for discussion and examples.

- a) when occurring word-internally and preceding a consonant, fully assimilates to (copies) that consonant
- b) when occurring word-finally, occurs as [k]
- c) when occurring word-internally and preceding a vowel, occurs as [g]⁶⁶

This distribution holds in the case of both lexemes and productive root-suffixations; among lexemes, the same root sometimes has both [k] and assimilated reflexes in different environments, as *taɲíʔ* ‘honeybee’ (< PTs **ta-ɲutʰ* ‘honeybee’) and *ɲilláa* ‘honey’ (< PTs **ɲut-lan* ‘honeybee-soup’). Among synchronically active formations, we find alternations such as *cinnám* ‘to throw a spearlike thing’ (< *cíK-nam* ‘throw a spearlike thing-NZR:RLS’) and *cigûp.nàm* ‘to throw a spearlike thing such that something shatters’ (< *cíK-ûp-nam* ‘throw a spearlike thing-SHATTER RESULT-NZR:RLS’). Thus, evidence is sufficient to establish *-K* as a phoneme, but with limited distribution and with incomplete phonetic specification.

Intriguingly, some speakers report sensing a “difference” of some kind between alveolar nasals which result from assimilation of a form in *-K* to a following alveolar nasal, and an alveolar nasal which realizes underlying *-n*. Thus, for example, in *zinnám* ‘to melt’ (< *ziK-nam* ‘melt-NZR:RLS’), the first medial [n] seemed to occur as a dental [ɲ], while in *zinnàm* ‘to stretch (VI)’ (< *zìn-nam* ‘stretch-NZR:RLS’) the corresponding segment was alveolar. This difference was not found among other alveolar segments (i.e., a [d] resulting from assimilation occurred as [d], not [ɖ]). However, some queried speakers reported sensing no difference, nor could I discern any in their speech. Thus, it is both possible that the “difference” was an illusion,⁶⁷ and that, at least in some Lare subdialects, partial retention of an archaic pronunciation exists. This question would require further study.

3.4.3. Velar and labio-velar approximants *ʋ* and *w*

⁶⁶ This reflects [k] followed by regular word-internal voicing assimilation (§4.1.3.7).

⁶⁷ That is, speakers who felt the difference may have been semi-consciously aware of the difference in phonological patterning of a particular form, and may have, again semi-consciously, tried to correlate this with a phonetic difference of some kind, and I was of course aware of the historical situation and may have been eager to find evidence of a linguistic fossil in modern Galo speech.

Velar and labio-velar approximants [ɰ] and [w] occur only as the result of the morphophonological process Triggered foot-strengthening (§4.1.4.6). In this process, vowel-homorganic geminate glides occur in a [VV.GV] sequence when disallowed /V(V).VV/ sequences occur across a syllable boundary as a result of enclisis. When an *i* vowel terminates the first syllable, a [i(i).jV] sequence results; this presents no difficulties, since *j* is a well-attested Galo phoneme which occurs in the underlying representations of many words. However, when an *u* or *o* vowel terminates the first syllable, [u(u)wV] and [o(o).wV] sequences result, as [au.wə] ‘it’s spicy’ (< *au* = əə ‘spicy=COP.IPFV’) and [hoo.wə] ‘it’s cattle’ (< *ho* = əə ‘cattle=COP.IPFV’). When an *i* terminates the first syllable, an [i(i)ɰV] sequence results, as [aii.ɰə] ‘by oneself’ (< *ai* = əə ‘self=TOP’).

However, unlike *j*, [w] and [ɰ] do not occur in the underlying representations of Galo morphemes, and thus cannot be assigned the same phonemic status as other consonants. For present purposes, they are described as “marginal” phonemes; as Galo grow more comfortable writing their language with attention to phonetic accuracy, it will be interesting to learn whether need is felt to develop dedicated symbols for these forms.

3.5. Syllables

3.5.1. Syllable canons at root and word levels

When approaching Galo syllable structure, it is useful to draw a preliminary distinction between *root phonology* and *word phonology*.

Root phonology derives its possibilities and constraints directly from the Proto-Tani syllable canon, as it was further shaped by the various syllable-oriented changes which have occurred since the Proto-Tani stage (see §2.1.1). All Galo roots and affixes underlyingly reflect this relatively restricted basic canon, which may be described as the *basic* syllable canon of modern Galo (Figure 3.10).

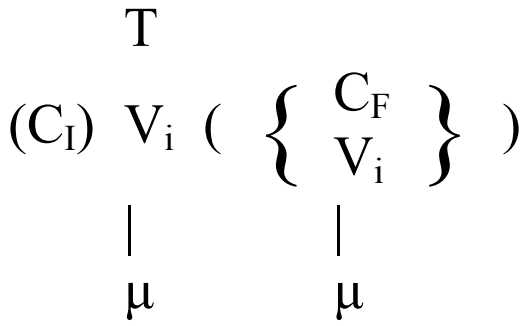


Figure 3.10 – Basic Lare Galo syllable canon

In the basic syllable canon, C_I represents an optional initial consonant, which may be any of the Galo consonant phonemes listed in §3.1, Table 3.1. V_i represents an obligatory nuclear vowel, which may be any of the vowels listed in §3.1, Table 3.2; it is optionally lengthened by an identical vowel in the second mora position. C_F represents an optional final consonant, drawn from the restricted set $C_F = \{p, K, k, m, n, r\}$. T represents a tone, which may be High/Plain or Low/Tense.

Turning to the *phonological word*, we find a far larger and less restrictive syllable canon resulting from the application of various morphophonemic processes. Word-internal assimilation processes are responsible for the largest expansion; for example, regressive total assimilation of underspecified consonant K results in expansion of the C_F set to include the full set of consonants in the language, with the exception of h .⁶⁸ Regarding vowels, compounding and root-prefixation at the word level (in some cases also facilitated by historical sound changes such as proto-onset losses) has led to previously non-occurring sequences which may be realized as monosyllables. For example, *aú* ‘fat/grease’ (< PTs $*a$ - ‘PFX’ + $*fu$ ‘fat/grease’; see also §3.3.1) may be viewed as monosyllabic from some perspectives. Similarly, a secondary CV-VC structure containing homorganic medial vowels may occur in modern Galo as a single syllable; for example, *paàk* ‘raven’ (< PTs $*pV$ - ‘PFX:FLYING’ + $*ak$ ‘crow’) is viewed by most speakers as monosyllabic. The outcome of such processes is reflected in the *expanded* Galo syllable canon (Figure 3.11).

⁶⁸ Recall from §3.2.4 that h does not occur post-consonantly.

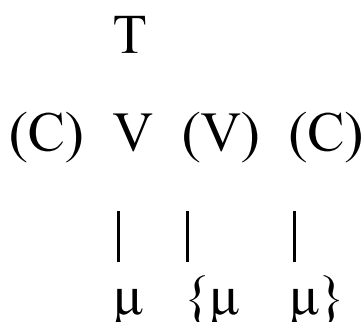


Figure 3.11 – Expanded syllable canon

In the expanded syllable canon, consonant initials and finals no longer form discrete sets, and long vowels may in principle be homorganic or diphthongal; in other words, segmentally speaking, nearly anything goes. In practice, however, not all combinations are possible in all positions of a word, and not all speakers will necessarily agree on the monosyllabic or disyllabic status of certain structures (cf. §3.3.1). In short, what we seem to find in modern Galo is an emergent restructuring of the concept of “syllable” in response to an overall shift in focus from “syllable” to “word” as the basic organizational unit in Galo phonology. Further discussion of phonological word-oriented possibilities and constraints will be found in §4.1.3.

3.5.2. Moraic structure

The basic Galo syllable canon exhibits a cross-linguistically typical weighted moraic structure (Broselow 1995); onset consonants are disregarded, while nucleus and coda (which may be a vowel or consonant) are each given a weight of one. Certain morphophonological processes in Galo operate differently when applied in the environment of a syllable with one or two mora (or of a word composed of such syllables; see §4.1.4.6). Thus, we can identify a distinction between *monomoraic*, or *light* syllables (those with the structure (C)V) and *bimoraic*, or *heavy* syllables (those with the structure (C)VV or (C)VC) (Figure 3.12).

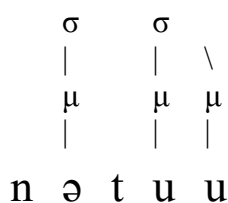


Figure 3.12 – Moraic structure of the disyllabic word *nətúu* ‘thread’, with light-heavy internal syllable structure

3.5.3. Syllabification

As in most if not all languages, onsets are preferred to codas in syllabification within a phonological word in Galo. That is, when a VCV sequence presents itself within the same word, and when C could in theory form either an onset or a coda (V.CV or VC.V), the first solution is preferred. Evidence for onset-preference comes from the location of the “pitch peak” in a phrase-medial Low/Tense-toned phonological word, which is generally located on the heavy syllable when syllable weights are unequal; when weights are equal, it is located on or closer to the initial syllable. Thus, when *akèn* ‘one’ is followed by phrasal enclitics *go* ‘IND’ or *əə* ‘TOP’, the difference in pitch peak locations: *akêngo* ‘one’ versus *âkenə* ‘by oneself’ reflects the different syllabifications applied: [a.ken.go] versus [a.ke.nə]. For further discussion of tone patterning, see §4.2.2.

A marginal exception to onset preference follows application of Syncope, in which final short vowels in a heavy-light word structure tend to reduce and/or delete (§4.1.4.5). For example, *taakə = go* ‘dove=IND’ ‘a dove’ is generally syllabified [taak.go], not *[taa.kə.go], with the latter generally viewed as an archaic-sounding pronunciation which would be unnatural in modern Lare. This is a marginal case inasmuch as, while a strong onset preference would motivate a trisyllabic pronunciation, if syllabification were viewed as applying *after* the application of Syncope, there would (in this case) no longer be an available nucleus available to construct a syllable in which *k* might serve as onset. For further discussion of Syncope, see §4.1.4.5.

3.6. Loanword phonology

The number of well-assimilated non-Tani loanwords⁶⁹ in Galo is extremely small; the majority can be easily listed (Table 3.8).

It is difficult to make any generalizations about such a small list of forms, particularly since absolutely nothing is known about the dates of borrowing, from which dialect or dialects of Assamese the loans might have originated, whether the Assamese speakers from which Galo speakers first learned these words were in fact native Assamese speakers themselves – and so on. A few regularities seem to emerge – for

⁶⁹ I am including only lexemes here. A few particles seemingly represent very recent loans, used in grammatical functions which are usually not found in the donor language; these are not used by all Galo speakers. For discussion and examples, see §13.4.

example, *tamúr* ‘betelnut’ seems to have undergone Final liquid merger (§2.4.3.2.2), and *azár* ‘thousand’ and *untráa* ‘orange’ exhibit Non-palatal fricative deletion (§2.4.3.2.1), suggesting relatively early dates for these loans. Some other interesting points include the reanalysis of nasalized Assamese *õ* as a rhyme with nasal coda *om*, and use of the Assamese non-final verb forms to form Galo stems. Ultimately, however, this is not a data set against which any powerful generalizations can be made.

| Galo | Gloss | Source | Form | Gloss |
|----------------|--|--------|--------------------------|--------------------------|
| <i>lagí</i> | ‘want/need’ | Asm | <i>lag-</i> + <i>-i</i> | ‘want/need; attach + NF’ |
| <i>porì</i> | ‘study; read’ | Asm | <i>porh-</i> + <i>-i</i> | ‘study; read + NF’ |
| <i>azár</i> | ‘thousand’ | Asm | <i>hezar</i> | ‘thousand’ |
| <i>pohàa</i> | ‘money’ ⁷⁰ | Asm | <i>poisa</i> | ‘money’ |
| <i>gám</i> | ‘village headman’ | Asm | <i>gaõ</i> | ‘village’ |
| <i>nahór</i> | ‘Ceylon ironwood tree (<i>Mesua ferrea</i>)’ | Asm | <i>nañor</i> | ‘Ceylon ironwood tree’ |
| <i>untráa</i> | ‘orange (citrus fruit)’ | Asm | <i>suntra</i> | ‘orange’ |
| <i>umbitáa</i> | ‘papaya’ | Asm | <i>umbita</i> | ‘papaya’ |
| <i>rəbáp</i> | ‘pomelo (grapefruit)’ | Asm | <i>rəbəp</i> | ‘pomelo’ |
| <i>okomiáa</i> | ‘Assamese’ | Asm | <i>əxəmia</i> | ‘Assamese’ |
| <i>kurìi</i> | ‘cat’ | Asm | <i>mekuri</i> | ‘cat’ |
| <i>tamúr</i> | ‘betelnut’ | Asm | <i>tamul</i> | ‘betelnut’ |
| <i>tikó</i> | ‘contract’ | Asm | <i>tika</i> | ‘contract’ |
| <i>dipiráa</i> | ‘lunch’ | Asm | <i>duporia</i> | ‘lunch’ |
| <i>potáa</i> | ‘paper; letter’ | Asm | <i>pətrə</i> | ‘paper’ |
| <i>potə</i> | ‘license’ | Asm | <i>pətrə</i> | ‘paper’ |
| <i>gurée</i> | ‘horse’ | Asm | <i>gfiora</i> | ‘horse’ |
| <i>hàa</i> | ‘tea’ | Asm | <i>sa</i> | ‘tea’ |

Table 3.8 – Well-assimilated non-Tani loanwords in Galo

In modern Galo, loanword use has grown sharply, with the number of Hindi and English loanwords in common usage in most areas (excepting immediate Assamese contact areas) now vastly exceeding loans from Assamese. However, here too it is difficult to make many generalizations, due to at least three factors: first, the present high-contact situation is not much more than a few decades old, which means that each new generation has a different experience of and level of exposure to non-Tani languages than

⁷⁰ Now seemingly obsolete, having been replaced by a generalization of native Galo *murkóo* ‘silver’. However, a seemingly derivative form *haanír* ‘cash’ remains.

each previous generation. Second, the present contact situation is in a state of high flux, due in part to the increasing mobility of Galo people and in part to the steadily increasing penetration of Indian mass culture (television, magazines, newspapers, cinema and radio, as well as people) into previously isolated Arunachal Pradesh. Third, the level of exposure of Galo people to non-Tani languages varies enormously, together with the level of proficiency in non-Tani languages which they attain. Some younger Galo have learned Hindi as a first language, although their speech is often described as non-standard and may or may not be describable as a creole (Modi 2005). Others use non-Tani languages regularly as trade languages, and still others may understand non-Tani languages and use some non-Tani words themselves, but do not attain a high level of spoken or written proficiency. Accordingly, the phonology of non-Tani loanwords in Galo can vary enormously from speaker to speaker, and very few generalizations may be easily made. These caveats notwithstanding, as we look ahead to the possibility of future sociolinguistic research in the Galo area, a few points bear mentioning:

1) *Voiced aspirated consonants*, which are common to both Hindi and Assamese, are usually not well-represented by Galo speakers in loanword use. This fact is intriguing in view of the vestiges of breathy phonation that have been identified in Galo speech now and again, and which may have reflected an earlier register contrast associated with the tone system (cf. §3.3). Since voiced aspiration of consonants and breathy phonation have similar (sometimes identical) phonetic properties, a different outcome might have been expected.

2) *Vowel nasalisation* is also common to Hindi and Assamese, as well as to some other Tibeto-Burman languages of the area (including the Western Tani language Apatani (Abraham 1985)). However, vowel nasalization is not usually well-represented in the speech of my Galo consultants, even including those who have reached a high degree of proficiency in Hindi and/or Assamese (cf. also §3.3, fn).

3) *Tones* are generally assigned to non-Tani loanwords, as shown in Table 3.8. This includes recent loans from Hindi and English, such as *ulfāa* ‘United Liberation Front of Assam’. Although the trend is in favour of cross-speaker consistency, I have not yet been able to determine the principles for assigning Galo tones to non-Tani loanwords; future research will be required.

4) Realizations of *non-native segments and clusters* exhibit enormous variation across speakers. Although onset and coda clusters alike tend to be simplified, they are

certainly not always. Non-Tani vowels tend to be merged to Tani places, such as Asm *ɔ* → Galo *o* or *a* – but again, the patterns are not always regular.

5) *Prosodically*, monosyllabic non-native words are usually borrowed as phonological words, constituting a full metrical foot, regardless of their internal syllable structure. Thus, for example, English *use* has the same prosodic status as a disyllabic native Galo lexeme with respect to the phonetic realizations of any following suffixes (according to rules such as Phrase-medial truncation; see §4.1.5.2).

6) *Reborrowing* is nowadays a very common occurrence, and can complicate efforts to analyse past and current assimilation/nativization patterns. For example, among most younger speakers and virtually all residents of the Assamese contact area, nativized Galo *tamúr* ‘betelnut’ has been “updated” to *tamúl*, and likewise *hàa* ‘tea’ to *sàa* (cf. also §3.2.4).

Several Arunachali and Assamese linguistics students whom I have encountered over the years have indicated an interest in sociolinguistic studies, and some work seems to be in progress (the only completed work of which I am aware is Modi (2005)). Looking ahead, this will surely be an exciting and rewarding field for local researchers, although due to the complexity of the current contact situation and the speed of change, it will also be a very challenging one.

4. Phonology II – Word and phrase

The present chapter §4 is divided into two main sections §4.1 and §4.2.

In §4.1, criteria are developed for assessing the status of “words” in Galo; the nature of a difference between “phonological words” and “grammatical words” is also outlined here. §4.1 also discusses the relationship of words (of both types) to *affixes* and *clitics*.

§4.2 deals with word and phrase prosody, and is divided into major subsections on tone and stress in §4.2.2 and §4.2.3. §4 concludes with a brief section on integration of surface prosody in §4.2.4.

4.1. What is a “word” in Galo?

“Words” in Galo are not always easily represented. That is, although we can easily come up with long lists of “words” in context-free elicitation (mostly nouns, adjectives, and citation forms of simple verbs), when morphological complexity is introduced, it often becomes extremely difficult for linguists and native speakers alike to recognize clear and consistent word boundaries. Briefly consider the following examples (17)-(18).

- (17) *zabdù*
záp-dùu
talk-IPFV
‘talk’

- (18) *zabrík hidù*
záp-rík-hí-dùu
talk-APPL:MEET-REFL-IPFV
‘talking to one another’

In (17), Imperfective *-dùu* is suffixed to a bound verb root *záp-* ‘talk’. Neither *záp-* nor *-dùu* can stand independently, nor can they stand in any other relative order. A single, uninterruptible prosodic contour occurs over *zabdù*, with potential pauses at either edge, with a single tone contour and constituting a single metrical foot. On the segmental level, internal sandhi and boundary phenomena are observed (i.e. Regressive voicing assimilation (§4.1.3.7) occurs at the word-internal syllable boundary and Final length neutralization (§4.1.4.4) occurs at the right-edge word boundary). Native speakers readily

attribute meaning to *zabdù* but are unable to easily describe the meaning or function of either of its parts. In short, a diverse set of criteria converge to support the notion that *zabdù* is a “word”.

Now, however, consider (18). Here again, grammatical criteria identify a single word. No subset of the string can occur independently or in any other order, and although native speakers can attribute meaning to the whole, they cannot easily assign meaning to its parts. However, *two* distinct prosodic units can now be identified, in which *two* primary stress slots are found. Assimilation sandhi occur at the border of *záp-* and *-rík* but not at the border of *-rík* and *-hí* (word-internally, *h* surfaces [s] post-consonantly; cf. §3.2.4). In short, phonological criteria suggest that this is not one but rather *two* words.

Following the generally-accepted framework summarized in Dixon and Aikhenvald (2002), as set forth in numerous previous works by them and other scholars, this disconnect will be described here in terms of a difference between two types of unit: “grammatical word” and “phonological word”.⁷¹ The following subsections review criteria by which these units may be identified. Some of these criteria involve exceptionless (or rarely violable) *rules*, while others consist of more probabilistic *tendencies*. In some cases, the convergence among or contrast between grammatical and phonological words is robust, as in (17)-(18) above. In other cases, the analysis hinges on thin and contextually variable criteria. The resulting picture is complex, perhaps in some ways unsatisfyingly so. However, it must be recalled that Galo has heretofore been an instrument for oral, face-to-face communication, and has not been significantly shaped by conventionalization for writing purposes. Many of the difficulties found (by linguists and native speakers alike) in consistently segmenting utterances into “words” for the purpose of writing the language (as we are doing here) are, when speaking, simply a non-issue.⁷²

⁷¹ This sense of “grammatical word” is not to be confused with another, unrelated sense in which “grammatical word” denotes words which have as their value a grammatical function as opposed to a lexical meaning, i.e. (in English) words like “the”, “to”, and “and” as opposed to “boat” and “tree”. To avoid confusion, in the present work we use the term “grammatical word” in the Dixon-Aikhenvald sense of opposition to “phonological word” and the term “function word” to refer to words with grammatical-functional as opposed to lexical status.

⁷² It is also instructive to consider that the word for ‘word’ in Galo *agóm* (< PTs **gom* ‘speech; voice’) also has the related senses ‘speech’, ‘language’, ‘utterance’, and ‘matter/point’. Thus, it might be more accurate to gloss *agóm* as something like ‘communicum’ in the sense of ‘unit and/or medium of communication’, without regard to segmentation or length. According to this definition (and according to Galo speakers’ usual judgments), both phonological *and* grammatical words may qualify as *agóm* (even when these do not coincide), but neither roots nor affixes do. One might note here a potential similarity with Tibetan (among other languages), in which multiword utterances, rather than words per se, are separated by spaces when writing (Sprigg 1955). Importantly, such types contrast with the traditional Chinese concept of the basic unit of language, the *zǐ*, which has a lower-level denotation including roots and morphemes, but no unit

4.1.1. Grammatical word

As defined by Dixon and Aikhenvald (2002:§7), a *grammatical word* is identifiable as a *grammatical unit between morpheme and syntactic phrase*, whose constituents are a *head plus immediate (local) dependents*, in a *fixed, continuous order* in terms of a *given semantic value*. These identification criteria are probably universal, and are expanded on only briefly here with reference to examples (17) and (18) above.

a) *indivisibility*. Independent words cannot generally interrupt the strings of morphemes expressed in (17) and (18).⁷³

b) *patterning as a unit*. The strings in (17) and (18) can be moved and modified within the syntax as wholes, but no subset can.

c) *fixed order*. The orders of elements in (17) and (18) are fixed. While certain sequences of grammatically bound forms (for example, predicate derivations (§11)) are to an extent variably-ordered in Galo, variation always results in a different meaning; i.e., a *different* grammatical word.

d) *status as a syntactic unit*. The strings in (17) and (18), taken as wholes, each realize a *predicate* (a unit referred to by various syntactic rules, which is a constituent of various phrase types, etc). No subset of either string in (17) and (18) can qualify as such a syntactic unit.

e) grammatical *part-whole composition*. The functional and structural descriptions of the parts in (17) and (18) refer to the whole, and the functional and structural description of the whole makes reference to the parts. No elemental subset of (17) or (18) relates to another constituent at the same or a higher level.

f) *native speaker awareness of meaning and independent status*. Speaking very generally, a speaker is more likely to feel comfortable uttering and assigning meaning to a grammatical word in isolation than to one of its subparts. For example, most speakers sense no difficulty in uttering and assigning meaning to *zabdù* in (17) out-of-context, although the same cannot be said of *hidù* in (18). There are difficulties in applying this criterion, since native speakers typically experience greater difficulties in assigning meaning to function words than to lexemes (i.e., *go* in *would go* is more easily defined or

larger than a word (Chao 1968). Some modern, linguistically-inclined Galo have coined the term *gomcìr* (lit., ‘speech pellet’) to denote sub-lexical roots and morphemes; it remains to be seen whether this usage will become widely-accepted or not.

⁷³ For an important partial exception to this generalization, see §13.5.

described as a “word” than is *would*). Nonetheless, native speaker awareness of meaning and independence may be employed as a supporting criterion.

Stated simply then, a grammatical word is identifiable in being *treated as a unit* by the grammar at various levels. Characteristics of phonological words will be shortly discussed; first, it will be useful to review some of the properties of *affixes* and *clitics*.

4.1.2. Affix and clitic

If “words” are, in general, both phonologically and grammatically *independent*, both affixes and clitics are relatively *dependent* in both phonological and grammatical senses. In a grammatical sense, words tend to head grammatical phrases while affixes and clitics tend not to. In a phonological sense, words tend to head a phonological phrase, hosting a primary-stressed syllable, while clitics and affixes tend not to (§4.1.4.1). In addition, while words tend to exhibit a glottal stop onset prosody in Galo, clitics and affixes tend not to (§4.1.3.3).

The *affix/clitic* distinction, however, is *not* phonological, but rather *grammatical*.⁷⁴ While clitics have the syntactic status of grammatical words, may phonologically depend on a wide variety of constituent types, and usually have phrasal rather than local scope, affixes do not have grammatical word status, but are rather word-level dependents – usually, of a single type of grammatical word – and have word-level rather than phrasal scope.

In Galo, some morpheme types may have affixal *and* clitic allomorphs, usually with different segmental values. For example, the Galo Genitive and Accusative case markers have suffixal and enclitic forms, with the suffixal forms operating on pronominals and the enclitic forms operating on non-pronominally-headed noun phrases. In the [bracketed] common noun-headed noun phrases in (19), we find that Accusative *əəm* always occurs *phrase-finally*, prosodically depending on whatever noun phrase constituent immediately precedes it (whether the head or a post-head functor). Note in particular the occurrence of Accusative *əəm* *after* the Adverbial particle *rûu* ‘CERT’. Now compare the [bracketed] pronominally-headed noun phrase in (20). Here, we see that the

⁷⁴ In Galo at least, as in (I believe) most Tibeto-Burman languages; different characterizations of the affix/clitic distinction may of course be viewed as more appropriate for other languages. For a fuller discussion in the context of a cross-linguistic typology, see Aikhenvald (2002:43-57).

Accusative marker is directly suffixed to the Demonstrative pronominal head; note especially that the Adverbial particle *jûm* must now *follow* the suffixed pronoun.⁷⁵

- (19) *hottúm-horé...jó rûəm...əgə...abá narûəm*,
 [hottúm-horé jòo rûu = əəm] əgə [abáa narûu = əəm]
 bear-boar and/or.such CERT=ACC HEST type everything=ACC
hoín-holóə rûəm...pîrîk-taakúu rûəm...əgə...
 [hoín-holóə rûu = əəm] [pîrîk-taakúu rûu = əəm] əgə
 civet-large.wildcat CERT=ACC kaleej.pheasant-bird.variety CERT=ACC HEST
laalâ.
 làa-là(a)
 take-NF
 ‘He got every kind of animal, including megafauna, wildcats, and jungle birds.’
 (MK, TT 115)

- (20) *ηό higîm jûm docém dù*.
 ηό [higî-m jûm] dó-cém-dùu
 1.SG SPRX.IND-ACC DLMT eat-ENJOY-IPFV
 ‘I like to eat this one (variety of banana) only.’ (ZR, C2:7)

For further discussion of common noun phrase structure, see §6.1.2; for discussion of pronominally-headed noun phrase structure, see §6.1.3. For discussion of “Adverbial” particles such as *rûu* and *jûm*, see §13.5.2.

4.1.3. Phonological word

Generally speaking, and again referring to the basic framework established by Dixon and Aikhenvald (2002:§6), a *phonological word* may be identified as a *phonological unit between syllable and phonological phrase*, and which is recognizable in terms of the *coalescence of a set of phonological properties*, among which may be: *segmental features* (internal and external phonotactics), *prosodic features* (accent and/or tone assignment, as well as harmony prosodies), and *rules* (internal and external sandhi, and boundary phenomena).

The following subsections review the set of “phonological word” properties currently identified for Galo. Throughout the discussion, it will be noted that phonological word properties most often converge upon a *disyllabic* unit, while

⁷⁵ *ηό higî jûm əm dó-cém-dùu, with the Delimiting particle *jûm* putatively intervening between pronoun and case enclitic, is unacceptable to my consultants.

monosyllabic and, especially, trisyllabic units are usually more problematic. Some additional discussion on this point may be found in §4.1.6. first summarizes the phonological word criteria in the order they will be discussed below.

| Type | Description | Section |
|------------|--|----------|
| Prosodic | Stress-placement | §4.1.3.1 |
| Prosodic | Tone specification | §4.1.3.2 |
| Prosodic | Glottal stop word onset | §4.1.3.3 |
| Prosodic | Lack of internal glottal stop/pause, single intonation contour | §4.1.3.4 |
| Structural | Bimoraic constraint on word minimality | §4.1.3.5 |
| Structural | Word boundary phonotactics | §4.1.3.6 |
| Structural | Word-internal assimilation sandhi and other segmental alternations | §4.1.3.7 |
| Structural | Very long vowel constraint | §4.1.3.8 |

Table 4.1 – Summary of criteria for the identification of phonological words in Galo

4.1.3.1. Word prosody 1: Stress and meter

While the overlap is perhaps not complete, there is a very strong tendency in Galo for a phonological word to consist of a *single metrical foot*, and for a metrical foot to constitute a single phonological word (cf. §4.2.3.2). This generalization tends to hold quite independently of the grammatical status of the elements in question. Thus in (21), seven phonological words are realized, each consisting of a single metrical foot with the initial syllable always stressed (marked ` _). However, *nammó* and *zaalâa* are not themselves grammatical words, but are rather *portions* of grammatical words, as expressed in the interlinearization.

- (21) `abó `taníi...`míkáa `nammó...`gumbòk `zaalâa `jù.
 abó-taníi mík-kaa-nam = əə gùm-bók≡záa≡là(a) juu
 father-mankind char-TENT-NZR:RLS=TOP lean-DOWN/SOUTH≡REAL≡NF REP
 ‘Abo Tani...having tried to burn them...found (the flames) actually leaned
 southward, so they say.’ (NyPB, LAT 210)

4.1.3.2. Word prosody 2: Tone

Although tone is (like segments) underlyingly a property of individual simplex, usually monosyllabic morphemes in Galo, its primary domain of surface-phonetic

realization is the (usually morphologically complex and polysyllabic) phonological word. The same rules for surface tonal derivations are followed whether the constituents of a particular phonological word are lexical or functional in nature, and whether they consist of a whole or a portion of a grammatical word. For example, in (21) above, it is just as possible to ask a native speaker to specify the tones of *gumbòk* and *zaalàa* as it is to ask him/her to specify the tones of *abó* and *taníí*; and, when a morpheme-by-morpheme analysis is conducted, it will be found that the rules for their respective tonal derivations are the same. This is true despite the fact that while *abó* and *taníí* are both uncontroversially lexemes to which no native speaker would experience difficulty in assigning meanings to out of context, *gumbòk* and, especially, *zaalàa* have considerably less (and possibly no) cognitive reality as meaningful “words”. Further discussion of word tone may be found in §4.2.2.

4.1.3.3. Word prosody 3: Glottal stop onset

As also discussed and exemplified in §3.4.1, underlyingly vowel-initial phonological words tend strongly to exhibit a glottal stop onset, which blocks onset-loaning across word-boundaries in syllabification when it occurs. As a general rule, the Glottal stop onset prosody applies primarily to lexemes; it tends not to apply to vowel-initial enclitics such as Topic-marker *əə* (§14.2.1.3), or ‘Same level’ demonstratives/postpositions in *á-* (§7.4) when they occur in a post-head modifying function. Unfortunately, the number of vowel-initial functors in Galo is so much smaller than the number of vowel-initial lexemes that it becomes difficult to test this rule in all conditions.

4.1.3.4. Word prosody 4: Intonation contour

A phonological word occurs under a single intonation contour. As a converse to the Glottal stop onset prosody, it is *never* possible for a glottal stop or prosodic pause to occur inside a phonological word.

4.1.3.5. Word structure 1: Bimoraic constraint

Galo words tend strongly toward minimal bimoraicity;⁷⁶ however, due mainly to the relatively small number of monosyllabic grammatical words in Galo, it is not always clear where and when precisely the constraint should be said to apply. Generally speaking, all monosyllabic lexemes are bimoraic, whether or not their constituent root is, or was historically, host to one mora or two. For example, *ɲíí* ‘person’ and *èè* ‘excrement’ are both synchronically bimoraic, as may be seen from the phonetically long rhyme which occurs when they are followed by Individuator *go*: *ɲíí* = *go* [ɲíigō] ‘a man’ and *èè* = *go* [èegō] ‘some excrement’. However, when the cognate roots occur in lexical compounds, their lengths contrast; now, ‘person’ has a short rhyme while the rhyme of ‘excrement’ remains long: *ɲízà* ‘girl’ and *ɲípàk* ‘non-hill-tribal’ contrast with *eejùu* ‘anus’ and *eerìn* ‘anal sphincter’ (see Appendix A for additional examples). Similarly, first and second person singular pronouns *ɲó* and *nó* contrast with third person singular pronoun *bɛ̀* in terms of their underlying rhyme length; this fact is illustrated by their different realizations when suffixed in Genitive *-kə̀*, as *ɲókə̀* ‘1.SG.GEN’, *nokə̀* ‘2.SG.GEN’ and *bɛ̀kə̀* ‘3.SG.GEN’. However, when occurring phrase-medially and unsuffixed, *all* exhibit a long rhyme: *ɲóo* = *cìn* ‘1.SG=ADD’, *nóo* = *cìn* ‘1.SG=ADD’ and *bɛ̀* = *cìn*.

These facts present difficulties for diachronic analysis, as it is often not clear whether the bimoraicity of a particular monosyllabic word owes its length to operation of the Bimoraic constraint, or instead to historical incorporation of a prefix or suffix with subsequent vowel-harmonization.⁷⁷ However, they also pose difficulties for synchronic analysis; for example, if the Bimoraic constraint were viewed as a synchronic property of the phonological word, then forms such as *ɲóo* = *cìn* ‘1.SG=ADD’ – in which the underlyingly short rhyme of the first person singular pronoun has been lengthened – should be analysed as a two word sequence. However, there would seem to be little if any

⁷⁶ Minimal word bimoraicity or disyllabicity (according to the prosodic typology of a given language; in particular, whether it is a quantity-sensitive language or not) is often viewed as a language universal, with the prosodic word minimally consisting of a (minimally bimoraic) foot (McCarthy and Prince 1986; McCarthy and Prince 1995). However, doubts over the universality of minimal word bimoraicity have also been cast with respect to the prosodic phonology of certain North-East Indian languages, for example by Temsunungsang (forthcoming 2008), with reference to the Mongsen and Chungli dialects of Ao (Naga).

⁷⁷ For example, *ə̀ə̀* ‘bamboo’ may reflect **a-ə̀* → *ə̀-ə̀* (compare *ətɛ̀* ‘bamboo grove’, which establishes the monomoraic character of the lexical root, and cf. *ə̀-mə̀* ‘fire’ (< PTs **a-mə̀*) for a similar change). Or, it may reflect *ə̀* + application of the Bimoraic constraint. For discussion of the *a-* prefix from a diachronic perspective, see §2.4.3.1; for a synchronic perspective, see §5.3.1.1.1.

prosodic difference between such putative disyllabic “word sequences” and a disyllabic “single word” such as *eerìn* ‘anal sphincter’.

For the present, what may be said with confidence is that there is a Bimoraic constraint on phonological words in Galo; what is less clear is whether it has operated or operates as a historical or a synchronic process, and, if the latter, at what “level” in the derivation of phonological words. The Bimoraic constraint may be informally represented as in Figure 4.1.

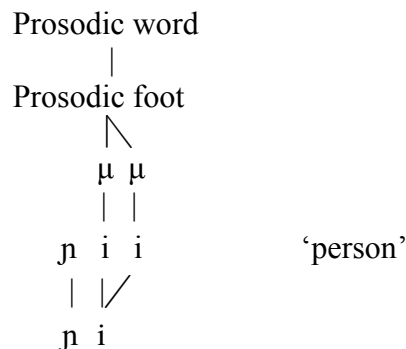


Figure 4.1 – Illustration of the Bimoraic constraint (based on the Prosodic Morphology Hypothesis, as outlined in McCarthy and Prince (1995))

4.1.3.6. Word structure 2: Boundary phonotactics

As was discussed in §3.5.1, the “basic” Galo syllable canon (which most closely reflects the Proto-Tani syllable canon) must be expanded to accommodate the syllabic outcomes of word-internal assimilation processes which occur in modern Galo (cf. §4.1.3.7). At word boundaries, however, the phonotactics of the basic Galo syllable canon are preserved. In this sense, proto-syllable-oriented phonotactic constraints have become, in modern Galo, *word*-oriented phonotactic constraints.

Word-finally among consonants, *r* is the only liquid admitted. Among stops, only *p* and *k* are admitted, and among nasals, only bilabial *m* and alveolar *n* are allowed.

Underspecified consonant *K* surfaces as [k] word-finally (cf. §3.4.2). Finally, no fricatives are allowed word-finally; all of these constraints reflect direct inheritances from the Proto-Tani syllable canon, as modified by post-Proto-Tani syllable-oriented changes (cf. §2). Word-initially, the full set of consonants is available, with one exception: among fricatives, only *h* is allowed word-initially in native words; some recent Indic loans such

as *sàa* ‘tea’ have (re-)introduced word-initial *s*- (both *s* and *h* are allowed word-medially in native words, in different conditions; see §3.2.4).

Among vowels, all seven are permitted to occur word-initially as open or long forms. Word-finally, *e*, *ɛ*, and *a* (and in some subdialects and archaic pronunciations also *u*) can *only* occur in long rhymes; short forms are disallowed (cf. §2.4.4.5).

Table 4.2 illustrates Galo word-boundary phonotactics. Note that this also entails a restriction on the set of segment-sequences which can occur across words. This set may be determined by simply reversing the two columns in Table 4.2.

| Initials | Finals |
|------------|------------------|
| p, t, c, k | p, k |
| b, d, z, g | |
| m, n, ɲ, ŋ | m, n |
| l, r, j | r |
| h | |
| V (all) | VV (all) |
| | V (i, ə, o(, u)) |

Table 4.2 – Word boundary phonotactics

4.1.3.7. Word structure 3: Internal assimilation sandhi

Word-internal assimilation sandhi are of two main types: *manner* and *place*. Both are regressive, and both are fully obligatory in all Galo dialects for which data have been obtained. However, they differ slightly in detail from dialect to dialect. In Lare Galo, regressive manner assimilation is restricted to *voicing*, and applies to oral stops in all voiced environments, including voiced oral stops, nasals, approximants and vowels; informally (where T = any oral stop): $T \rightarrow [\alpha\text{Voice}] / \#_.[\alpha\text{Voice}]\#$. Voicing assimilation is observed in all qualifying domains, including lexicalized compounds (22) and synchronically productive formations (23).

- (22) *lagbək* (**lakbək*)
 lák- bək-
 hand/arm- right-
 ‘right hand/arm’

- (23) *kabnám* (*kapnám)
 káp-nam
 cry-NZR:RLS
 ‘crying’

Sporadically, manner assimilation is extended in Lare Galo to include assimilation in *nasality*. For example, *kabnám* in (23) may sometimes be realized [ˈkámmām], reflecting assimilation of the initial syllable-final stop *p* to a homorganic nasal [m] when preceding a nasal *n*; however, such pronunciations are often viewed by Lare speakers as incorrect or sloppy in clear speech. By contrast, in Pugo Galo (both in my data and in that of Weidert (1987)) regressive assimilation in nasality has been phonologized and is now obligatory in all qualifying environments (in all morphological domains); thus, the citation form of (23) in Pugo is *kamnám*.

Regressive *place* assimilation is also found word-internally in Galo, although it applies only to nasals; oral stops and approximants are unaffected. Among nasals, *-m* assimilates in place to a following *velar* consonant only, while *-n* assimilates in place to both *velar* and *labial* consonants. Nasals *p* and *ŋ* do not occur as finals in the underlying forms of native modern Galo morphemes, and so are unaffected (Table 4.3).

| PT | Lare | Assimilation | Example | Gloss | Phonetic |
|---------|------|---------------|---|--|---|
| *-k | -k | None | <i>ák-mèn</i> <i>ák-nam</i> | ‘hook-AS.PLAY’ ‘hook-NZR:RLS’ | [âgmèn] [ágnám] |
| *-p | -p | None | <i>káp-nam</i> <i>káp-káa</i> | ‘cry-NZR:RLS’ ‘cry-PF’ | [kábnám] [kápkáa] |
| *-l, -r | -r | None | <i>kár-mèn</i> <i>kár-káa</i> | ‘pile-AS.PLAY’ ‘pile-PF’ | [kârmèn] [kârkáa] |
| *-m | -m | Velar | <i>jóm-nam</i> <i>jóm-káa</i> | ‘swallow-NZR:RLS’ ‘swallow-PF’ | [jómnmám] [jónŋkáa] |
| *-n | -n | Velar, Labial | <i>ín-pîi</i> <i>ín-tó</i> <i>ín-càa</i> <i>ín-káa</i> | ‘go-REACH’ ‘go-PFV’ ‘go-ASCEND’ ‘go-PF’ | [împîi] [íntó] [încàa] [ínkáa] |

Table 4.3 – Place assimilation characteristics of different C-final roots

Related to these general assimilation rules are the word-medial realizations of fricatives *s* and *h*, as well as underspecified consonant *K*. As discussed and exemplified in

§3.2.4 and §3.4.2 respectively, *s* occurs word-medially when following a consonant and/or when onset to a light syllable; when following a vowel and/or when onset to a heavy syllable, we find *h*. Word-medial *K* fully assimilates to any following consonant, or surfaces [k] when followed by a vowel. Both of these alternations provide robust word boundary identification criteria, and are capable of quite clearly illustrating the disconnect between grammatical and phonological “words” (cf. §3.2.4 ex. (15)).

4.1.3.8. Word structure 4: Very long vowel constraint

Sequences of more than two vowels of any quality are not found underlyingly in any Galo roots or grammatical morphemes. In addition, such sequences are not in general permitted in surface phonology within the same phonological word. When underlying sequences of three or four vowels result from morpheme concatenation within a single phonological word, a variety of possible resolutions are available.

In the most common case, when a vowel-initial enclitic is hosted by a word with a *long* final vowel, the sequence is reduced in length, but not resyllabified. Thus, for example, *il̥il̥* = əə ‘stone=COP.IPFV’ ‘it’s a stone’ is realized [i.li.ə] (not *[i.li.ə(ə)]), and *apúu* = əə ‘flower=COP.IPFV’ ‘it’s a flower’ is realized [a.pu.ə] (not *[a.puu.ə(ə)]). Some speakers are conscious of disyllabicity being maintained even when homorganic vowel sequences are presented, as *əə* = əə ‘bamboo=COP.IPFV’ ‘it’s bamboo’, realized [ə̌.ə̌]; for such speakers, this contrasts with *əə* ‘bamboo’, realized [ə̌] in isolation (following operation of Final Length neutralization; see §4.1.4.4).⁷⁸

Another strategy is to realize the long vowel as a vowel-glide sequence. This strategy is mainly found in two areas: in the *lexicon*, forms such as *pejàk* ‘soybean’ have resulted from erstwhile concatenation of VV.V sequences (in this case, *pée-* ‘bean’ + *àk-* ‘soybean’; the “expected” form **pe(e)àk* is rejected by speakers). Interestingly, the parallel process does not apply to back rounded vowels; *poà* ‘rice beer storage basket’

⁷⁸ To the extent that not all speakers agree on this point, it seems to hinge not on inter-speaker or inter-dialectal differences, but rather on differences in levels of *awarenesses* of the difference in context-free usage. Unfortunately, the number of homorganic long vowel sequences arising from morpheme concatenation in my corpus is so small as to not permit a discourse-based analysis.

results from *pòo*- ‘liquor’ + *á*- ‘keep’, not **powà*.⁷⁹ Glide-insertion is also found in the morphophonological process of Triggered foot-strengthening. In this case, a vowel-initial enclitic motivates geminate glide-formation at the boundary of a V_iV_j word, with the glide quality a function of the V_j vowel. Thus time, back rounded vowels *are* affected, as *hoó* = *əə* → [how.wə]; for further discussion and examples, see §4.1.4.6.

So far, we have covered cases in which an initial form ending in a *long vowel* is followed by a dependent vowel-initial form. Word-internally, an initial form ending in a *short vowel*, if followed by a vowel-initial form, behaves in the same manner; the result is a disyllabic [V.V] sequence. However, when a host phonological word ends in a permitted short vowel (*i*, *ə*, *o* and, rarely, *u*), a following, dependent vowel-initial form is resyllabified as a prosodic constituent of the host. This process is also discussed in §4.1.4.6.

The Very long vowel constraint is relatively easily dealt with in synchronic analysis, since its effects can always be “undone” by removing the conditions of the alternation (e.g., a particle may be inserted between *hoó* and *əə* in the above example). In diachronic analysis however, it can prove troublesome. This is because when a given vowel-final root only has exemplars in a vowel-adjacent context, it becomes difficult or impossible to determine its underlying (or historical) length. The case of *poà* ‘rice beer storage basket’, discussed above, is easily dealt with inasmuch as numerous other attestations of both roots exist (such as in *opòo* ‘liquor’ and *anám* ‘to keep’. In the case of *ai* ‘heavy’ however (in which the initial reflects a short prefix *a*-), is the rhyme, reflecting the ‘heavy’ root and the only attested lexeme in which this root appears, underlyingly long *ìi*- or short *ì*-? This is a potentially vexing question which is not always easily resolved. For discussion of one possible solution (albeit with limited applicability), see §5.3.2.2.

4.1.4. Phonological phrase

A phonological phrase is a higher-level prosodic unit whose constituents are phonological words. Criteria for the identification of a phonological phrase are less robust

⁷⁹ Qualifying *ua* sequences are very rare, but appear to follow the same pattern in resisting glide-formation, as in the loanword *puá* ‘half kilo’ (< Asm *pua*) and the seemingly obscure formation *uá* ‘wake up’ (< *úu*- ‘awake’ + *-áa* ‘ALL’), which was only attested through elicitation as a test case in this context.

than are those of a phonological word (cf. Table 4.1), and their application is less often exceptionless (more often variable). In particular, it is often difficult to determine whether a prosodically “tightly-knit” sequence – especially, trisyllabic sequences resulting from morpheme concatenations within a grammatical word or phrase – is best analysed as a single phonological word, or as a two-word phonological phrase (and, if the latter, where to draw word boundaries); additional discussion on this point is found in §4.1.6.

Primary criteria for the identification of phonological phrases include *lack of pauses*, a *continuous/uninterrupted rhythm* and the occurrence of a *phrasal tonal domain*. A secondary criterion is the seemingly irregular but pervasive process of *Phrase-medial truncation* (§4.1.5.2). Morphophonological processes which appear to occur at the level of the phonological phrase, but which are not obviously criterial in its identification, include *Syncope* (§4.1.4.5) and *Triggered foot-strengthening* (§4.1.4.6).

The relationship between phonological phrase and grammatical phrase is not always straightforward, and has not yet been fully researched. There is certainly evidence that some phonological phrases may span multiple grammatical constituents, as exemplified in §4.1.4.2 and elsewhere. At the same time, a phonological phrase may constitute only a portion of a grammatical phrase, as in §4.1.2 ex. (19). Further research must be conducted in this area.

4.1.4.1. Phrasal prosody 1: Stress and meter

Following initial stress-assignment at the level of a phonological word, foot-formation seems to apply a second time at the level of a phonological phrase. The same, trochaic, foot type is used in both cases. For discussion and examples, see §4.2.3.4.

4.1.4.2. Phrasal prosody 2: Tone

Following the initial derivation of tone at the level of the phonological word, a second set of derivations apply at the level of the phonological phrase. Among the most salient of the phrasal functions of tone include the realization of Low/Tense-toned words, which occur with a high rising pitch (usually without a subsequent fall to low within the same word) in *phrase-medial position only*. This salient rise in pitch enables identification of a phrasal unit in possibly unexpected places; for example, it is normal for a predicate-adjacent pronoun (of any argument type) to fall within the same phonological phrase as the predicate. In (24), note that *bɪ̃* and *caalèn* – both Low/Tense words – exhibit a

rising(-falling) pitch (marked $\underline{\hspace{0.5em}}$) in phrase-medial positions, but that *duukù* – also a Low/Tense word – in phrase-final position exhibits a low/falling pitch (marked $_$). For further discussion and examples, see §4.2.2.3.

(24) *bɛ̃ caalɛ̃n duukù.*

bɛ̃ càa-lɛ̃n-dùu-kú

3.SG ascend-OUT-IPFV-CMPL

‘He’s setting out (in an upward direction).’

4.1.4.3. Phrasal prosody 3: Intonation contour

As a general tendency – by no means inviolable – phonological phrases tend to occur under the same overall intonation contour. Pauses tend more often to occur at phrase boundaries than phrase-internally, and the tendency is for phrases to host a continuous, uninterrupted rhythm.

4.1.4.4. Phrasal structure 1: Final length neutralization

In *phrase-final position only*, underlying word-final vowel length is *phonetically neutralized* in Galo. For example, *tabə* ‘sugar cane’ (<*ta*- ‘MDIM’ + *bə*- ‘sugar cane’) and *tabəə* ‘usually listen’ (*tá*- ‘listen’ + *-bəə* ‘HAB’) underlyingly contrast in length, as may be seen when they occur in non-phrase-final position, as *tabə = go* ‘sugar cane=IND’ ‘some sugar cane’, realized [$\text{tabə}^{\text{H}} \text{go} \sim \text{tab}^{\text{H}} \text{go}$] versus *tá-bəə-dùu* ‘listen-HAB-IPFV’ ‘usually listening’, realized [$\text{tabəə}^{\text{H}} \text{du}$]. However, phrase finally (as in wordlist elicitation), *tabə* ‘sugar cane’ and *tabəə* ‘usually listen’ are both realized [tabə]; the underlying final length contrast is phonetically neutralized.⁸⁰

⁸⁰ Final length neutralization is an extremely important feature to bear in mind when describing a Tani language, as it can lead to incorrect conclusions concerning underlying lexical representations in elicitation contexts. Sun (1993b: §2.2.4.1) discusses the difficulty of consistently reconstructing contrastive vowel length to Proto-Tani, referring to its “instability” in many modern Tani languages and seeming neutralization in various conditions in different languages. Since he does not identify any length neutralization process for the dialect of Bengni (Western Tani, Tibet) he described, we may assume that the word-final length contrast he records in a pair such as Bengni *jalu* ‘soul’ and *aluu* ‘salt’ is in fact audible. However, we may also note that at least some authors who have correctly noted the neutralization of length word-finally (such as Weidert (1987) for Galo and Apatani), have incorrectly described it as an *inherent feature of lexemes* rather than a general rule-governed or constraint-based property of the phonology of a language. This misunderstanding is almost certainly due to over-reliance on forms obtained through wordlist elicitation, in which all words are, necessarily, phrase-final. Thus, while it is possible that many of the extant sources on Tani languages accurately reflect underlying length contrasts (either because they are

4.1.4.5. Phrasal structure 2: Syncope

Syncope is a seemingly stress-motivated process of *vowel reduction and/or deletion* applying phrase-medially in Galo, with somewhat different effects according to the quality of a qualifying vowel, as well as the context in which it occurs. This section describes the Syncope process only; for discussion of stress in a general context, see §4.2.3.

Generally speaking, Syncope reduces the nuclear vowel of a light ((C)V) syllable in a weak (unstressed) position. Table 4.4 summarizes the observed reductions.

| Vowel | Outcome | Comments |
|-------------|--|------------------------|
| <i>e, i</i> | [e, i] | Usually unaffected |
| <i>i, u</i> | [i, u ~ ⁱ , ^u] or [ə ~ ə] | Sporadically affected |
| <i>o, a</i> | [ə ~ ə] | Usually affected |
| ə | [ə ~ Ø] | Almost always affected |

Table 4.4 – Outcomes of Syncope by vowel quality

(25) and (26) exemplify the process, with syllable breaks shown by ‘.’ and vowels affected by syncope in **bold**. In (25), note that in *namə = lo*, the affected medial vowel is nucleus of an underlyingly light syllable, but that in *káa-nam = əə*, it is so due to onset-preference in syllabification (§3.5.3) and the lack of glottal stop onset to the vowel-initial enclitic əə (§4.1.2; §4.1.3.3).

Where underlying final coda consonants are *not* resyllabified due to the presence of a following consonant as in *geegáp nammə* (26), the vowel in weak/unstressed position is nucleus to a *heavy* syllable, and so the process does not apply. Similarly, where vowels are underlyingly long (as *i#* in (26)), are in metrically strong (foot-initial) positions (as *lo* in (25)) or are phrase-final (as *lakù* in (31)), the process does not apply.

audible in wordlist elicitation or because they have in fact been neutralized in underlying representations, and are not recoverable in any context), it is far more likely that most of them do not. The subject of vowel length in comparative Tani should therefore be treated with extreme caution by scholars without access to the primary data.

- (25) `kaa.nǎ.mǎ...`ná.m̥.ló `jǎə.cìn `duu.mà.
 [káa-nam = əə] [namǎ = lo jǎə = cìn dùu-máa]
 look-NZR:RLS=TOP house=LOC who=ADD stay-NEG
 ‘Upon looking...(they saw that) there was nobody in the house.’ (TR, FA 012)
- (26) `í.lǎ.ə `gee.gáp `ku.nǎ.mǎ...`í.lǎ.ə...
 ɪlǎ = əə gée-gáp-kú-nam = əə ɪlǎ = əə
 stone=TOP seal-STUCK-CMPL-NZR:RLS=COP stone=TOP
 `lǎ.bǎ.rəm `gee.gáp `nam.mǎ...
 lǎbǎr = əəm gée-gáp-nam = əə
 foot.surface=ACC seal-STUCK-NZR:RLS=TOP
 ‘Having gotten stuck on the stone...the stone having (expanded and) sealed in the
 soles of her feet...’ (LN, TG 033)

The precise prosodic domain of Syncope’s application – i.e., whether at phonological *word* or *phrase* levels – remains somewhat mysterious. Traditionally, Syncope has been viewed as a *word-internal* phonological process, as in English *monetary* (realized [mənətɛri] in some dialects, with the penultimate vowel deleted). However, it is not entirely clear whether sequences such as *káa-nam = əə* [kaa.nə.mə] should be viewed as one phonological word or two, and, if two, whether *kaanǎ* and *mǎ* truly represent phonological two-word sequences in the same sense as *geegáp* and *namǎ* in (26) clearly do.

To an extent, Syncope may be responsible for *reshaping* the phonological word in Galo. For example, although some of my consultants may represent the sequence written *kaa.nǎ.mǎ* in (25) as “kaanǎmǎ”, “kaanǎm ə” or even “kaanam ə”, with the underlying vowel quality restored, many of my more progressively-minded consultants insist that “should” be (orthographically) written “kaanmǎ” – i.e., as *one* phonological word with a fully ellipsed medial vowel – presumably reflecting their sense of the typical Lare pronunciation.

Consistent representation of phonological word boundaries in sequences containing syncopated internal elements has proved challenging, and there are undoubtedly numerous inconsistencies in numbered examples throughout this work. For example, a sequence such as *káa-nam = əə* in (25) would tend to be represented as one “word” (without internal word breaks), while a sequence such as *namǎ = lo* might be represented as one or two, depending on the extent of medial vowel reduction, the length

of any prosodic gap at the enclitic boundary, and the extent to which I and my consultants perceived /o/ to be receiving stress. It is possible that such inconsistencies reflect the fluidity of Galo prosody, and the possibility that Syncope is motivating an incipient historical change in the representation of phonological words in Galo; but it is also possible that my, and possibly also my consultants', underlying awareness of grammatical word boundaries has influenced our decisions. Future research must be brought to bear on this question.

4.1.4.6. Phrasal structure 3: Triggered foot-strengthening

Triggered foot-strengthening is a seemingly stress-motivated process of resyllabification. It is triggered by the phonological phrase-internal occurrence of a vowel-initial enclitic at the right-edge boundary of certain types of phonological word, and seems designed to preserve or create a heavy-light $[(C)VX-(C)V]$ syllable structure, strengthening the preferred strong-weak structure of a corresponding metrical foot. Here we discuss only the observed alternations; for general discussion of stress, see §4.2.3.

Triggered foot-strengthening has different effects depending on the internal structure of a host phonological word, as well as on the quality of its final vowel. Due to the very small number of vowel-initial enclitics in Galo, it has not been possible as of this writing to determine whether enclitic-oriented factors (such as initial vowel quality) may condition the alternations differently or not. Generally speaking, the forms attested as triggering the process include Topic marker əə , Imperfective copula əə and Accusative case marker əəm . Although it is not attested in all conditions, Vocative particle aa has also been observed to trigger the process.

A summary of the possible outcomes of Triggered foot-strengthening is presented in Table 4.5. Word shapes not listed in the first column are not affected.⁸¹ A summary of outcomes by final vowel type is presented in Table 4.6. Vowel types not listed in the first column do not occur word-finally in words of qualifying shape.

⁸¹ Briefly, Heavy/Light-(C)VV words are subject to the Very long vowel constraint (§4.1.3.8). Heavy/Light-(C)VC word are subject to resyllabification and syncope (§4.1.4.5). Neither type is thus affected by Triggered foot-strengthening.

| Word shape | Type | Outcome |
|----------------------------------|----------------------------|--|
| (C)VX-CV | A: Disyllabic, heavy-light | Full final vowel realization/blocked Syncope |
| (C)V-CV | B: Disyllabic, light-light | Medial consonant gemination, full final realization/blocked syncope |
| (C)VC | C: Monosyllabic, C-final | Final consonant gemination |
| (C)V _i V _j | D: Monosyllabic, V-final | Coda-preserving homorganic glide-insertion in V _j , followed y glide-gemination |

Table 4.5 – Possible outcomes of Triggered foot-strengthening by word shape

| Vowel quality | Outcome |
|---------------|---|
| <i>o</i> | Preservation |
| <i>i, u</i> | Deletion with replacement by homorganic glide |
| <i>ə</i> | Deletion |

Table 4.6 – Possible outcomes of Triggered foot-strengthening by final vowel quality

Type A words (disyllabic, heavy-light) have their internal structures preserved when followed by a vowel-initial enclitic. In the case of Type A words with final *i* or *u*, the vowel is deleted and replaced by an epenthetic, homorganic glide, with the enclitic-initial vowel now serving as the final segment of the new disyllabic word, as *ruuci* = *əə* ‘left.ear=COP.IPFV’ ‘it’s a left ear’, realized [ruu.c^hə]. *o* is preserved, as *dùu-kò* = *əə* ‘stay-NZR:LOC/OBL=COP.IPFV’ ‘it’s a residence’, realized [duuko]. Note that this means that the copula is inaudible in such cases, and its underlying presence must usually be either inferred from context or (when possible) proved via insertion of a grammatically-appropriate intervening form.⁸² In addition, words in underlying = *əə* with a final light syllable exhibit full final vowel realization, or blocking of syncope in a qualifying condition (i.e., [o] in [duuko] is not reduced to [ə] in a phrase-medial environment, despite its occupying the weak/unstressed position of a phonological word – this is due to the underlying presence of an enclitic in *əə*). *ə* is deleted from final Type A words, as *taakə* = *aa* ‘dove=VOC’ ‘O Dove!’, realized [taaka].

Type B words (disyllabic, light-light) undergo medial gemination when followed by a vowel-initial enclitic. According to vowel quality, possible outcomes are *aci* = *əə*

⁸² For example, in *ηó-kə dúu-kò* = *əə* ‘1.SG-GEN stay-NZR:LOC/OBL=COP.IPFV’ ‘it’s my residence’, realized [ηók duukò] it is possible to insert the noun *namá* ‘house’ between the two final elements, giving [ηók dûuko nammá]. The underlying presence of the copula can now be phonetically ascertained.

‘elder.brother=COP.IPFV’ ‘it’s elder brother’, realized [acc^hə], *abó* = əə ‘father=COP.IPFV’ ‘it’s father’, realized [abbo] and *anə* = aa ‘mother=VOC’ ‘O Mother!’, realized [anna].

Type C words (bimoraic, C-final) follow the same basic gemination pattern as Type B words, although due to the extreme paucity of qualifying environments the pattern has not been robustly attested. Since there are no monosyllabic lexemes of the shape (C)VC in Galo, and since relatively few monosyllabic dependents (suffix or enclitics) may be followed by a qualifying enclitic, the only widely-attested form is in Realis/Non-subject nominalizer *-nam*, as in *-nam* = əə ‘-NZR:RLS=TOP/COP.IPFV’, realized [nammə].

Type D words (bimoraic, V-final) exhibit a somewhat different process whereby a glide which is homorganic with one of two non-identical vowels is inserted to stand as second syllable onset. Due to the relatively small number of words with V_iV_j shape in the Galo lexicon, it has not been possible to test each of the fourteen available configurations. Affected sequences attested to date include those in *Vo*, *Vu*, *Vi*, and *Vɿ* (where *V* is a non-identical vowel) as well as *oə*. Sequences in *Vo*/*Vu* exhibit insertion of an onset *w* (otherwise a non-occurring segment in native Galo phonology), as *að* = əə ‘child=COP.IPFV’ ‘it’s a child’, realized [ao.wə], or *aù* = əə ‘spicy=COP.IPFV’ ‘it’s spicy’, realized [au.wə]. Sequences in *Vi* exhibit insertion of an onset *j*, as *oi* = əə ‘neutral.spirits=COP.IPFV’ ‘it’s neutral spirits’, realized [oi.jə], while sequences in *Vɿ* exhibit insertion of an otherwise non-occurring velar glide *ʉ*, as *aɿ* = əə ‘self=TOP’ ‘by/of oneself’, realized [aɿ.ʉə]. Sequence *oə* is only attested in the word *hoə* ‘cattle’; in this case, a *w* glide is inserted following a lengthened *o* vowel, as *hoə* = əə ‘cattle=COP.IPFV’ ‘it’s a cow’, realized [hoo.wə]. The precise nature of this alternation is somewhat elusive, as there are no other forms of similar shape and behaviour in my data with which to draw a comparison. As data from additional Galo dialects become available, we may be able to learn something more on this topic.

Figure 4.2 very roughly illustrates the basic operation of Triggered foot-strengthening, following the Type B word *tabə* ‘snake’ from its underlying form in concatenation with Imperfective copula *əə* to their combined phonetic output.

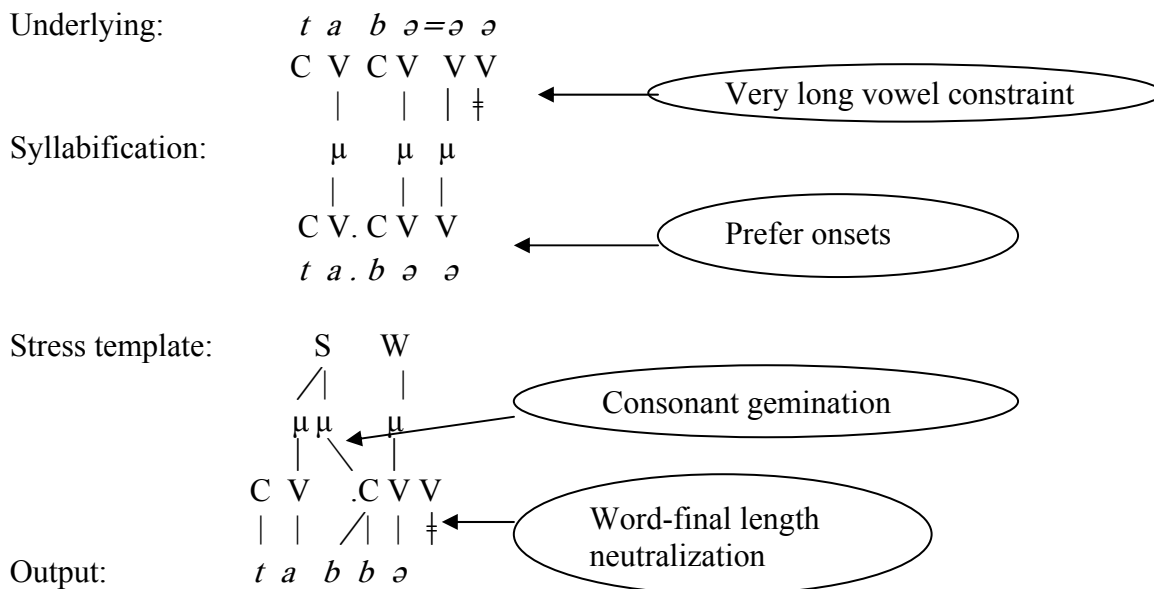


Figure 4.2 – Derivation of surface form *tabbə* ‘it’s a snake’ from underlying *tabə=əə* ‘snake=COP.IPFV’

4.1.5. Irregular phonological processes in the word and phrase

4.1.5.1. Initial gemination

An irregular but pervasive process of *initial gemination* is observed when certain morphemes (mainly suffixes, but also some clitics) follow a weak ((C)V) syllable within a phonological word. Following Initial gemination, the extra initial consonant is resyllabified as coda of the preceding syllable; schematically, $CV-C_iV \rightarrow [CVC_i.C_iV]$.

This process is formally similar to both Triggered foot-strengthening (§4.1.4.6) and Irregular medial gemination (§2.4.4.8.2), and probably shares the same, ultimately stress-related functional motivation; however, unlike Triggered foot-strengthening, Initial gemination does *not* appear to be specifiable as a language-wide phonological rule; also, unlike Irregular medial gemination, Initial gemination is *not* an invariant property of certain lexical words, but rather applies regularly at certain morpheme boundaries. Thus, it would seem that Initial gemination must be lexically-specified as an underlying property of certain Galo morphemes. Examples of morphemes which regularly undergo Initial gemination are *moo* ‘COP.NEG’ (§9.3.3), *(-)boolo* ‘COND’ (§16.3.2.1), *-bá(a)* ‘PFV.DRCT’ (§12.3.3.2) and *-lèe* ‘SSEQ’ (§16.4.4.1) (27).

- (27) *əmb rillèe là...*
 əmbə rì-lèe-là(a)
 ANAP.PADV do-SSEQ-NF
 ‘Because of that having been done...’ (IR, B3:29)

4.1.5.2. Phrase-medial truncation

A seemingly irregular but pervasive process, Phrase-medial truncation affects certain morphemes with etymologically long, open rhymes, and which in modern Lare *alternate between long and short open rhymes in different phrasal positions*. Most of the affected forms are predicate suffixes, although some particles which seem to be partially cognate with predicate suffixes are also affected. Morphemes which are subject to Phrase-medial truncation are cited with a parenthetical final vowel *-V(V)* in this work. Phrase-medial truncation can be subdivided into two types, based on the position of the affected morpheme:

In *Type 1* truncation, the affected morpheme is in second syllable/morpheme position in both a grammatical and a phonological word, and in a non-final position with respect to the higher phonological phrase. The most commonly-attested morpheme of this type is Stative predicate inflection *-dó(o)* (seemingly < PTs **don* ‘lie down’). In (28), note that since Stative *-dó(o)* occurs at the end of a phonological word, it is further subject to reduction through Syncope, viz. *-dó* → [də] (§4.1.4.5). In (29), note that Stative *-dó(o)* heads a phonological word (in third syllable position with respect to the grammatical word), and so surfaces with a long rhyme and full vocalic specification.

- (28) *məjirê! “lubii” pòol kaadé larè?*
 məjir = əə lubii poolò káa-**dó(o)** larèe
 NAME=VOC WORD month have/exist-STAT DUB
 ‘Meyir! Is there really a month named “Lubi” (my sense is that there isn’t one, but he is suggesting that there is)?’ (IR, 02-2007 FILE)

- (29) *ók miiên dookú naanà.*
 okə mii-lèn-**dó(o)**-kú-nà = əə = na
 ANAP.ABL multiply-OUT-STAT-CMPL-NZR:SUB=COP.IPFV=DECL
 ‘(Our lineage/clan/population) has come down from that point.’ (TB, OAM 327-328)

In *Type 2* truncation, the affected morpheme is in third syllable/morpheme position in a grammatical word, and is heading an independent phonological word (again

in a non-final position in the higher phonological phrase). The most commonly-attested morpheme of this type is Non-final suffix *-lâ(a)*. In (30), note that Non-final *-lâ(a)* occurs in second position, and surfaces with full vocalic specification. If *-lâ(a)* were underlyingly short, it would be subject to reduction through Syncope (§4.1.4.5); however, the reduced form [lə] is unacceptable to my consultants in this example. In (31), however, *-lâ(a)* is in third syllable/morpheme position and surfaces with a short rhyme (this time not reduced because in a metrically strong/stressed position in its host phonological word); the long form [laa] is unacceptable to my consultants in this example.

- (30) *ɲibó aalâa kù.*
 ɲibó áa-lâ(a)-kú
 person.non-kin come-NF-CMPL
 ‘She had gotten married.’ (TR, FS 073)

- (31) *bùllə cìn...kaalîg lakù.*
 bulù = əə cìn káa-lîk-lâ(a)-kú
 3.PL=TOP ADD look-INTO-NF-CMPL
 ‘They also...saw (them) off.’ (TR, FS 076)

In sum, the positional incommensurability of Type 1 and Type 2 Phrase-medial truncation, together with the fact that not all syllables of the same form appear to be affected, require its identification as an irregular, lexically-specified property of particular morphemes. Further information may be found in subsections corresponding to affected morphemes or their derivatives below.

4.1.6. Trisyllabic sequences: word or phrase?

In our discussion of phonological words in §4.1.3, focus fell principally on *disyllabic* sequences, which constitute in a sense “prototypical” phonological words. Despite the fact that most Galo lexemes are also disyllabic, it is of course possible to encounter *trisyllabic* sequences; within the noun phrase, disyllabic lexemes are commonly followed by case enclitics such as *əə* ‘TOP’ and *lo* ‘LOC’, and within the predicate complex trisyllabic sequences such as *káa-kèn-dùu* ‘look-GOOD/EASY-IPFV’ ‘good-looking; beautiful’ are commonplace. While there is never doubt that such sequences constitute a

phonological unit of some kind, it is sometimes very difficult to discern whether they are to be treated as *one phonological word*, or as *two*.

Applying the criteria for phonological wordhood summarized in Table 4.1, we find a certain degree of indeterminacy. Consider the two predicates of (32).

(32) `kaanəmə...`bɰi `caalên `dù.

káa-nam = əə bɰi càa-lên-dùu

look-NZR:RLS=TOP 3.SG ascend-OUT-IPFV

‘Having looked...(I saw that) he was leaving for the upper (village).’

In (32), the nominalized, topicalized predicate *káa-nam = əə* very likely constitutes a single phonological word. No glottal stop or pause intervenes at the clitic boundary (between nominalizer and Topic marker), internal rhyme-reduction occurs due to resyllabification and syncope, and primary stress occurs on the initial syllable only. Now, however, consider the final predicate. Here again, we have a trisyllabic sequence, but the syllables seem less well-integrated as a single “word”. Again, no significant pause interrupts them, but primary stress falls on both *càa-* and *-dùu*. Native speakers may write *káa-nam = əə* as a single orthographic word, but usually write *càa-lên-dùu* as two.

Unfortunately, there is no easy answer here. Some “word” criteria are relatively robust, and apply to disyllabic sequences only; these include fricative and underspecified consonant realization, (§3.2.4, §3.4.2) and the prohibition against internal pauses or glottal stop (§4.1.3.4). However, such criteria are clearly not applicable in every case, as when fricatives or underspecified consonants are not present in the sequence in question. Other “word” criteria also apply sporadically to sequences larger than two syllables. For example, assimilation sandhi (§4.1.3.7) *may* apply sporadically across word boundaries (although they are never obligatory in this context, unlike *within* a word). Word-final vowel length neutralization (§4.1.4.4) may or may not occur at the boundary of the second and third syllable of a trisyllabic word, and the question of whether a particular trisyllabic sequence represents one metrical foot (with one stress position only) or two, and whether the two stressed slots are equal or unequal are both very difficult questions on which I have found considerable disagreements among native speakers (see also §4.2.3).

For now, what may be said with confidence is the following: A phonological word in Galo is prototypically disyllabic, although monosyllabic, bimoraic phonological words are also admitted. Phonological units of greater than two syllables generally constitute phonological phrases, which exhibit some but not all of the properties of phonological

words – often in a sporadic rather than obligatory form – and which in general constitute a relatively “looser” phonological structure. Trisyllabic phonological units exhibit considerable indeterminacy; by some criteria, they may appear to have phonological word status, while by other criteria they may appear to constitute a phonological phrase consisting of two phonological words. It is certain that future research, including cross-dialectal research within Galo as well as in its neighbours, will shed considerable light on this matter.

4.1.7. Interim summary

The preceding subsections have suggested that when phonological and grammatical criteria for word are considered separately, at least four types of outcome are possible for any polysyllabic sequence of morphemes:

- 1) phonological and grammatical criteria may converge
- 2) phonological and grammatical criteria may diverge

In (1), two further possibilities are that we have

- a) one word
- b) two words

In (2), there are the further possibilities

- a) one phonological word comprising two grammatical words or
- b) two phonological words comprising a single grammatical word.

Table 4.7 summarizes the possibilities.

| Type | Ph. Wd. | Gr. Wd. | Ex. | Composition | Gloss |
|------|---------|---------|--------------------|----------------------|---------------------|
| 1a | 1 | 1 | <i>rabgúr</i> | <i>rabgúr</i> | ‘doorjamb’ |
| 1b | 2 | 2 | <i>mootùm lo</i> | <i>mootùm lo</i> | ‘jungle LOC’ |
| 2a | 1 | 2 | <i>bujnə</i> | <i>bujnə ə</i> | ‘2.DL TOP’ |
| 2b | 2 | 1 | <i>kaapàa tokú</i> | <i>káa-pàa-tó-kú</i> | ‘see-ATTN-PFV-CMPL’ |

Table 4.7 – Summary of types of grammatical-phonological word relation

However, we have also reviewed some evidence suggesting that the phonological word/grammatical word distinction may not be exhaustively expressible as a binary system, but may in fact represent something like a *cline of formal integration*

corresponding to a more generalized notion of “word” as, say, a “form-meaning unit”. This sort of a cline may be expressible as in Figure 4.3.

| | | | | | | |
|---------------------|--|-----|-----|-----|----|----|
| Grammatical words: | 1 | 1-2 | 1 | 2 | 1 | 2 |
| Phonological words: | 1 | 1 | 1-2 | 1 | 2 | 2 |
| Syllables: | 1 | 2 | 3 | 3-4 | 4+ | 4+ |
| Formal integration: | <total---high-----less high-----low-----lower----very low> | | | | | |

Figure 4.3 – Cline of formal integration in Galo words

4.2. Prosody

4.2.1. Theoretical-typological preliminary

Languages are sometimes described as being “a tone language” or “a stress/accent language”, as though these characterizations necessarily represented mutually exclusive types. And indeed, analysis of some languages suggests mutual exclusivity:

In English, a resolute “stress language”, pitch contrasts at the word level (as opposed to at the phrasal level of intonation contours) are phonetic correlates of stress, and are not independent of other stress-oriented features such as relative amplitude and vowel length/extremity. Thus, in minimal pairs on stress in English (such as [ˈcom.bat] vs. [com.ˈbat]), the stressed syllable is relatively louder, marginally longer, higher in pitch, and fully vocally specified; there are no lexical pairs of this type in English which contrast in pitch contour but not in amplitude contour, relative duration and so on.

In Standard Thai, an essentially morphosyllabic “tone language”, nearly every tone-bearing unit (TBU) is also a stressed syllable (in the sense of having a strong relative amplitude, etc.); if a given syllable is toneless, it is also less prominent in terms of amplitude, length, vocalic specification and so on (Noss 1964:17-26; Iwasaki and Ingkaphirom 2005:6). Since the presence of stress features in Thai usually correlates with the presence of tones (save for “emphatic” stress, which, like English intonation, in Thai codes a pragmatic function), and since we find minimal pairs on tone but not on stress (such as *mâj* ‘new’ and *mâj* ‘NEG’), we view Thai as an essentially “tone” language.

“Pitch-accent” seems less well-defined as a language type; in the classic example of a “pitch-accent” language, Japanese, lexemes *may* be distinguished according to the relative placement of pitch; for example: *káki* ‘oyster’ and *kakí* ‘persimmon’ – in these examples, stress-correlated features such as relative amplitude and duration seem not to play a role, distinguishing Japanese from a “stress” language such as English. However,

the status of the system remains basically “accentual”, in that it serves primarily to realize a particular metrical pattern and is only occasionally employed in lexical contrasts. This would tend to align Japanese more closely to the prosodic profile of English than to that of Standard Thai.

In some languages, however, we find *both* “stress” *and* “tone” systems operating to an extent *independently*, although they may (and usually do) in some ways interact. Such “hybrid” prosodic systems are considerably less well-described, although some important advances have been made.⁸³ Galo is a language with exactly such a hybrid prosody; in Galo, both tone and stress systems exist which seem to have basically unrelated diachronic origins and to an extent unrelated domains of primary application, but which at higher levels appear, to some extent, to interact. In subsections below, we first discuss tone §4.2.2 and then stress §4.2.3; §4.2.4 concludes with a discussion of their interaction.

4.2.2. Tone

4.2.2.1. Overview

Galo basically exhibits what has been called a “word tone” system (Mazaudon 1977; Watters 1985; Weidert 1987; Donahue 2003; Michaud and Mazaudon 2006). In most attested word tone systems, the inherently-specified tones of certain morphemes (typically roots, but sometimes also affixes) appear to interact, projecting a single overall tonal “contour” over the entire phonological word of which they are constituents.

In terms of the number of underlyingly contrastive categories, the Galo tone system is quite simple; only *two underlying tonemes* must be specified to account for virtually all tone-based lexical contrasts.⁸⁴ Despite the small number of toneme categories, hundreds of minimal pairs on tone may be adduced at the word level; a small selection is given in Table 4.8 (see also the list of roots in Appendix A).

⁸³ For example, Chao (1968: §1.3) for Chinese and, more recently, Watters (2002: §2.2.1.i) for Kham. These are both described as primarily “tone” languages, with marginally independent “stress” systems; most attested examples of prosodically mixed languages seem to be of this type. The reverse case, in which a primarily “stress” language exhibits marginal or developing tonal characteristics, is less well-attested, although some modern Khmer dialects may be analyzable as of this type (Wayland and Guion 2005).

⁸⁴ A third set of semantically and/or pragmatically marked, mainly emphatic lexemes and particles which contrast prosodically with the two-way basic set, but which do not perform basic lexical distinctions, is discussed in §4.2.2.2.1.

| Nouns/adjectives (lexeme form) | | Verbs (citation form, suffixed in <i>-nam</i> ‘NZR:RLS’) | |
|--------------------------------|--------------------|--|-------------------------------|
| Word | Gloss | Word | Gloss |
| <i>alíi</i> | ‘seed’ | <i>hennám</i> | ‘to climb (VT)’ |
| <i>alìi</i> | ‘new’ | <i>hennàm</i> | ‘to dry out (VI)’ |
| <i>apí</i> | ‘elder sister’ | <i>runám</i> | ‘to bury (VT)’ |
| <i>apì</i> | ‘two’ | <i>runàm</i> | ‘to burn (VT)’ |
| <i>aú</i> | ‘fat(ty)/greas(y)’ | <i>bínám</i> | ‘to carry on one’s back (VT)’ |
| <i>aù</i> | ‘hot/spicy (one)’ | <i>bínàm</i> | ‘to hang (VI)’ |
| <i>tabé</i> | ‘snake’ | <i>dornám</i> | ‘to pay (VTE)’ |
| <i>tabè</i> | ‘sugar cane’ | <i>dornàm</i> | ‘to increase (VI)’ |

Table 4.8 – A selection of minimal pairs on tone

Once the phonetic reflexes of tonemes and the rules for their word-level derivation are understood, establishing the tones of individual lexemes at the context-free word level is a relatively trivial affair. What is difficult – often alarmingly so – is fully accounting for the surface prosodic contour which is actually exhibited in natural Galo speech, this being a product of the interaction of root tones to form the tones of words, together with the interaction of word tones to form the tones of phrases, together with word and phrasal boundary effects and pragmatic modifications which may be made at various levels. The basic skeleton of the overall derivation, to be discussed in more detail below, is given in Figure 4.4.

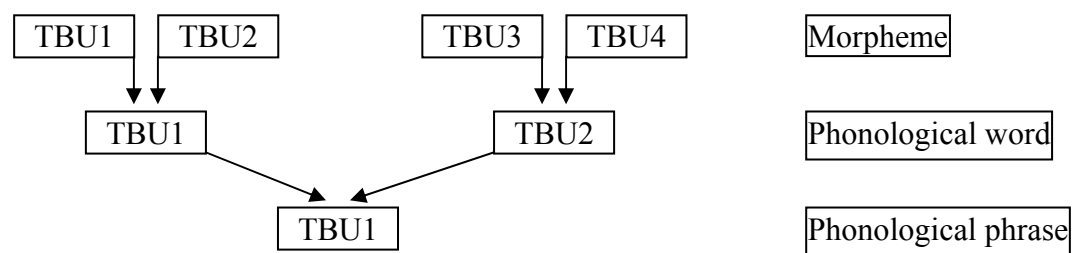


Figure 4.4 – Schematic of the tonal derivation from morpheme to phonological phrase

The following subsections represent the best effort currently possible at understanding the stepwise derivation of Galo tone contours, however given the degrees of complexity involved they will surely prove to be far from the last word.

4.2.2.2. First level derivation: morpheme to word

All Galo roots, and most functor morphemes (including suffixes, particles and enclitics), are underlyingly specified for one of two tones. The first, unmarked tone is

High/Plain, marked with an acute accent ́ over the penultimate vowel of a TBU, as in *óó* ‘vegetable’. The second, marked tone is *Low/Tense*,⁸⁵ marked with a grave accent ̀ over the penultimate vowel of a TBU, as in *əə* ‘bamboo’. Since the overwhelming majority of roots and functors are bound in Galo, it is not generally possible for a native speaker to pronounce the underlying tone of a morpheme in isolation. Instead, underlying morpheme tones must be discovered inductively through comparative analysis of their behaviour in different types of phonological word.

In the simplest case (but also the rarest, in terms of frequency) *monosyllabic words* directly project the underlying tone of their single constituent morpheme: the pitch contour of a monosyllabic *High/Plain* word is relatively high and level, with a slight fall/downdrift at the right edge (when spoken in isolation). The pitch contour of a monosyllabic *Low/Tense* word is high-to-low falling. Figure 4.5-Figure 4.6 illustrate the waveform (pressure over duration) and pitch (F0 over duration) of monosyllabic *High/Plain* noun *óó* ‘vegetable’ as spoken by a middle-aged male; Figure 4.7-Figure 4.8 illustrate the same of *Low/Tense* noun *əə* ‘bamboo’.

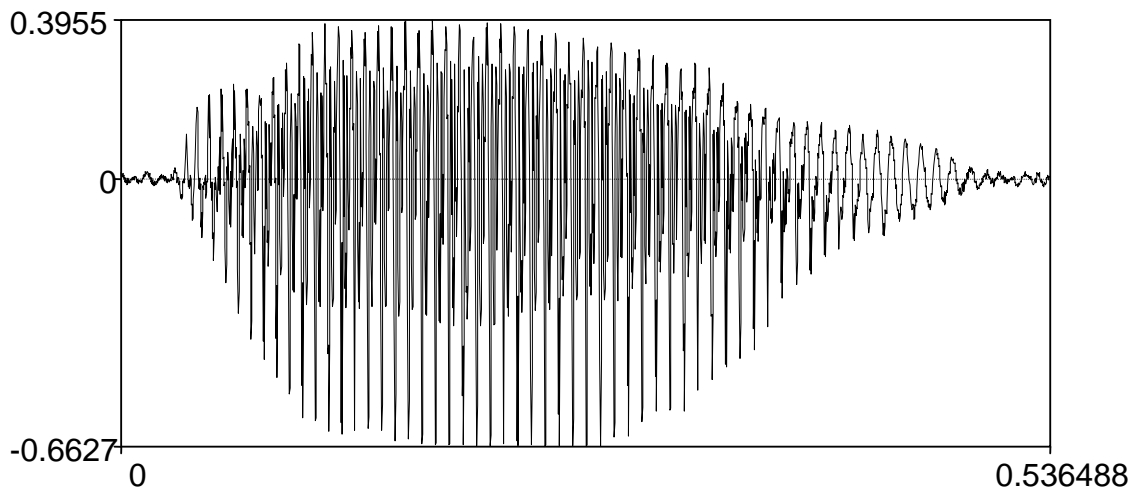


Figure 4.5 – Waveform of *óó* ‘vegetable’ (X axis = Time (s); Y axis = output (pressure quotient))

⁸⁵ Note that “tense” here does not refer to the traditional “tense/lax” distinction among vowels. Rather, it refers to the added “tension in the throat” which some speakers feel to characterize *Low/Tense* words. For further discussion of this terminological choice, see §4.2.2.4.

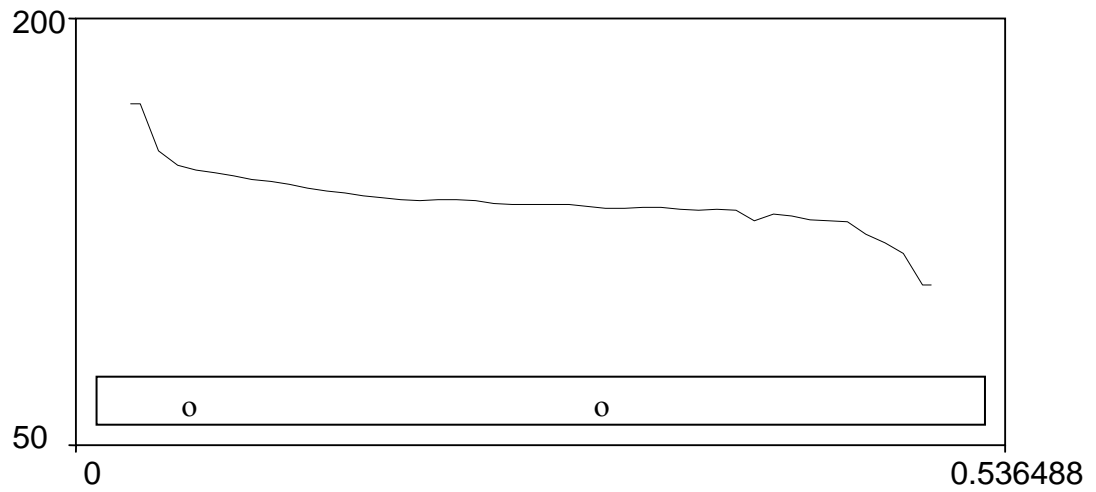


Figure 4.6 – Pitch of ʃo ‘vegetable’ (X axis = Time (s); Y axis = F0 (Hz))

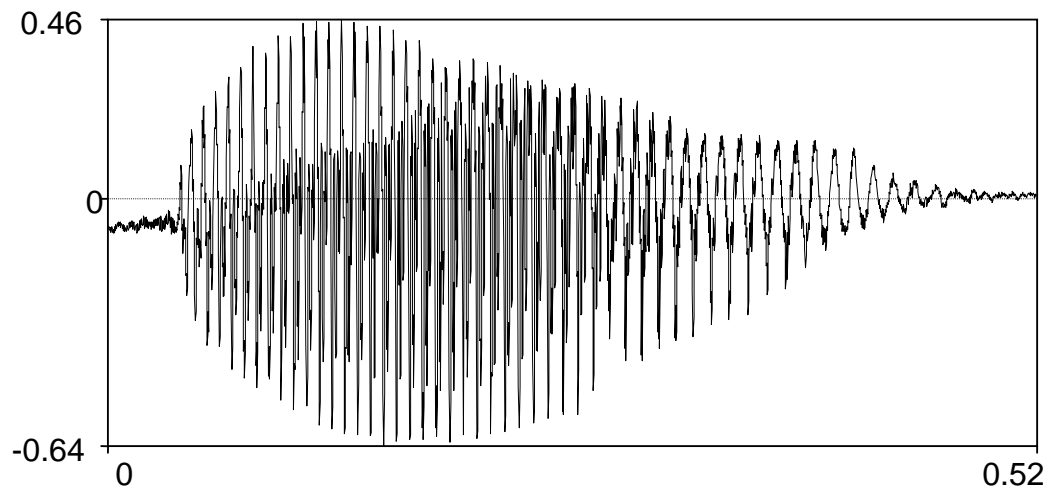


Figure 4.7 – Waveform of ʃə ‘bamboo’ (X axis = Time (s); Y axis = output (pressure quotient))

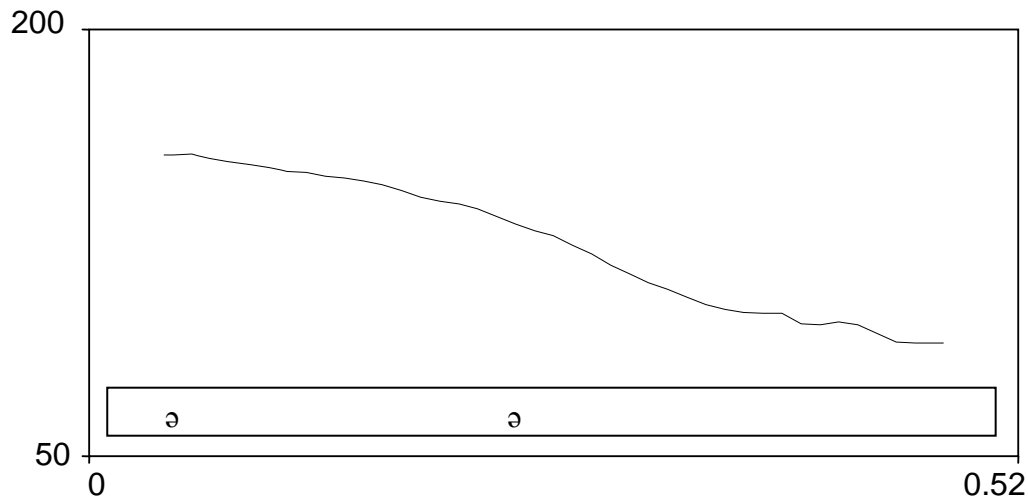


Figure 4.8 – Pitch of ə ‘bamboo’ (X axis = Time (s); Y axis = F0 (Hz))

Disyllabic words exhibit the same basic set of categorical distinctions, High/Plain and Low/Tense. When a disyllabic word has only *one* constituent TBU, the resulting word tone is a direct projection of that single TBU. Among nouns and adjectives, this applies to most types of prefixed roots, such as those in *a-* ‘PFX’, *ta-* ‘MDIM’, *ja-* ‘FDIM’ and *ho-* ‘PFX:ANIMAL’; none of these prefixes are underlying TBUs. Among verbs, this mainly applies to citation forms, since Realis event nominalizer *-nam* (quite helpfully!) is not an underlying TBU. Table 4.9 presents a selection of disyllabic words consisting of prefixed and suffixed roots, in which the resulting word tone is a direct projection of the single tone-bearing morpheme.

| Form. 1 | Gloss | Form. 2 | Gloss | Word | Gloss |
|-------------|--------------|-------------|--------------|---------------|-----------------|
| <i>ta-</i> | ‘MDIM’ | <i>bɔ̌-</i> | ‘snake’ | <i>tabɔ̌</i> | ‘snake’ |
| <i>ta-</i> | ‘MDIM’ | <i>bə̌-</i> | ‘sugar cane’ | <i>tabə̌</i> | ‘sugar cane’ |
| <i>hɪ̌-</i> | ‘urinate’ | <i>-nam</i> | ‘NZR:RLS’ | <i>hɪ̌nám</i> | ‘to urinate’ |
| <i>hɪ̌-</i> | ‘plug/clamp’ | <i>-nam</i> | ‘NZR:RLS’ | <i>hɪ̌nàm</i> | ‘to plug/clamp’ |

Table 4.9 – Direct projection of underlying root tones in phonological words

Figure 4.9-Figure 4.10 illustrate the pitch contours of disyllabic High/Plain and Low/Tense words *hɪ̌nám* ‘to urinate’ and *hɪ̌nàm* ‘to plug/clamp’ (waveforms are henceforth omitted in the interest of space). Note that the pitch contours of disyllabic words are somewhat more detailed than are those of monosyllabic words. Specifically, in the High/Plain word *hɪ̌nám* ‘to urinate’ (Figure 4.9), there is a slight initial rise to a level “plateau”, followed by a slight downstep or downdrift at the right edge (roughly, 34 43).

The Low/Tense contour of *hínàm* ‘to plug/clamp’ (Figure 4.10) is more marked, exhibiting an overall *rising-falling* form (roughly, 35 41. This rising-falling form is particularly evident in relatively *larger* disyllabic Low/Tense phonological words (i.e., those with relatively heavier internal syllable structures). The important thing to bear in mind here, however, is that despite perceptible phonetic differences between the pitch contours of relatively smaller and relatively larger phonological words, the tonal specification of the word as High/Plain or Low/Tense remains the same (also see discussion in §4.2.2.3).

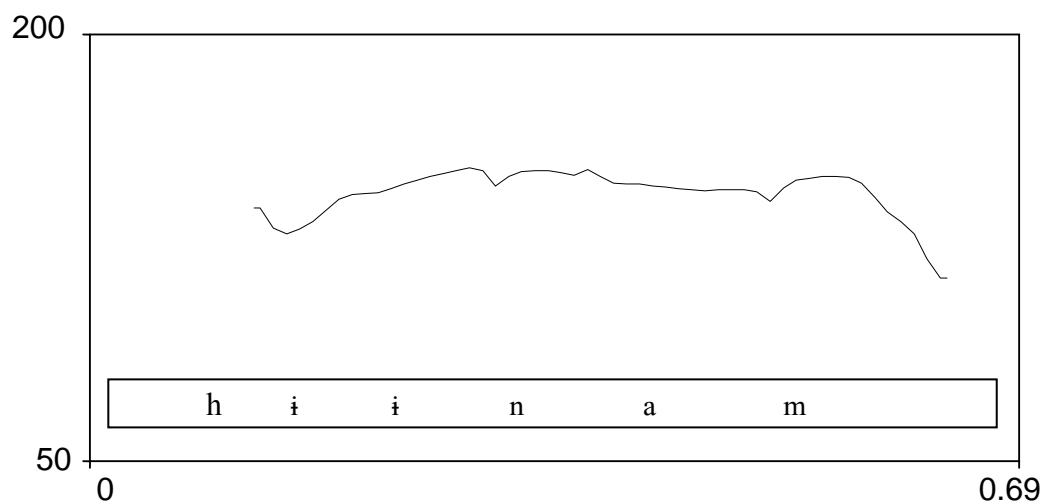


Figure 4.9 – Pitch of *hínàm* ‘to urinate’ (X axis = Time (s); Y axis = F0 (Hz))

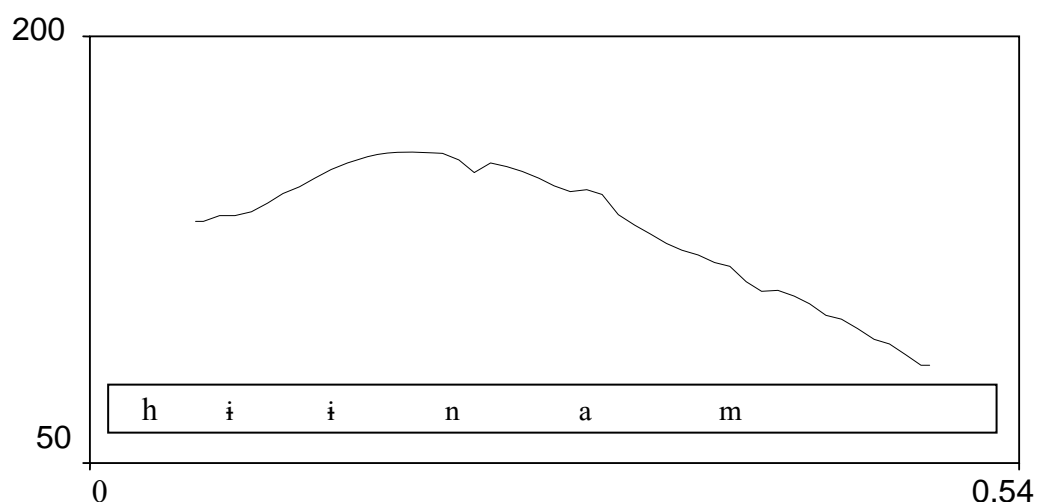


Figure 4.10 – Pitch of *hínàm* ‘to plug/clamp’ (X axis = Time (s); Y axis = F0 (Hz))

Up to now, we have dealt only with phonological words with one constituent underlying TBU. When *both* constituents of a disyllabic word are underlying TBUs, the

word tone contour must now be analysed as a product of their interaction. The general principle followed at the word level is *low trumps high*; Table 4.10 illustrates the full set of possible patterns for nouns/adjectives (first four) and verbs (second four); the same basic derivation holds for lexeme-internal/lexicalized compositions and actively/productively-formed compounds or root-suffix constructions alike.

| Cat. | Form. 1 | Gloss | Form. 2 | Gloss | Word | Gloss | Pattern |
|------|-------------|--------------|-------------|----------|---------------|-----------------|------------------|
| N | <i>lák-</i> | ‘hand/arm’ | <i>cáo-</i> | ‘finger’ | <i>lakcáo</i> | ‘finger’ | H + H → H |
| N | <i>lák-</i> | ‘hand/arm’ | <i>cì-</i> | ‘left’ | <i>lakcì</i> | ‘left hand/arm’ | H + L → L |
| N | <i>là-</i> | ‘foot/leg’ | <i>cáo-</i> | ‘finger’ | <i>lácáo</i> | ‘toe’ | L + H → L |
| N | <i>là-</i> | ‘foot/leg’ | <i>cì-</i> | ‘left’ | <i>lácì</i> | ‘left foot/leg’ | L + L → L |
| V | <i>hí-</i> | ‘urinate’ | <i>-tó</i> | ‘PFV’ | <i>hító</i> | ‘urinated’ | H + H → H |
| V | <i>hí-</i> | ‘urinate’ | <i>-dùu</i> | ‘IPFV’ | <i>hídùu</i> | ‘urinating’ | H + L → L |
| V | <i>hí-</i> | ‘plug/clamp’ | <i>-tó</i> | ‘PFV’ | <i>hító</i> | ‘plugged’ | L + H → L |
| V | <i>hí-</i> | ‘plug/clamp’ | <i>-dùu</i> | ‘IPFV’ | <i>hídùu</i> | ‘plugging’ | L + L → L |

Table 4.10 – Rules for derivation of surface tones from underlying tones

Figure 4.11-Figure 4.14 illustrate the pitches of the first four words in Table 4.10, in order, as spoken by a middle-aged male. Note that in Figure 4.11, which represents the only High/Plain word of the group, there is again a slight rise from syllable one to syllable two, followed by a slight downdrift at the right edge (compare Figure 4.9). By contrast, the final syllables of the Low/Tense words illustrated in Figure 4.12-Figure 4.14 all drop markedly in pitch throughout the final syllable. Note also that in the initial syllable of Figure 4.12 there is a prominent rise to a pitch “peak” prior to the fall, which is not seen, or not as prominently seen, in the Low/Tense words of Figure 4.13-Figure 4.14; again here, this is attributable to the relatively greater weight (=longer duration) of the initial syllable, as compared with that of the other two Low/Tense words (compare also Figure 4.10).

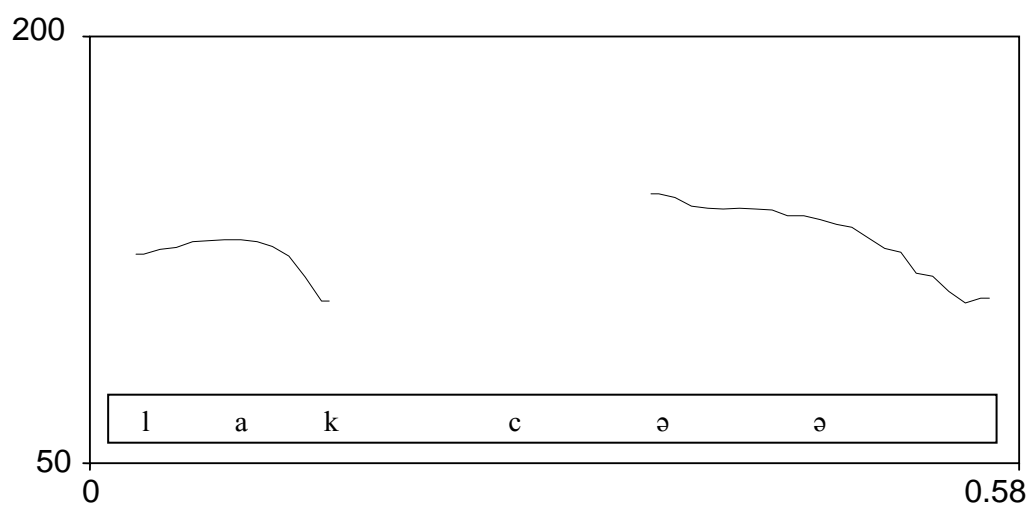


Figure 4.11 – Pitch of *lakcəə* ‘finger’ (X axis = Time (s); Y axis = F0 (Hz))

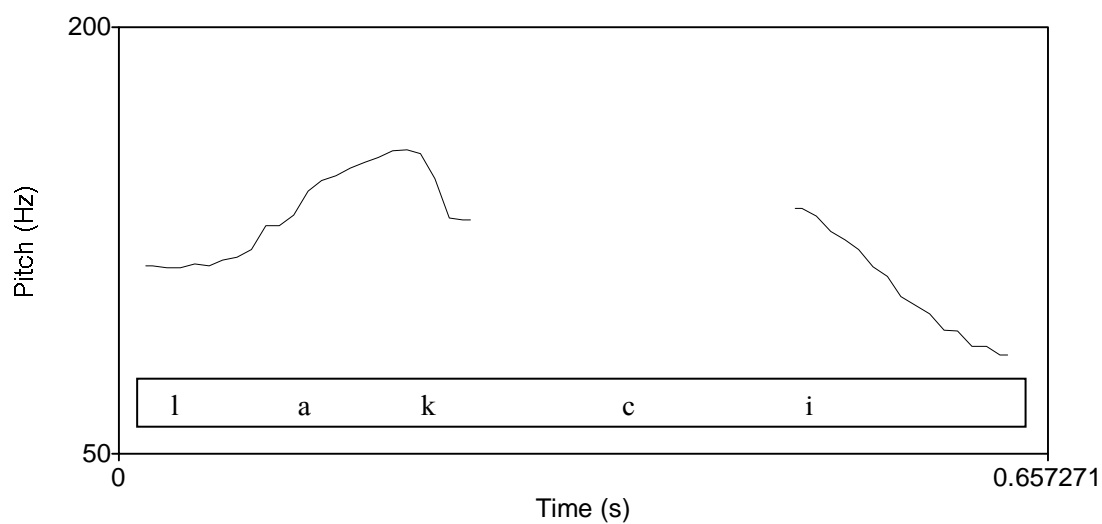


Figure 4.12 – Pitch of *lakci* ‘left hand/arm’ (X axis = Time (s); Y axis = F0 (Hz))

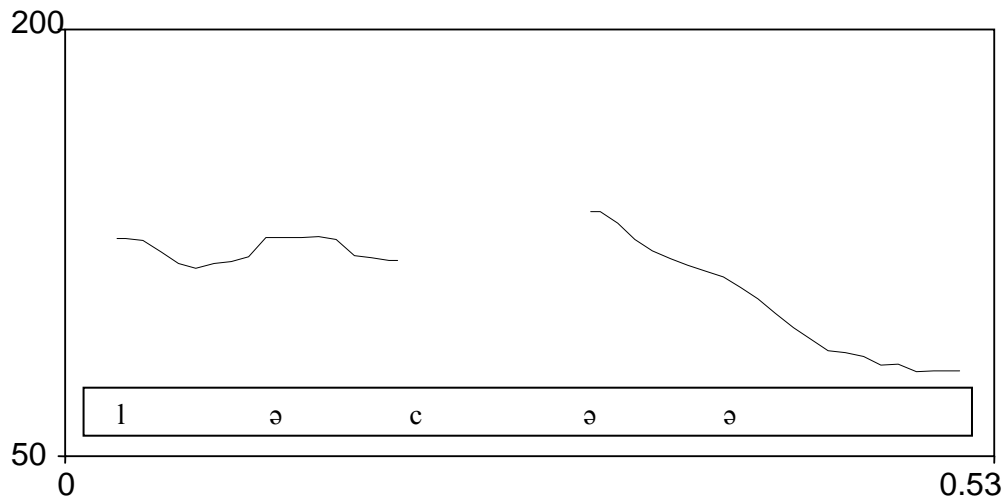


Figure 4.13 – Pitch of *lɔcə* ‘toe’ (X axis = Time (s); Y axis = F0 (Hz))

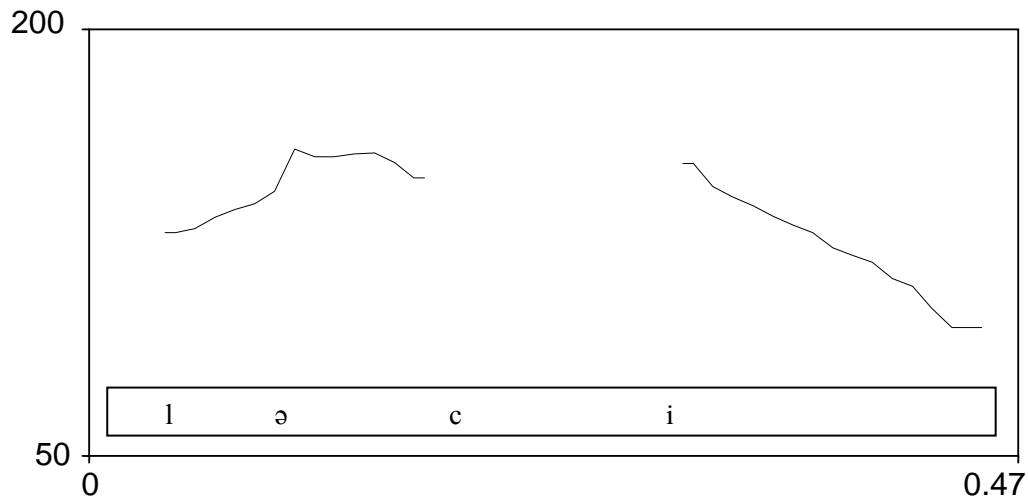


Figure 4.14 – Pitch of *lɔci* ‘left foot/leg’ (X axis = Time (s); Y axis = F0 (Hz))

To summarise the above discussion, there are two basic lexical tonemes, High/Plain and Low/Tense, which are lexically-specified properties of individual morphemes (underlying TBUs). Monosyllabic, mono-morphemic words exhibit a direct phonetic reflex of the single underlying toneme. Disyllabic words with only *one* constituent TBU also exhibit a direct phonetic reflex of the single underlying toneme. Disyllabic words with *two* constituent TBUs exhibit a High/Plain tone if and only if both underlying TBUs are High/Plain; otherwise, the surface word tone is Low/Tense. Phonetically, High/Plain pitch contours are relatively mid and level, with larger words tending to exhibit a slight initial rise and a slight right edge downdrift. Low/Tense pitch

contours exhibit an overall falling contour, although in larger words the fall is preceded by a salient rise.

4.2.2.2.1. Emphatic realizations at the word level

A relatively small number of lexemes and particles (around 30-40 total, with many partial cognates among them) with marked, emphatic semantic and/or pragmatic values are underlyingly specified for a distinct tonal realization, notated with a circumflex accent $\hat{_}$ over the penultimate vowel (also the location of the “pitch peak” in the marked word).

A selection is first given in Table 4.11.

| Term | Gloss | Rel. word/ Form. 1 | Gloss | Form. 2 | Gloss |
|-----------------|-----------------------|--------------------------|---------------------|---------------|-----------------------|
| <i>jakkâa</i> | ‘very many’ | <i>jaakâa</i> | ‘many’ | -- | -- |
| <i>ajjîi</i> | ‘very small’ | <i>ajjîi</i> | ‘small’ | -- | -- |
| <i>takâ(a)m</i> | ‘everyone/where’ | <i>ta-</i> | ‘MDIM’ | ??? | ??? |
| <i>appîi</i> | ‘all/every(one)’ | <i>a-</i> | ‘PFX’ | <i>-pîi</i> | ‘reach; all/every’ |
| <i>buppîi</i> | ‘all/every(one)’ | <i>bu-</i> | ‘3.PL formative’ | <i>-pîi</i> | ‘reach; all/every’ |
| <i>buppâa</i> | ‘all/every(one)’ | <i>buppîi</i> | ‘all/every(one)’ | <i>əə</i> | ‘TOP’ |
| <i>ajuppâa</i> | ‘both’ | <i>ajîi</i> | ‘two’ | <i>buppâa</i> | ‘all/every’ |
| <i>azzâa</i> | ‘real; true’ | <i>a-</i> | ‘PFX’ | <i>zâa</i> | ‘real; true’ |
| <i>zizzâa</i> | ‘real; true; in fact’ | <i>zî- (?)</i> | ‘give’ (?) | <i>zâa</i> | ‘real; true’ |
| <i>mazzâa</i> | ‘very much’ | <i>mâa (?)</i> | ‘NEG’ (?) | <i>zâa</i> | ‘real; true’ |
| <i>zâa</i> | ‘REALITY.EMPH’ | <i>zâa</i> | ‘REALITY’ | -- | -- |
| <i>rûu</i> | ‘CERTAINTY.EMPH’ | <i>rûu</i> | ‘CERTAINTY’ | -- | -- |
| <i>cəə</i> | ‘PRECISION.EMPH’ | <i>cəə</i> | ‘PRECISION’ | -- | -- |

Table 4.11 – Selection of lexemes and particles underlyingly specified for a “rising-falling” tone

Phonetically, the pitch contour associated with such forms is identical to that of a Low/Tense word; in this sense, the entire category may be thought of as an emphatic extension of the Low/Tense category (rather than as a third, contrastive toneme category).⁸⁶ The difference here is that, while in ordinary circumstances a Low/Tense word exhibits a single contour *over the length of the word* (cf. §4.2.2.2), in emphatic words such as those in Table 4.11, the entire tone contour is “packed into” *the marked syllable*. Figure 4.15, taken from a spoken text (elder female speaker), illustrates use of

⁸⁶ Note also that several of the forms in Table 4.11 also exhibit segmental properties seemingly designed to enhance their emphatic values, such as consonant gemination (*appîi*) and vowel lengthening (*takâ(a)m*).

takâ(a)m ‘everyone/where’. Note by comparison with Figure 4.12 (illustrating *lakci* ‘left hand/arm’) that the pitch peak of *takâ(a)m* is concentrated over the *second* syllable rather than the *first*.

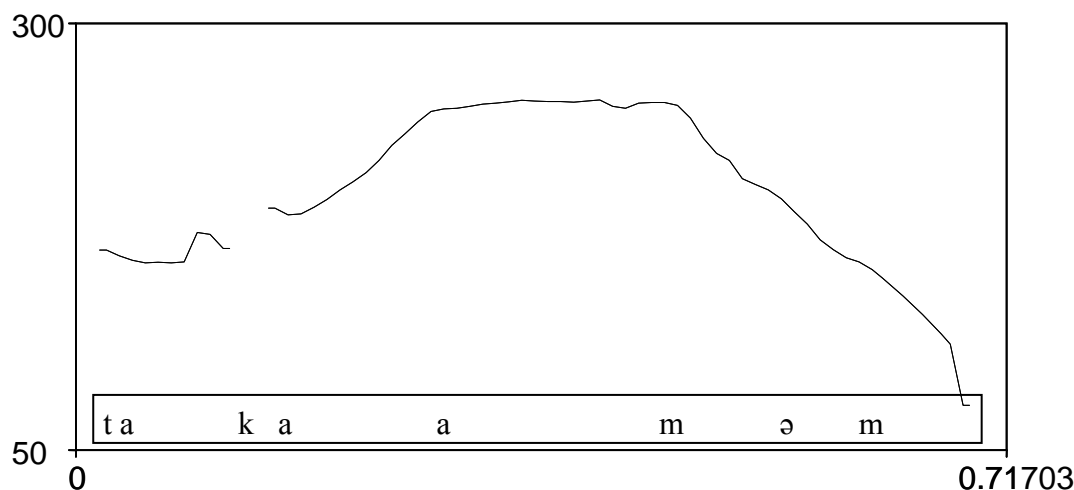


Figure 4.15 – Pitch of *takâam = əəm* ‘everyone/where=ACC’ (X axis = Time (s); Y axis = F0 (Hz))

Similarly, particles such as *zâa* ‘REALITY.EMPH’, which may occur in a wide variety of morphosyntactic contexts (see §13.5.2), always “commandeer” the pitch contour corresponding to their position in a phonological word or phrase: whether standing as a distinct phonological word or as a constituent of a larger phonological word, they necessarily project an emphatic, rising-falling pitch contour which overrides any word tone which might otherwise have pertained to the syllable slot in which they occur.

In sum, emphatic lexemes and particles such as those in Table 4.11 must be specified as a tonally distinct word type, since their phonetic pitch contours and word-contextual behaviours are different from the “basic” High/Plain and Low/Tense types described in §4.2.2.2. However, due to their basically emphatic nature and limitation to a relatively small set of semantically and/or pragmatically marked lexical items, as well as their basic resemblance to the Low/Tense type from which their pitch contour appears to be derived, they cannot be considered to constitute a third basic toneme category as such. Some further discussion with reference to the phonological phrase level may be found in §4.2.2.3.

4.2.2.3. Second level derivation: word to phrase

4.2.2.3.1. Introductory overview

Assignment of the tonal contour of a phonological phrase level follows somewhat different principles from those seen at word level. At the word level, the lexically-specified tones of a word's constituent roots are not directly audible, but rather interact to project a single, irreducible phonetic contour which must be analysed as a phonological property of the word as a whole (§4.2.2.2). At the phrase level, the constituent phonological words of a phrase directly project tones which *are* audible at surface level. At the same time, however, they continue to interact to produce an overall contour which is greater than the sum of its parts, and must be analysed as a rule-governed property of the phrase.

4.2.2.3.2. Boundary effects

Prior to introducing word-projected tone contours, it is necessary to understand phrasal boundary effects. Generally speaking, downdrift occurs from left to right throughout a phonological phrase. It appears to be an inherent property of all phonological phrases, although it may also be overridden by phrase-internal factors (discussed below). Downdrift may also be enhanced by Final intonation (§4.2.4), which is present when a phrase occurs utterance-finally. It is likely that the downdrift discussed at the word level (§4.2.2.2) is in fact a phonological phrase property, which also affects words when they are spoken in isolation (effectively realizing single-constituent phonological phrases). In close transcriptions in this grammar, a noticeably lowered high tone is marked by a flat accent $_$; however, lowered high tones are *not* generally marked as such in the surface line of numbered examples. For further explanation of transcription and notational conventions, see §4.2.2.4.

4.2.2.3.3. Basic derivation of phrasal tone

At the level of a trisyllabic or quadrisyllabic phonological phrase with two phonological word constituents (in which each phonological word is a TBU), there are four possible internal structures:

- 1) H H
- 2) H L
- 3) L H
- 4) L L

The first structure H H exhibits an overall pitch contour which resembles that of a High/Plain word almost precisely. A slight rise is followed by a slight downdrift at the right edge, although the overall contour is characterized by a central, level pitch “plateau”; roughly, for a trisyllabic phrase (where # denotes a word boundary): 33 34 # 43; for a quadrisyllabic phrase, roughly: 33 34 # 44 43. Figure 4.16 illustrates the pitch contour of *abó-gítúu* ‘father-pillar’ ‘father’s leaning-pillar’, spoken by a middle-aged male; note the slight rise on [bo], and the slight downdrift toward the right edge.⁸⁷

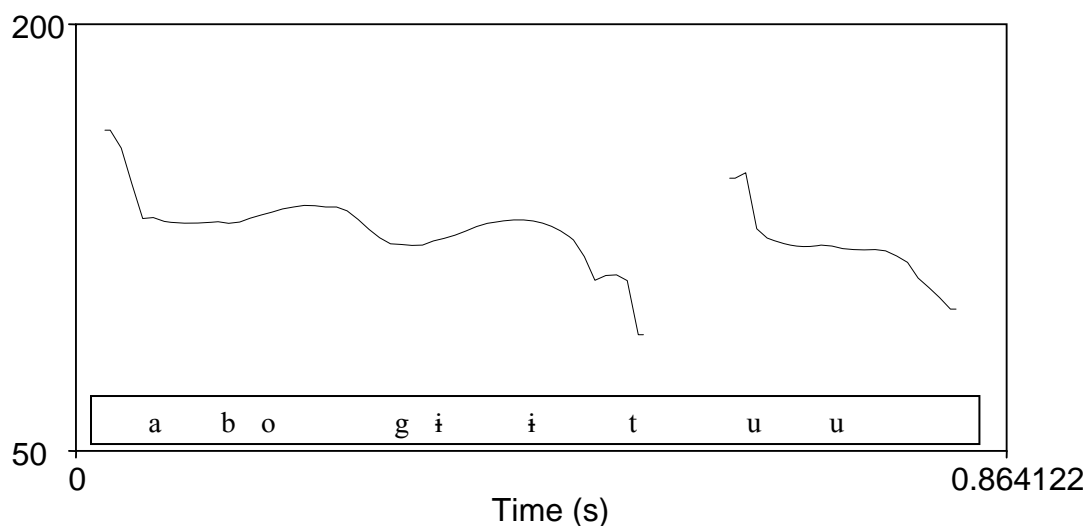


Figure 4.16 – Pitch contour of *abó-gítúu* ‘father-pillar’ ‘father’s leaning-pillar’ (X axis = Time (s); Y axis = F0 (Hz))

The second structure H L is generally realized with a single level contour over the High/Plain word, with a falling contour over the Low/Tense word; roughly: 33 33 # 32 21 or 33 44 # 32 21. Notably, there is no rising-falling contour over the Low/Tense word in this type. Figure 4.17 illustrates the pitch contour of *dooní-poolò* ‘sun-moon’ ‘Tani traditional religion’, spoken by a middle-aged male.⁸⁸

⁸⁷ The sharp rises and falls at voicing boundaries are not significant; they are the result of the processing algorithm tracking aspiration and other signal noise.

⁸⁸ Note here again that a false “pitch peak” occurs at the second word voice onset boundary, and that a false “rise-fall” occurs during stop pre-voicing.

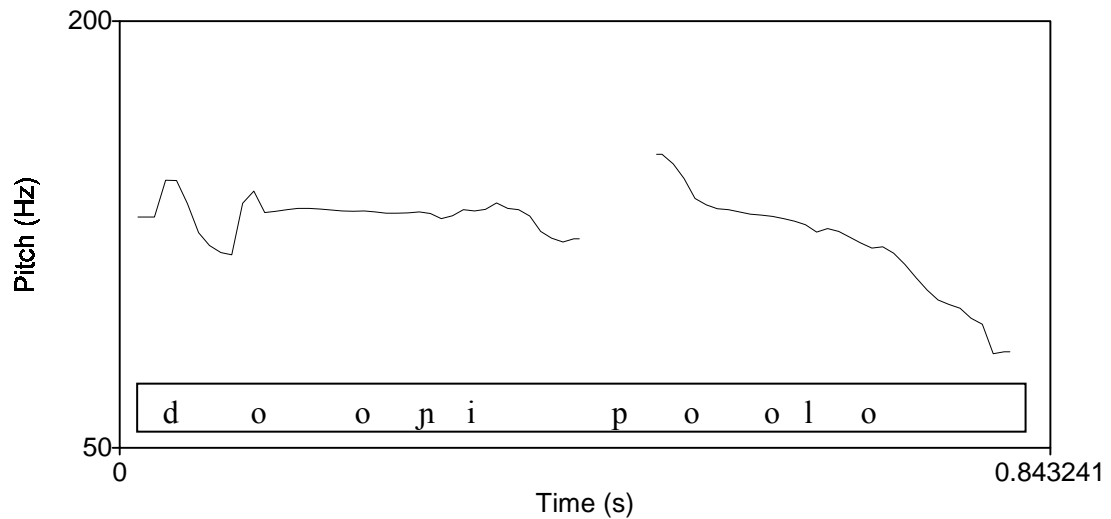


Figure 4.17 – Pitch contour of *dooní-poolò* ‘sun-moon’ ‘Tani traditional religion’ (X axis = Time (s); Y axis = F0 (Hz))

The third structure L H is characterized by a sharp rise to a “pitch peak” over the low word, followed by a an overall falling contour which, however, does not fall completely. Roughly: 44 55 # 43 32 or 44 55 # 43 22. Figure 4.18 illustrates the pitch contour of *anə-giitúu* ‘mother-pillar’ ‘mother’s leaning-pillar’ spoken by a middle-aged male.

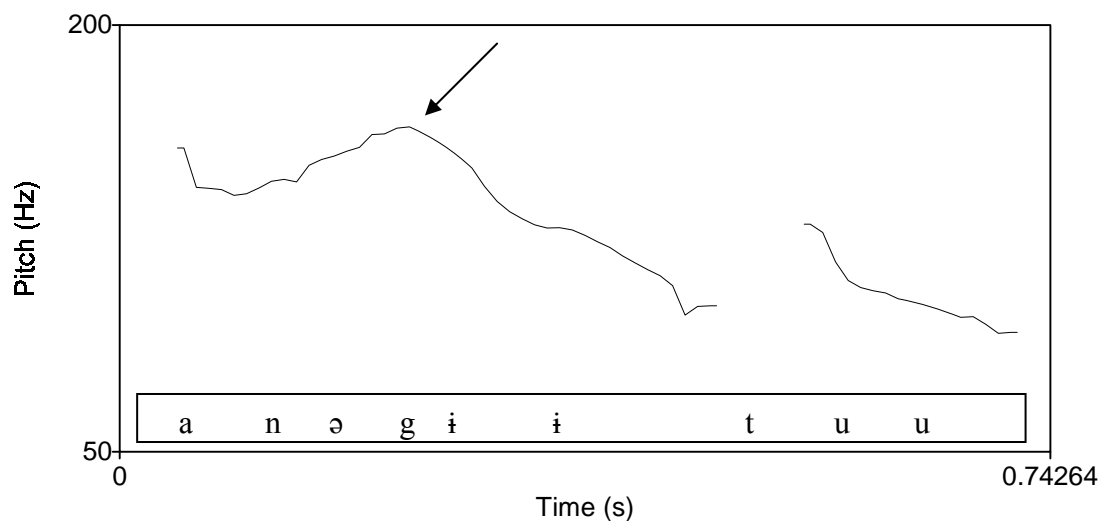


Figure 4.18 – Pitch contour of *anə-giitúu* ‘mother-pillar’ ‘mother’s leaning-pillar’ (X axis = Time (s); Y axis = F0 (Hz))

The fourth structure L L is characterized by an overall rising-falling contour which extends over the whole word; roughly: 34 45 # 43 21. It is very similar in contour to the third structural type L H, only differing in perceptibly falling to the base of a speaker’s range, as opposed to leaving a lilting “hang” just above it. Figure 4.19

illustrates the pitch contour of *nilò-rabgò* ‘husband-doorway’ ‘men’s/husband’s doorway’, spoken by a middle-aged male.

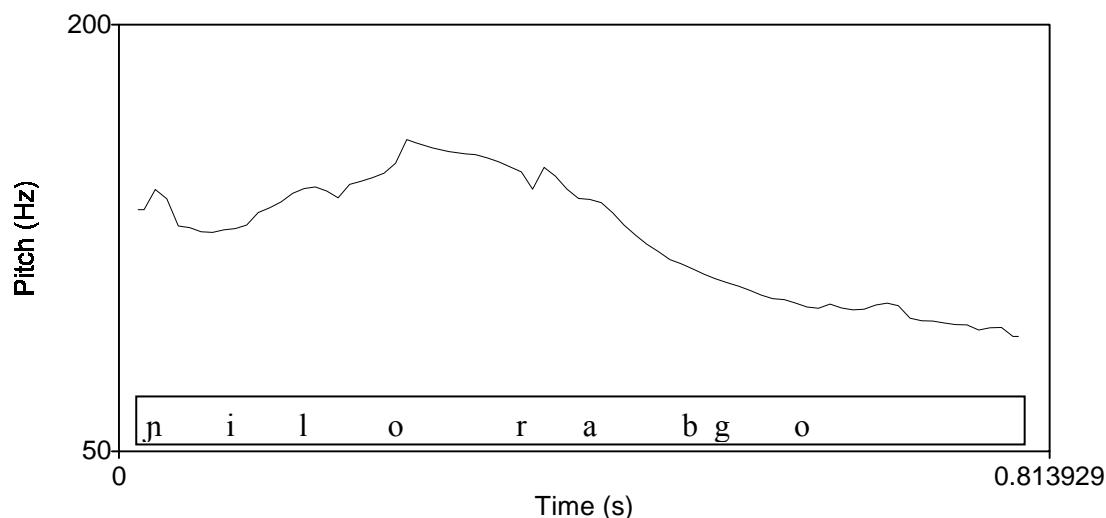


Figure 4.19 – Pitch contour of *nilò-rabgò* ‘husband-doorway’ ‘men’s/husband’s doorway’ (X axis = Time (s); Y axis = F0 (Hz))

To summarize the above discussion, the pitch contour of a phonological phrase is a function of the pitch contours of its constituent phonological words. H H and H L contours are, very roughly speaking, simply high, level and high, falling respectively. L H and L L contours are similar in shape: a salient “rise” in pitch occurs over the initial Low/Tense constituent; however, the right edge differs. In a L H contour, the pitch does not fall completely, but hangs somewhere in the 22 range. In a L L contour, the pitch falls to the base of the speaker’s range.

Three further points bear mentioning in this context:

1) *root tones are not relevant at the level of the phonological phrase*. That is to say, there is no difference at the phonological phrase level between the behaviour of a Low/Tense word with internal L-H TBU constituency and a Low/Tense word with internal H-L TBU constituency. At the phrase level, both are simply “Low/Tense words”. In this sense, the distribution of TBUs is reassigned at the level of the phonological phrase (cf. §4.2.2.1, Figure 4.4).

2) *the phonetic pitch contour of a phonological word depends upon its position in the phonological phrase*. That is to say, when a phonological phrase has internal constituents with the same tonal specifications, viz. H H or L L, the overall pitch contour is the same as that of a High/Plain or Low/Tense phonological word: high, level or (rising-)falling. However, in phrases with “mismatched” H L and L H constituencies, the phrase is “governed” by its initial constituent. In the H L type, the overall contour is

relatively level, with no perceptible rise to a pitch peak prior to the falling contour of the L constituent. In the L H type, the overall contour is rising-falling, with the pitch of the H constituent relatively lower than in an H L type. In this sense, we can think of a two-constituent phrase as having an overall “High/Plain” or “Low/Tense” character (effectively, rightward-spreading of the initial constituent) even as its internal constituents simultaneously project their own individual phonetic characteristics. Table 4.12 summarizes this view.





| Phrase type and constituency | Term | Realization | Contour |
|------------------------------|--------------------|---|---|
| [[H H] H] | <i>abó-g#túu</i> | [[a ³³ bo ³⁴] _H [g# ⁴⁴ tuu ³³] _H] _H |  |
| [[H L] H] | <i>doopí-poolò</i> | [[doo ³³ ji ³³] _H [poo ⁴³ lo ²¹] _L] _H |  |
| [[L H] L] | <i>anə-g#túu</i> | [[a ³³ nə ⁴⁵] _L [g# ⁴³ tuu ²²] _H] _L |  |
| [[L L] L] | <i>nilò-rabgò</i> | [[ji ³³ lo ⁴⁵] _L [rab ⁴³ go ²¹] _L] _L |  |

Table 4.12 – Tonal contour derivation in the phonological phrase

4.2.2.3.4. Extended derivation of phrasal tone

The tonal contour of a phrase larger than two syllables simply extends the basic derivation described in §4.2.2.3.3 over a larger field. As a general principle, each two-place sequence of phonological words may be thought of as a phonological phrase in its own right, with non-phrase-final High/Plain or Low/Tense words tending to govern the phrasal constituent to their immediate right. This means that spreading within the phrase is recursive, and often resembles an overall “downdrifting” contour punctuated by rises to the “pitch peaks” of non-phrase-final words. A full exposition of the mathematically huge number of possible configurations and resulting contours would constitute a full-length work of its own; however, by means of a basic illustration we can consider the minimal sentence pairs in (33)-(34).

- (33) *b# gaatáa duukú dà.*
 b# gáa-táa-dùu-kú da
 3.SG scratch-AGAIN-IPFV-CMPL ASRT
 ‘He’s finally scratching (it) again.’

- (34) *b# n#táa duukú dà.*
 b# n#-táa-dùu-kú da
 3.SG nudge-AGAIN-IPFV-CMPL ASRT
 ‘He’s finally nudging (it) again.’

Both of (33)-(34) consist of at least three tonally-specified phonological words (with the TBU status of *da*, as with most clause-final particles, somewhat uncertain; see §13.1.4), with the first and third words Low/Tense and the second word High/Plain in (33) and Low/Tense in (34). Considering the whole in both cases to constitute a phonological phrase,⁸⁹ we can note that *bɪ̃* ‘3.SG’ and *duukù* ‘IPFV-CMPL’, being non-phrase-final, surface with rising-falling contours in both. When the phrase-medial word is High/Plain, as *gaatáa* in (33), the pitch contour is relatively level over it, and the overall contour following it is relatively high. When the phrase-medial word is Low/Tense, as *nɪ̃táa* in (34), we find the same rise to a pitch peak which is observed in both cases of *bɪ̃* ‘3.SG’. In effect, [bɪ̃ gaatáa] forms one (Low/Tense) phonological phrase in (33), and [gaatáa duukù] forms another (High/Plain) phonological phrase, with the same applying to (34). When examining the pitch contours in Figure 4.20-Figure 4.21, which represent (33)-(34) as spoken in isolation by a middle-aged male, note two things in particular: first, the rising-falling pitch over *nɪ̃táa* in Figure 4.21, contrasting with the relatively level pitch of *gaatáa* in Figure 4.20; second, the relatively level pitch over [duu] in Figure 4.20, contrasting with its relatively low, falling pitch in Figure 4.20.

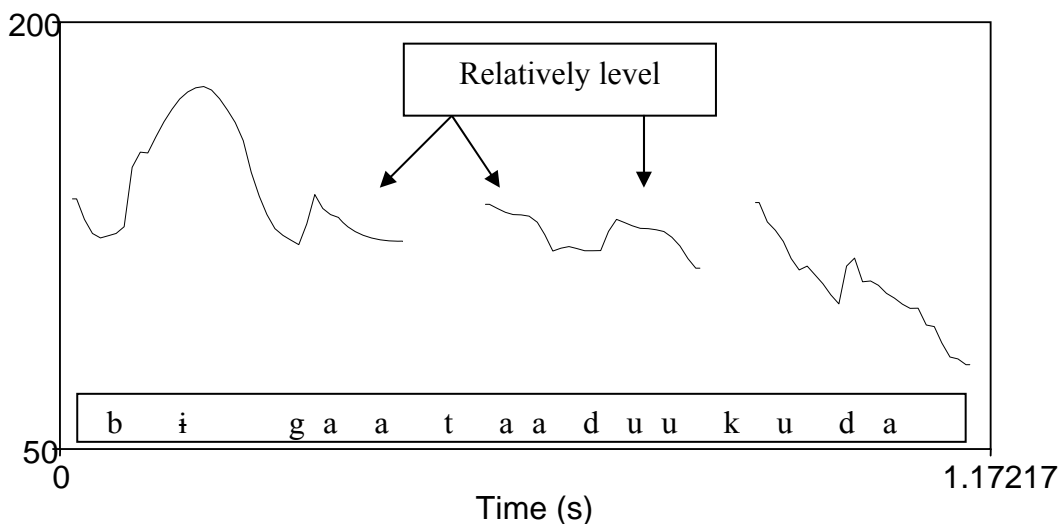


Figure 4.20 – Pitch contour of *bɪ̃ gaatáa duukù dā* ‘He’s finally scratching (it) again.’ (X axis = Time (s); Y axis = F0 (Hz))

⁸⁹ Note that this does not necessarily denote that they are a grammatical phrase; predicate-adjacent arguments, whether subject or non-subject, routinely fall within the same phonological phrase as the predicate in Galo.

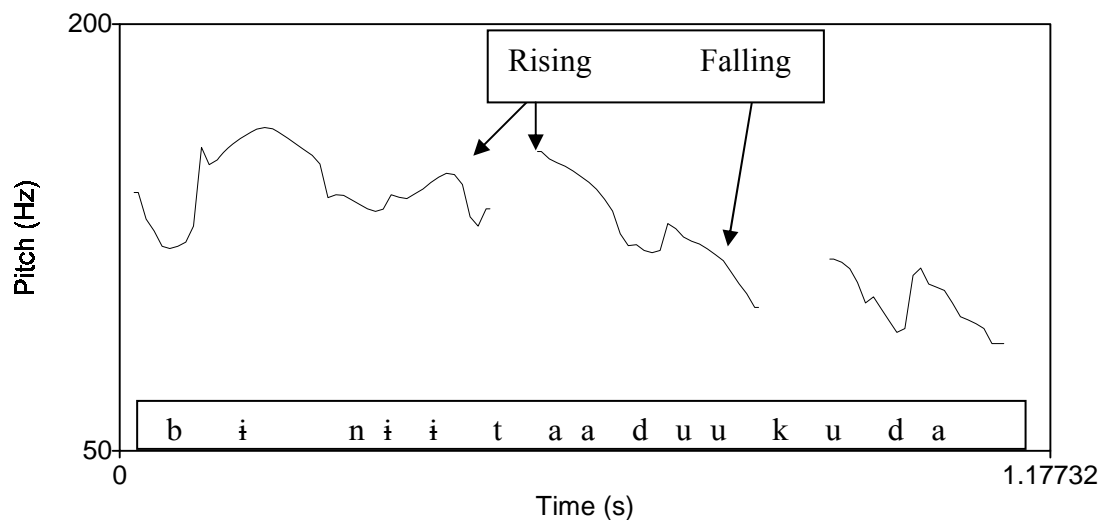


Figure 4.21 – Pitch contour of *bii nniitaa duukû dà* ‘He’s finally nudging (it) again.’ (X axis = Time (s); Y axis = F0 (Hz))

To summarize the above, large phrasal tonal contours basically resemble recursively “stacked” contours of smaller constituent phrases.

4.2.2.4. Interim summary, with a note on transcription

In the preceding sections, a view of the Galo tone system has been sketched in which two primary lexical tones interact to produce a set of two word tones, and in which word tones interact to produce an overall phrasal contour. The result is complex, and may be rendered even more complex through introduction of emphatic intonation patterns and so on. This raises problems for representation. How much of the surface pitch contour is phonologically “relevant”? Under-transcription of the pitch contour both risks under-representation of communicatively-motivated choices made by Galo language users and risks depriving the analyst of the ability to recognize and capture generalizations. At the same time, over-transcription of the pitch contour risks clouding the more salient and meaningful phonetic cues in a forest of marginally relevant detail.

In this grammar, I have elected to transcribe only one surface prosodic pattern, and to limit myself to only four symbols:

- ˊ high/level
- ˋ low/falling
- ˆ rising-falling
- ˊˋ emphatic/extra-high rising

These four symbols in most cases suffice to give an overall impression of the surface contour, but of course risk some amount of under-transcription. For example, comparing the pitch contours in Figure 4.20-Figure 4.21 with their representations in (33)-(34), the salient “pitch peaks” are transcribed, as are points of relatively high/level or low/falling pitch. However, these are represented as characteristics of individual phonological words; differences in pitch which occur over the syllable [duu], for example, being a function of the phrasal context rather than the word per se, are not transcribed.

Thus I am quite aware that, in “under-transcribing” the surface pitch contour in this way, I am depriving other analysts of the ability to easily capture some phonological generalizations at the level of the phrase. However, I am equally aware that an attempt to consistently transcribe the pitch of every syllable – at the present level of understanding, at least – would have ended in confusion and failure. This is because, in natural speech, the pitch of individual syllables is not so important for meaning contrasts that such precision is required as would enable, and merit, the level of detail required when transcribing a morphosyllabic tone language with several categorical contrasts, like Vietnamese or Cantonese. What is important and salient to Galo speakers is the *overall character of a contour*; accordingly, some positions in the contour are less salient than others, and are more easily subjected to imprecision, idiolectal variation, and so on. Transcription of surface tonal contours in the present work has aimed at an acceptable compromise between the need for accuracy and the reality of variability. However, it is entirely possible (and I am hopeful) that an even better solution can eventually be found.

4.2.3. Stress

The discussion of “stress” in Galo is restricted to matters of rhythm and meter. There are no lexeme/word-oriented or category-oriented stress patterns employed in the service of meaning contrasts (as with English *`combat* vs. *com`bat*). Stress is also perhaps somewhat less salient in Galo than in some other languages, possibly since at least one usual phonetic correlate of stress – relative pitch height – is primarily employed in the service of tonal lexical contrasts. However, there is much evidence both from historical and synchronic Galo phonology and morphophonology which suggests that the evolution of a stress system, however recent and limited it may be, has had a profound effect on the segmental composition of both underlying and surface forms of words.

4.2.3.1. Phonetic correlates of stress

The principle phonetic correlates of stress in Galo appear to be *relative syllable duration* and *full vs. reduced syllable nucleus* (see the separate description of Syncope in §4.1.4.5). Relative *amplitude* may also play a role, and relative *pitch* may serve as a cue in limited contexts. Figure 4.22 illustrates the waveform and superimposed pitch (F0) of *gáa-zí-káa-kú* ‘scratch-BEN-PF-CMPL’ ‘finally scratched for someone’, realized [ˈgaazi ˈkaakū]; note that the first and third (stressed) syllables are relatively high in amplitude/pressure, and that their durations are relatively longer; however, note that relative pitch does not always correlate; the average pitch of unstressed syllable [zi], at 138 Hz, is higher than that of [gaa], at 134 Hz.

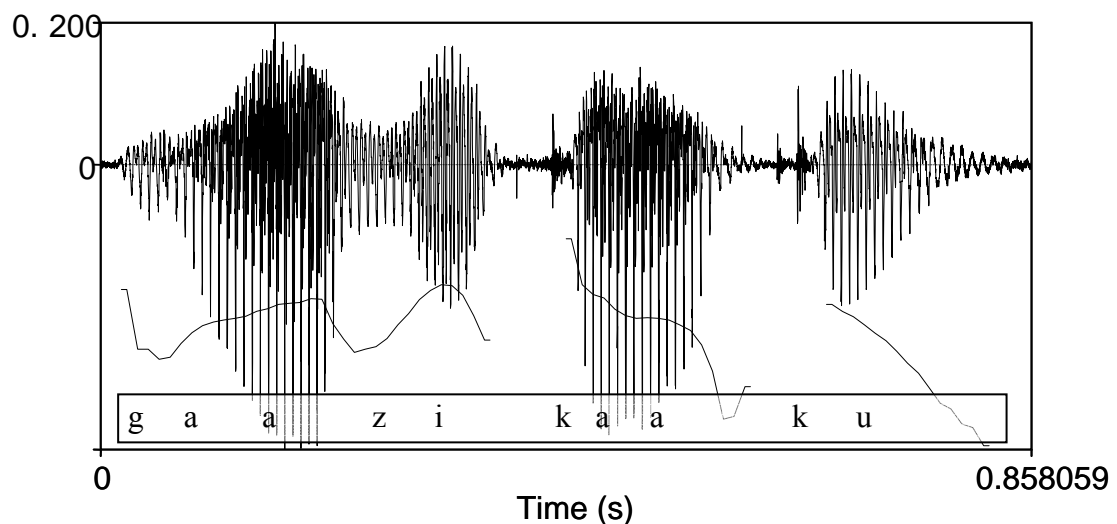


Figure 4.22 – Waveform of *gaazí kaakú* ‘finally scratched for someone’ (X axis = Time (s); Y axis = F0 (Hz), pressure)

4.2.3.2. Foot and dominance

The basic stress-assignment template is a *disyllabic foot*, in which the *initial syllable* is the more prominent. Traditional metrical theory describes this sort of unit as a *trochee*, in which the *bounded* metrical foot is *left-dominant* (Hayes 1980; Kager 1995). Although the strong syllable is obligatory, the weak syllable is optional, in the sense that there are no apparent consequences if it is left unfilled (Figure 4.23).

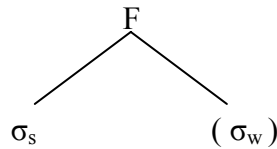


Figure 4.23 – Disyllabic structure and left-dominance of the Foot (F = Foot; subscript s = Strong; subscript w = Weak)

Note that this basic disyllabism in the stress template also corresponds to the basic tendencies for lexemes and phonological words to be disyllabic; such correspondences are unlikely to be accidental (cf. §2.4.3.1).

4.2.3.3. Quantity-sensitivity

Quantity-sensitivity (or syllable structure/weight) complicates analysis of Galo stress considerably. This is because certain potential phonetic correlates of stress appear to be sensitive to the quantity of mora in a particular syllable, while others do not.

Generally speaking, if a phonological word contains a sequence of identically-*weighted* syllables, as *aló* [ˈa.lo] ‘salt’ and *pumtúp* [ˈpum.tup] ‘tip of the nose’, a trochaic foot is formed, and the initial syllable is relatively longer in duration, has a relatively full vocalic specification, and is relatively higher in amplitude. If the word in question is a Low/Tense word, the phonetic location of the “pitch peak” will tend to occur over the *first* syllable, not the second. This overall relative asymmetry is even more pronounced and noticeable when the foot-initial syllable is heavier than the foot-final syllable. Figure 4.24 represents the waveform, pitch (lower line) and intensity (higher line) of *ŋó tabə* = *go káa-tó* ‘1.SG sugar cane=IND look-PFV’ ‘I saw some sugar cane’, as spoken by a middle-aged male, realized [ˈŋó ˈtábə gò ˈkaató]. Note with respect to *tabə* ‘sugar cane’ that the pitch and intensity peaks both occur over the syllable [ta]. The duration of the syllable nucleus in [ta], at 91 Ms, is also longer than that of [bə], at only 34 Ms. Moreover, although this is not discernible from the measures presented, the syllable nucleus in [ta] is more fully realized as [a] than is that of [bə], which registers as little more than a release of the preceding stop. All of the identified criteria thus converge to identify [ta] as “stressed” relative to [bə].

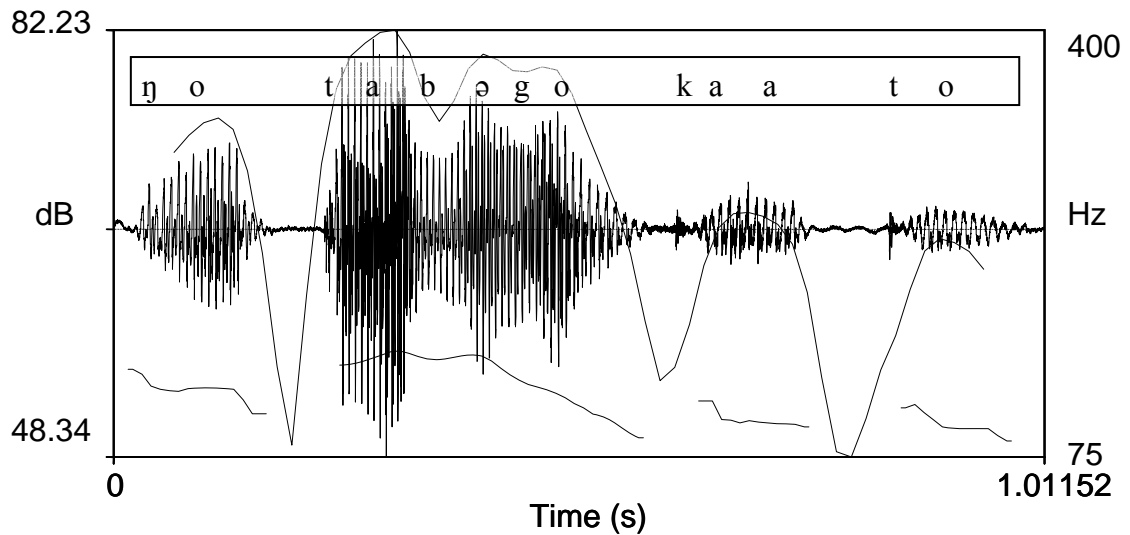


Figure 4.24 – Waveform (pressure), pitch (F0) and intensity (dB) of *ŋó tábə gò kaató* ‘I saw some sugar cane.’

However, when the *second syllable* of a phonological word has an *underlyingly greater quantity of mora than the first*, the data grow mixed. Figure 4.25 represents the waveform, pitch (lower line) and intensity (higher line) of *ŋó jizâr = go káa-tó* ‘1.SG **girl**=IND look-PFV’ ‘I saw a girl’, as spoken by a middle-aged male, realized [ŋó `jizâr gò `kaató]. Now, note that intensity and pitch peaks are on the *second* syllable [zâr]. However, describing [zâr] as “stressed” relative to [ni] is not straightforward. The nucleus of [ni] is fully specified, and is basically identical in length to that of [zâr] at 85 and 82 Ms respectively; although it is true that [zâr] is a closed syllable and its nucleus can thus be perhaps expected to be relatively short, note still that both syllable nuclei are comparable in length to that of the stressed syllable [ta] in Figure 4.24, and distinctly longer than that of the unstressed syllable [bə] in the same example. In short, [ni] is *not* “de-stressed”.

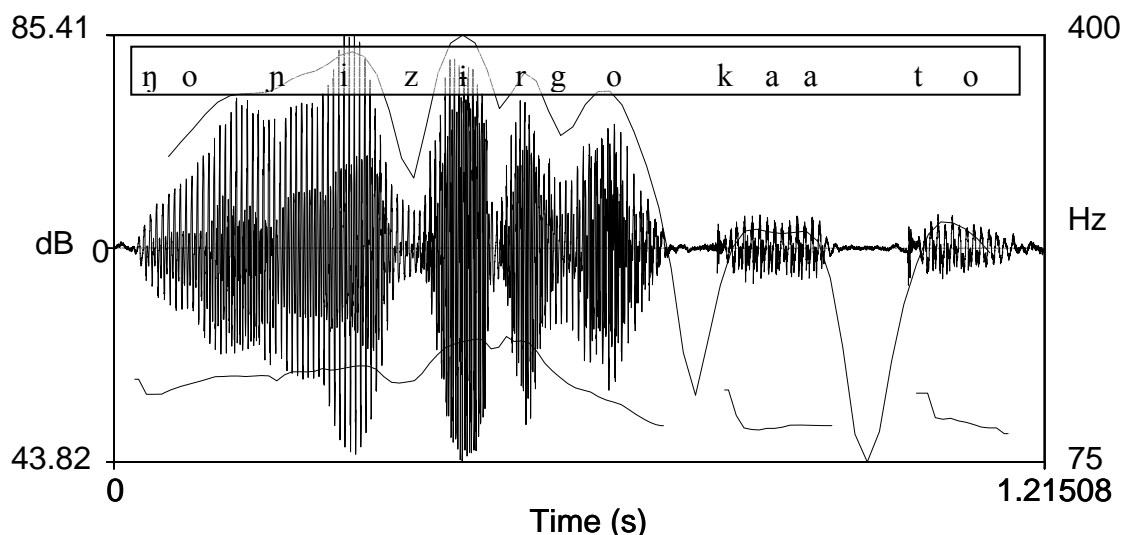


Figure 4.25 – Waveform (pressure), pitch (F0) and intensity (dB) of *ŋó pizâr gò kaató* ‘I saw a girl.’

To summarize the above, Galo is a quantity-sensitive language. However, quantity-sensitivity is not expressed as a simple preference for stressing a syllable with a greater number of mora; certain prosodic phenomena seemingly respond to syllable weight – namely, relative amplitude and relative pitch height – while others do not – namely, relative duration and nuclear vocalic specification.

In view of these facts, the general bias in this description has been to treat phonological words as though they always realized well-formed feet, with an initially-stressed syllable. As a general rule, tone is marked on the second syllable rather than on the first. However, notation of the pitch peak of a phrase-medial Low/Tense phonological word (circumflex \frown) follows its phonetic location, in response to the internal syllable structure of that word. Similarly, when the final syllable of a phonological word is unstressed and its vowel severely reduced (see Syncope, §4.1.4.5), it is notated with a superscripted vowel, usually schwa [ə]; in such cases, tones will always be marked on the first syllable.

The following examples summarize the possibilities (35)-(38).

(35) *ŋó álP gó kaató*

ŋó áló = go káa-tó
1.SG salt=IND look-PFV

‘I saw some salt.’ (High/Plain word, balanced internal syllable weights)

- (36) *ŋó alóo gò kaató*
 ŋó **alóo** = go káa-tó
 1.SG **bone**=IND look-PFV
 ‘I saw a bone.’ (High/Plain word, right syllable heavier)
- (37) *ŋó ârè gò kaató*
 ŋó **anè** = go káa-tó
 1.SG **mother**=IND look-PFV
 ‘I saw a mother.’ (Low/Tense word, balanced internal syllable weights)
- (38) *ŋó ilhi gò kaató*
 ŋó **ilhi** = go káa-tó
 1.SG **stone**=IND look-PFV
 ‘I saw a stone.’ (Low/Tense word, right syllable heavier)

4.2.3.4. Recursive foot-formation and the phonological phrase

Foot-formation appears to apply recursively within a phonological phrase in Galo; that is to say, just as a phonological word is asymmetrically composed of one stressed and one unstressed syllable, stressed syllables at the phrase level appear to be of unequal prominence. Generally speaking, the stressed syllable within a phonological phrase would tend to correspond to the initial syllable of a lexeme, while unstressed or less stressed syllables would tend to correspond to non-initial syllables of lexemes or to functors. In (39), note that trochees are formed at both word [ˈa.lo] and phrase [ˈˈa.lo] # go] levels.⁹⁰

- | | | | | | | | |
|------|--------------------|----------|----------|--------|---|--|-----------------|
| | x | | x | | | | Phrase peaks |
| | x | x | x | x | x | | Foot/Word peaks |
| | x | x | x | x | x | | Syllable peaks |
| (39) | `ŋó | `álʰ | gó | `kaató | | | |
| | ŋó | aló = go | káa-tó | | | | |
| | 1.SG | salt=IND | look-PFV | | | | |
| | 'I saw some salt.' | | | | | | |

In this description, “primary” and “secondary” stresses have not been marked, nor in general have prosodic constituents larger than phonological words been consistently represented. It is possible, therefore, that some ambiguous transcriptions occur at the level of the surface phonology (especially, “words” which are actually “phrases” consisting of

⁹⁰ Similarly, in §4.1.4.5 exx. (25) and (26), initial syllables within the two trisyllabic sequences ending in [mə] exhibit greater overall initial syllable prominence; however the final syllable is somewhat more prominent than the medial syllable.

two “words”). Ideally, both higher level and lower level prosodic constituents would be consistently represented, and I have hopes that this will become possible in a future expansion of this work.

4.2.4. Integration of surface prosody

Integration of surface prosody remains one of the greatest standing challenges in Galo language description. The view sketched above is one in which the basic prosodic constituent is the phonological word, and where prosodic rules apply at both word and phrase levels. The question is whether all prosodic phenomena are sensitive to and/or identify precisely the same types of constituent. We have already seen some evidence that this may not be the case; for example, the shape of a tonal contour may or may not be sensitive to the same basic word-and-syllable-level structural features to which rhythm appears to be sensitive. Furthermore, we have seen evidence from tonal contours that certain grammatical non-head elements (such as a predicate-adjacent nominal, including a subject pronoun) behave as though they formed an element of a phonological phrase with a following head. However, it is not at all clear what their metrical status with respect to the overall phrase would be.

Ultimately, it would seem as though in the process of shifting from a basically morphosyllabic language (cf. §2.1) to a basically synthetic, agglutinating language, prosody has played a central, and possibly a motivating role. Furthermore, it may be that the process remains ongoing. Just as stress and rhythm may have motivated historical sound changes at the word level (for example, Word-final weakening; see §2.4.4.5), the same basic patterns may now be motivating shifts in constituency at a higher level (for example, the collapse of the Topic-marker *əə* into some types of lexeme, as exemplified in §4.1.4.6).

Finally, a topic on which this grammar is almost completely silent is that of pragmatically-oriented sentence/phrasal intonation (for a brief overview of linking intonation, see §16.2.2). Although it is clear that pragmatically-oriented intonation exists in Galo, and interacts with the mainly lexically- and rhythmically-driven prosody described in this chapter, the process of discovering regularities to this interaction has but barely begun. Under the circumstances, and given the complexities involved, it is certain that Galo prosodic phonology will remain an intriguing and rewarding topic for continuing research from a variety of perspectives; I sincerely hope that this very basic description will provide some suggestive avenues for further inquiry.

4.3. Phonetics and phonology of Topic marker/Imperfective copula əə

The phonetics and phonology of Topic marker and Imperfective copula əə are far from straightforward; although all of the processes governing their audibility and effects on neighbouring segments/syllables appear to be regular, and are discussed in sections such as §4.1.4.5 and §4.1.4.6 above, they can be difficult to keep track of. Since both forms are important to much of the grammatical argumentation that appears in this work, it will be useful to have a general reference; this is provided in Table 4.13. Table 4.13 also serves to demonstrate the phonetics and phonology of the Accusative enclitic əəm, which seems to bear a cognate formative əə. To derive the outcome of enclisis in Accusative əəm, the reader should simply replace each of the *final* vowels in the sixth column headed “Surface” with an [m] (for example, *abó = əəm* ‘father=ACC’ → [ab.bom]).

| σ1 | σ2 | Prec. Env. | Behaviour of əə | Example | Surface ⁹¹ |
|-----------------|-------|-----------------------------------|--|-----------------------------------|-----------------------|
| Heavy/ Light | Heavy | Long vowel | Audible | <i>ikii = əə</i> dog=TOP | [i.ki.əə] |
| | | Consonant | Audible | <i>agóm = əə</i> speech=TOP | [a.go.məə] |
| Heavy | Light | Short o, a, ə, (u?) ⁹² | Inaudible; surfaces as rhyme lengthening | <i>rabgò = əə</i> doorway=TOP | [rab.goo] |
| | | Short i | Audible as glide epenthesis | <i>dumci = əə</i> headache=TOP | [dum.cʲəə] |
| Light | Light | Short o, a, ə, u | Inaudible; surfaces as rhyme lengthening and triggers foot-strengthening | <i>abó = əə</i> father=TOP | [ab.booo] |
| | | Short i | Audible as glide epenthesis; triggers foot-strengthening | <i>aci = əə</i> pain=TOP | [ac.cʲəə] |
| | Heavy | Consonant | Audible; triggers foot-strengthening | <i>-nam = əə</i> NZR:RLS=TOP | [nam.məə] |
| | | Long a, e, ə | Audible | <i>pāa = əə</i> dawn=TOP | [paa.əə] |
| | | Long i, u, o, ɪ | Audible, triggers glide epenthesis and foot-strengthening | <i>ɲii = əə</i> | [ɲii.jəə] |
| | Light | Short o, a, ə, u | Inaudible; surfaces as rhyme lengthening | <i>-nà = əə</i> NZR:SUB=TOP | [naa] |
| | | Short i | <i>qualifying environment unattested</i> | -- | -- |

Table 4.13 – Phonetics and phonology of Topic marker/imperfective copula əə

⁹¹ Note that since length is neutralized phrase-finally in Galo (§4.1.4.4), many of the forms with word-final long rhymes listed in this column will only very rarely exhibit phonetically long rhymes in practice.

⁹² Only one word of this syllable shape with final -u attested: *goŋkù* ‘classical language’. Speakers seem to vary in their treatment of this irregularly-retained form.

5. Word classes and word-formation processes

This chapter discusses properties of the Galo lexicon, focusing primarily on the major open classes noun, adjective and verb. §5.1 presents a summary overview of word structure, semantics, distribution, and morphological marking. §5.2 discusses word class semantics and subclassification, focusing on nouns (§5.2.2) adjectives (§5.2.3) and verbs (§5.2.4) in order. §5.3 turns to word structure and word-formation processes, and includes subsections on nouns and adjectives §5.3.1, verbs (§5.3.2) and adverbs (§5.3.3). §5.4 and §5.5 give brief overviews of word class-changing derivations and reduplication respectively, and §5.6 presents a final summary.

5.1. Overview

The basic word classes in Galo are *noun*, *adjective*, and *verb*. *Adverbs* are not well-defined as a lexical class; most words denoting prototypical adverbial concepts (such as predicate manner and spatio-temporal modification) are either derived from and possibly still analyzable as nouns, or else are adjective-derived adverbials. Table 5.1 summarizes the major structural and distributional properties and subtypes of Galo words.

| Class | Typical structure | Phrase head | Modification | Predication | Subtypes |
|------------------|---------------------------------------|-------------------|--|-----------------------------|--|
| N | Disyllabic compound/ prefixed root | NP or GENP | Preposed, unmarked or as GENP head | Cannot head predicate | Common nouns, proper names, time nouns, classifiers/ quantifiers, relator nouns |
| ADJ | Disyllabic compound/ prefixed root | ADJP or PRED | Nominalized (relative clause) | Heads final predicate | Monosyllabic adjectival roots, common adjectives |
| V | Monosyllabic root | PRED only | Nominalized (relative clause) | Heads final predicate | Atransitive, intransitive, transitive, extended, clause complement- taking |
| ADV (bare) | Noun-like | ADVP or OBL NP | As GENP head | Cannot head predicate | None |
| ADV (derived) | Adjective- derived | ADVP only | As ADVP head | Cannot head predicate | None |

Table 5.1 – Lexical classes: summary overview

5.1.1. Internal structure

Galo nouns and adjectives are structurally closer to one another than either is to verbs. Most nouns and adjectives are disyllabic and etymologically complex, although a few simplex monosyllabic forms also exist. Regardless of size/structure, all nouns and adjectives may “stand alone” as a grammatical word. Verbs usually consist of a bound monosyllabic root, optionally expanded by one of a wide variety of predicate derivations; however, a small number of synchronically unanalyzable disyllabic verb stems also exist (Table 5.2).

| Nouns | | Adjectives | | Verbs | |
|---------------|----------|--------------|---------------------|--------------|------------------------|
| Term | Gloss | Term | Gloss | Term | Gloss |
| <i>jíí</i> | ‘human’ | <i>zèe</i> | ‘grue (green/blue)’ | <i>ín-</i> | ‘go (VIE); walk (VI)’ |
| <i>ikîi</i> | ‘dog’ | <i>kaí</i> | ‘big’ | <i>jùp-</i> | ‘sleep (VI)’ |
| <i>abó</i> | ‘father’ | <i>rəpàk</i> | ‘tender’ | <i>tír-</i> | ‘break (VT)’ |
| <i>mootùm</i> | ‘jungle’ | <i>ruuzí</i> | ‘deaf’ | <i>jáa-</i> | ‘be rotten (VI)’ |
| <i>looníi</i> | ‘marrow’ | <i>maazí</i> | ‘very much’ | <i>kahí-</i> | ‘hide (VI); hide (VT)’ |

Table 5.2– A few basic nouns, adjectives and verbs

5.1.2. Distribution and semantics

Nouns, verbs and adjectives may be diagnostically distinguished in terms of their different behaviour in predicative functions. Nouns may occur as CC,⁹³ but cannot head a predicate (40). Verbs occur as predicate heads, but cannot occur as CC (41). Adjectives may occur as either, with a minor semantic difference (42). This simple test identifies all and only the members of each lexical class, as schematized as in Figure 5.1.

- (40) *əgə ikið.* **əgə ikîi dù.*
 əgə ikîi = əə
 APRX.IND dog=COP.IPFV
 ‘It’s a dog.’

⁹³ I follow Dixon (2006) in describing what are sometimes identified as “predicat(iv)e nominals” or “nominal predicates” (usually in equative or attributive predications) as “Copula Complement” (CC) and/or “Verbless Clause Complement” (VCC). For discussion, see §9.3.

- (41) *əgə jubə(ə). *əgə jubdù.*
 əgə jùp-dùu
 APRX.IND sleep-IPFV
 ‘It’s sleeping.’
- (42) əgə adəkə. *əgə adək dù.*
 əgə adək = əə
 APRX.IND different=COP.IPFV
 ‘It’s different (appraising a present state of affairs).’
 əgə adək-dùu
 APRX.IND different-IPFV
 ‘It’s different (now, and in general).’

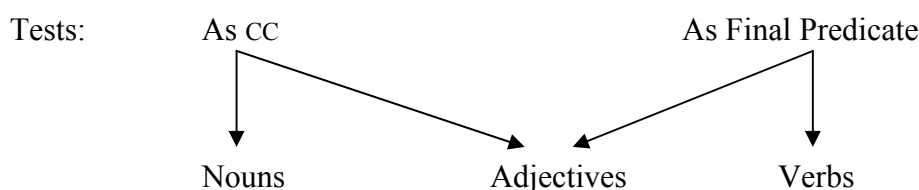


Figure 5.1 – Tests identifying major word classes in Galo

Only nouns may head a noun phrase (NP) in a non-derived form. Other important features of their distribution follow from this central characteristic: as NP heads, nouns may be modified by a genitive phrase (43), classifier expression (44), or relative clause (45). Semantically, nouns project the core of a referring expression (45).

- (43) *tabée gə abó*
 [[tabée = gə] **abó**]
 NAME=GEN **father**
 ‘Tabé’s **father**’
- (44) *ikîi dôŋni gò*
 [[**ikîi**] dôŋ-nì] = go
dog CLF:HIGH.ANIMAL-two=IND
 ‘two **dogs**’
- (45) *kopák hîinèŋ donó ərókə kekkaa kú!*
 [[kopák hîinè = əəm dó-nà] **ərók** = əə] [kéK-káa-kú]
 banana plant=ACC eat-NZR:SUB **pig**=TOP flee-PF-CMPL
 ‘The **pig** that ate the banana tree has escaped!’ (TR, 14:117)

No verb may stand in any of these positions unless it is first nominalized (46)-(47).

- (46) *nôk...socér abnàm gò membôə dù.*
 nó-kà hocér **àp-nam** = go mèn-bəə-dùu
 2.SG-GEN deer **shoot-NZR:RLS=IND** say-HAB-IPFV
 ‘(You’re) always talking about your stag-shooting (incident).’ (NyR, MDS 092)

- (47) **nôk...socér abgò membôə dù.*
 nó-kà hocér **àp** = go mèn-bəə-dùu
 2.SG-GEN deer **shoot=IND** say-HAB-IPFV

There are numerous cases of noun-adjective homophony reflecting instances of zero-derivation; in some cases, it may be difficult or even impossible to assign a basic adjective or noun class-affiliation to the lexeme in question (48)-(49).

- (48) *horió*
horíi = əə
straight=COP.IPFV
 ‘It’s **straight.**’ or ‘It’s a **line** (of strung-together beads or fish).’ (MN, 22:155)

- (49) *aré k go mô tə ké! ...aré! arék dù maazâ bə!*
aré k = go mò-tó = kée arée **aré k**-dùu maazâa = bə
blade edge=IND make-IPTV.ODIR=HORT.POL wow **sharp**-IPFV very-AVZR
 ‘Make a **blade edge**!...Wow! It’s really **sharp**!’ (MN, 22:155)

Basic nouns denoting types of human beings are very often zero-derivable for use as adjectives; examples are *jaamée* ‘young man; young, of a man’, *jikám* ‘old woman; old, of a woman’ and *jibò* ‘shaman; officiate as a shaman’. In (50), note that *jibò* ‘shaman’ stands as a genitive-modified CC of an appositive equative/identity construction, a position only available to nouns. In (51), *jibò* ‘officiate as a shaman’ occurs as an intransitive clause predicate – a function open to adjectives and intransitive verbs, but not nouns (cf. (40)).

- (50) *abó-taní...ôk² jibbò.*
 abó-taní okà **jibò** = əə
 Abo.Tani ANAP.GEN **shaman**=COP.IPFV
 ‘Abo Tani...was **shaman** of (the occasion).’ (MK, TT 036)

(51) “*aoə əmbə cənla paala ɲib lakù!*”

aə = əə əmbə cən-la(a) pa-a-la(a) **ɲib**-la(a)-kú
 child=TOP ANAP.PADV know-NF get-NF **be.shaman**-NF-CMPL
 “My son has **become** such an accomplished **shaman** (said Abo Tani’s
 mother)!” (MK, TT 051)

However, most “core” adjectives (§5.2.3) must be nominalized if they are to stand as noun phrase heads (52)-(53).

(52) *ahôo nàm əcìn aldù*

ahò-nam əə = cìn alá-dùu
long/tall-NZR:RLS TOP=ADD good-IPFV
 ‘Tallness is also good.’ (TR, 14:82)

(53) *?/*ahôo əcìn aldù*

Similarly, most “core” nouns cannot function as adjectives; for example, they cannot usually occur as an attributive noun-modifier (54), unlike all adjectives and verb roots (55)-(56); nor can they occur as a final predicate (40).

(54) **ikiî nà ɲí*

ikiî-nà ɲíí
dog-NZR:SUB person

(55) *ahôo nà ɲí*

ahòo-nà ɲíí
 long/tall-NZR:SUB person
 ‘tall person’

(56) *kopák hiinè **donə** ərák*

kopák hiinè = əəm dó-nà ərák
 banana plant=ACC eat-NZR:SUB pig
 ‘the pig that ate the banana tree’

5.1.3. Morphological marking

In general, nominal/noun phrase operators in Galo are phrasal enclitics rather than word-level affixes, meaning that direct marking of nouns is very limited. Adjectives and, especially, verbs, take a wide variety of suffixes, particularly when standing as a final predicate.

5.1.3.1. Derivations

Nouns and adjectives exhibit a common set of derivational prefixes, although they have very limited synchronic productivity and are usually best analysed as lexicalized formatives (§5.3.1). There are no other nominal derivations. Adjectives and verbs both exhibit a wide variety of derivational suffixes – far too many to list here – in general, a wider set is available to verbs than to adjectives; see §5.3.2 and, especially, §11.

Adjectives and verbs take a common set of nominalizing suffixes (§15.2); verbs also take a number of adjectivalizing derivations (§11.2). A relatively small number of mostly intensifying derivations are available only to adjectives, not to verbs (§11.4). Finally, adjectives may be adverbialized in *bə* (§16.5.2), but nouns and verbs cannot.

5.1.3.2. Inflections

There are no word-level nominal inflections; referential and relational markers are phrasal enclitics (§14.2-§14.3). Adjectives and verbs both stand as heads of a grammatical predicate, which inflects at the word level when heading a predicative clause (§10.1). Both adjectival and verbal predicates take the same basic set of TAM suffixes, although verbal predicates, in general, take a wider range (for example, adjectives cannot occur in the Perfective, and cannot take most types of modal suffix; see §12).

5.2. Word class semantics and subclassification

5.2.1. Theoretical-typological preliminary

Numerous cross-linguistic studies have demonstrated that the noun, adjective and verb classes of languages which have all three (arguably, all languages of the world) have the following prototypical semantic contents: *nouns* code relatively concrete *entities* which may be referred-to in a discourse, *verbs* code relatively more diffuse *states* or *events* in which entities participate, and *adjectives* code *properties* of entities, which may be attributed to or predicated of them (Dixon 1977; Langacker 1987; Croft 1991; Croft 2001; Givón 2001 [1984]; Dixon 2004). Languages vary greatly in the finer details, particularly with respect to the contents of their adjective class, its degree of categorical robustness, and its more or less close affinity to nouns on the one hand and/or verbs on the other. Givón roughly schematizes the underlying semantics of the major lexical

classes in terms of a “time-stability” scale, with the most time-stable concepts prototypically represented by nouns on the one side, and the least time-stable concepts prototypically represented by verbs on the other (Figure 5.2).⁹⁴

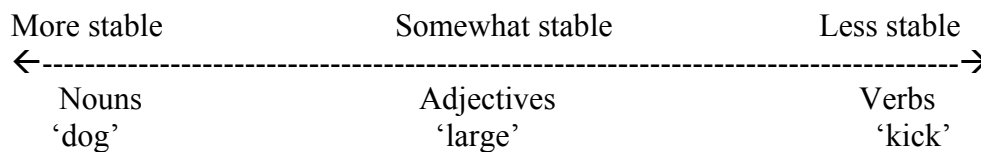


Figure 5.2 – Time-stability scale underlying the semantic contents of major lexical classes (adapted from Givón (2001 [1984]))

Lexical classes, like other naturally-occurring categories, may also typically be subdivided into a “core” and “periphery”, according to differences in the structure and/or distribution of class members. Core and peripheral membership boundaries, like the boundaries of the categories that host them, always have a cognitive-semantic motivation, and always include a certain amount of overlap (i.e. a certain number of transitional members (Rosch 1973; Givón 2001 [1984])). Adopting a “core-peripheral” approach to the organization of the lexicon, we might roughly re-cast Figure 5.2 as in Figure 5.3.

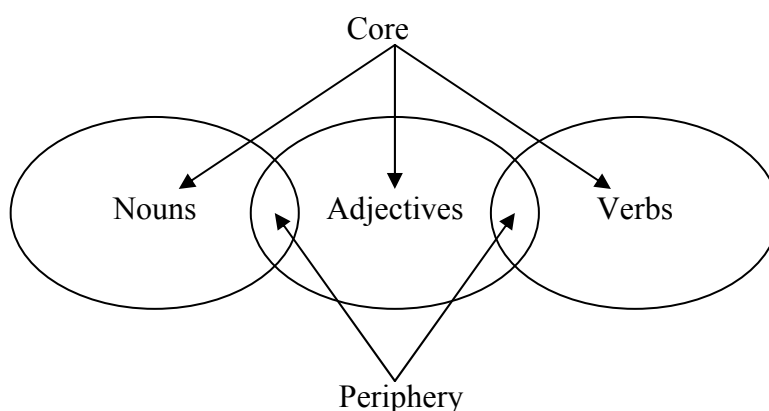


Figure 5.3 – Core-peripheral schematic of major lexical class associations

We do not of course assume that the semantic contents of the major lexical classes in Galo will neatly and unproblematically support this picture, particularly as an exhaustive analysis of Galo lexical semantics has not yet been conducted. However, we may note that data collected to date do not seem to support any substantial revision of the

⁹⁴ The time-stability scale has often been criticized, either because it represents a semantic over-simplification or because it fails to accurately predict the distribution of forms in every language. Indeed, there is certainly far more complexity involved in lexicalization patterns than a single scale can possibly represent exhaustively; however, as a one-stroke diagnostic of underlying semantic organization, it seems to me that the time-stability scale continues to represent a useful (if reductive) conceptual tool.

model outlined above, which may therefore perhaps be usefully used as a backdrop to the following discussion; we will return to this discussion in the summary in §5.6.

5.2.2. Noun class semantics and subclassification

5.2.2.1. Overview

Most Galo nouns denote types of *concrete entity*. Underived abstract nouns denoting concepts like ‘time’, ‘hunger’ and ‘anger’ are generally lacking in Galo; most such concepts are represented by nominalized adjectives or verbs. In most such cases, this process entails specification of a reference activity, which is denoted by the nominalized verb root; for example, it is possible to say *dó-dó* ‘eat-NZR:TIME’ ‘time to eat’, but not simply ‘time’ (§15.2). Similarly, there are few simple terms for superordinate natural classes such as ‘relative/kin’, ‘animal’, ‘plant’ and ‘food’. In some cases, such concepts can be formed via higher-level compounds or nominalized verbs, as *hottúm-horó* ‘bear-boar’ ‘(high) animal’ or *dó-nám* ‘eat-NZR:NSUB’ ‘edible thing (food)’; if not, as with ‘relative/kin’, only periphrastic expressions or more specific terminology may be used.

Nouns may be differently subclassified on semantic and distributional grounds. On a distributional basis, a broad division may be made between “core” and “peripheral” nouns; a “core” noun will be one which fails any possible distributional test for adjectival or verbal status. A “peripheral” noun will be one which may occur in a prototypically adjectival or verbal construction (such as head of an inflected clause predicate), and/or which has an adjectival or verbal sense; these would be structurally analyzed as cases of zero-derivation (Table 5.3).

| Core noun | Gloss | Peripheral noun | Gloss |
|--------------|---------------------|-----------------|--|
| <i>ɲíí</i> | ‘person (N)’ | <i>ɲíkám</i> | ‘old woman (N); old, of a woman (ADJ)’ |
| <i>abó</i> | ‘father (N)’ | <i>ɲibò</i> | ‘priest (N); officiate as a priest (VI)’ |
| <i>azék</i> | ‘slice (N)’ | <i>azàp</i> | ‘flat side (N); flat, of a sided object (ADJ)’ |
| <i>lakcì</i> | ‘left arm/hand (N)’ | <i>lakpée</i> | ‘arm cramp (N); cramped, of an arm (ADJ)’ |

Table 5.3 – Core and peripheral nouns (selection)

Alternatively, nouns may be subclassified on a purely semantic basis. In this case, most subclasses will have both core and peripheral members (both in terms of the

subclass and in terms of the class of nouns as a whole). For organizational purposes, the latter approach is taken below. In the below subsections, discussion is limited to salient structural, distributional and semantic properties of the noun subclasses only; since full tabulations of associated terms would run into the hundreds in many cases (and would ultimately constitute a small, fragmented dictionary), no such attempt has been made here.

Table 5.4 summarizes the Galo noun subclasses.

| Subclass | Reference |
|---|-----------|
| Kin | §5.2.2.2 |
| Fauna | §5.2.2.3 |
| Flora | §5.2.2.4 |
| Nature | §5.2.2.5 |
| Body parts | §5.2.2.6 |
| Culture/artifacts | §5.2.2.7 |
| Humans | §5.2.2.8 |
| Shapes, physical types, sorts and quantities/measures | §5.2.2.9 |
| Relative and absolute orientation | §5.2.2.10 |
| Cardinal numerals | §5.2.2.11 |
| Ordinal numerals | §5.2.2.12 |
| Quantification and qualification | §5.2.2.13 |
| Places | §5.2.2.14 |
| Human proper names | §5.2.2.15 |
| Time | §5.2.2.16 |

Table 5.4 – Summary table of noun subclasses

5.2.2.2. Kin

The basic set of kin relations appears to be shared among the Pugo and Lare Galo, although a small number of the terms themselves are not cognate (such as Pugo *nobó* for Lare *maktə* ‘elder sister’s husband’). Table 5.5-Table 5.6 give only the Lare set, as a full investigation of the kin terminology of other Galo dialects has not yet been conducted.

Before proceeding, a caveat: I make no claim to even a passing understanding of the structure and classification of kinship systems across cultures. In what follows, superordinate categories are named largely on linguistic principles (i.e., the category “daughters-in-law” is identified because it constitutes a structured lexical set); where linguistic structure is largely absent, I have grouped terms on a largely intuitive basis for purpose of presentation. A more detailed and informed presentation will hopefully be found in Nyodu, Post et al. (in preparation).

| Subtype | Term | Gloss |
|------------------|---------------|---|
| Consanguinal | <i>abó</i> | ‘father’ |
| | <i>anə̀</i> | ‘mother’ |
| | <i>ací</i> | ‘elder brother’ |
| | <i>ə́ní</i> | ‘elder sister’ |
| | <i>abɪ̀r</i> | ‘younger sibling’ |
| | <i>bɪ̀rò</i> | ‘brother (generic)’ |
| | <i>atò</i> | ‘grandfather/wife’s father’ |
| | <i>ajò</i> | ‘grandmother/wife’s mother/wife’s brother’s wife’ |
| | <i>aké</i> | ‘maternal uncle(s)’ |
| | <i>ə́jə̀</i> | ‘sibling(s) of daughter-in-law’ |
| Affinal | <i>ɲimé</i> | ‘wife; brother’s wife (archaic)’ |
| | <i>ɲilòo</i> | ‘husband; husband’s brother (archaic)’ |
| Filial | <i>aò</i> | ‘child’ |
| | <i>jaò</i> | ‘sister’s/aunt’s daughter’ |
| | <i>mə̀ò</i> | ‘sister’s/aunt’s son’ |
| | <i>orə̀</i> | ‘son’ |
| | <i>omə̀</i> | ‘daughter’ |
| | <i>oii</i> | ‘last child’ |
| | <i>okùr</i> | ‘grandchild’ |
| Brothers’ wives | <i>nətə̀</i> | ‘first brother’s wife’ |
| | <i>nəròo</i> | ‘second brother’s wife’ |
| | <i>nədə̀ə</i> | ‘third brother’s wife’ |
| | <i>nəkòo</i> | ‘fourth brother’s wife’ |
| | <i>nəii</i> | ‘last brother’s wife’ |
| Daughters-in-law | <i>ɲaméə</i> | ‘(grand)daughter-in-law (generic)’ |
| | <i>ɲamtə̀</i> | ‘first (grand)daughter-in-law’ |
| | <i>ɲamróo</i> | ‘second (grand)daughter-in-law’ |
| | <i>ɲamdéə</i> | ‘third (grand)daughter-in-law’ |
| | <i>ɲamkòo</i> | ‘fourth (grand)daughter-in-law’ |
| | <i>ɲamíi</i> | ‘last (grand)daughter-in-law’ |

Table 5.5 – Lare Galo kin terms 1

| Subtype | Term | Gloss |
|------------------|-------------------|---|
| Extended affinal | <i>riḡò</i> | ‘wife’s brother’ |
| | <i>riḡnə̀</i> | ‘wife’s sister’ |
| | <i>maktə̀</i> | ‘elder female relative’s husband’ |
| | <i>magíí</i> | ‘female relative’s husband (any)’ |
| | <i>magbó</i> | ‘younger female relative’s husband’ |
| | <i>magbó-kai</i> | ‘female relative’s husband’s elder brother’ |
| | <i>magbó-ajáa</i> | ‘female relative’s husband’s younger brother’ |
| | <i>bərbó</i> | ‘wife’s sister’s husband’ |
| | <i>bərnə̀</i> | ‘husband’s brother’s wife’ |
| | <i>kinnə̀</i> | ‘child’s spouse’s mother’ |
| | <i>kimbò</i> | ‘child’s spouse’s father’ |
| Avuncular | <i>niḡbḡi</i> | ‘maternal aunt’s son’ |
| | <i>niḡni</i> | ‘maternal aunt’s daughter’ |
| | <i>paapàa</i> | ‘paternal uncle’ |
| | <i>abó-nizḡr</i> | ‘paternal aunt’ |
| | <i>motə̀</i> | ‘elder maternal aunt’ |
| | <i>moróo</i> | ‘second maternal aunt’ |
| | <i>moíí</i> | ‘younger maternal aunt’ |
| | <i>kḡtə̀</i> | ‘eldest maternal uncle’ |
| | <i>kḡróo</i> | ‘second maternal uncle’ |
| | <i>kḡdóə</i> | ‘third maternal uncle’ |
| | <i>kíí</i> | ‘youngest maternal uncle’ |

Table 5.6 – Lare Galo kin terms 2

In Table 5.5-Table 5.6, note that some terms code more than one “type” of relation; for example, *ajò* can refer to one’s paternal or maternal grandmother as well as to one’s wife’s mother or wife’s brother’s wife, and *magbó* can refer either to one’s younger sister’s, one’s daughter’s, or one’s granddaughter’s husband. Whether this should be described in terms of polysemy or whether the relations referred-to are in fact not “multiple”, but are in fact *single* conceptual relations is an interesting question best left to investigation by a trained anthropologist.

Structurally, what might be called “core” kin terms, such as *abó* ‘father’ and *aò* ‘child’, tend to bear a residual *a-* prefix (cf. §5.3.1.1.1). Note, however, that while productive *a-*prefixation of kinship terms is common in Sino-Tibetan (Chao 1968; Coupe 2007), in modern Lare Galo it is non-productive. A number of kin terms reflect root-root

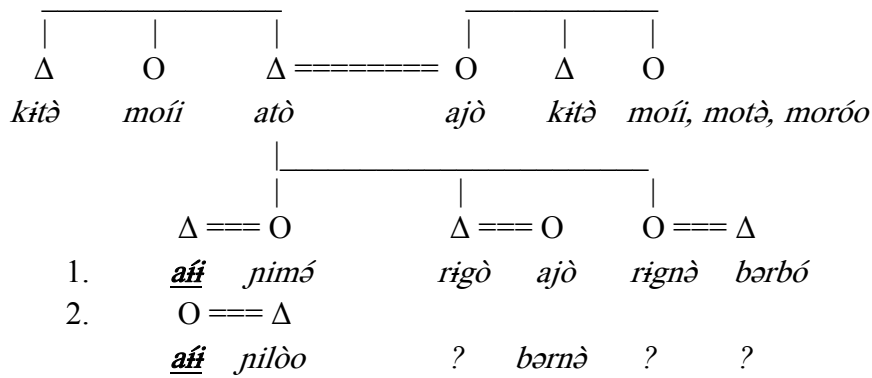


Figure 5.5 – Affinal and elder in-law relations. Lines 1 and 2 illustrate differences corresponding to a male and female ego respectively.

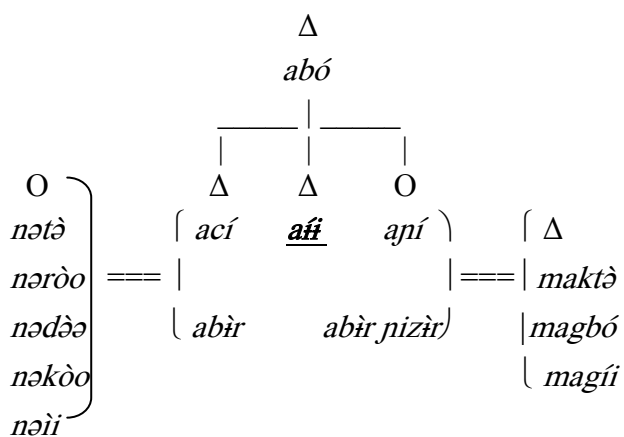


Figure 5.6 – Sibling and sibling-spousal relations

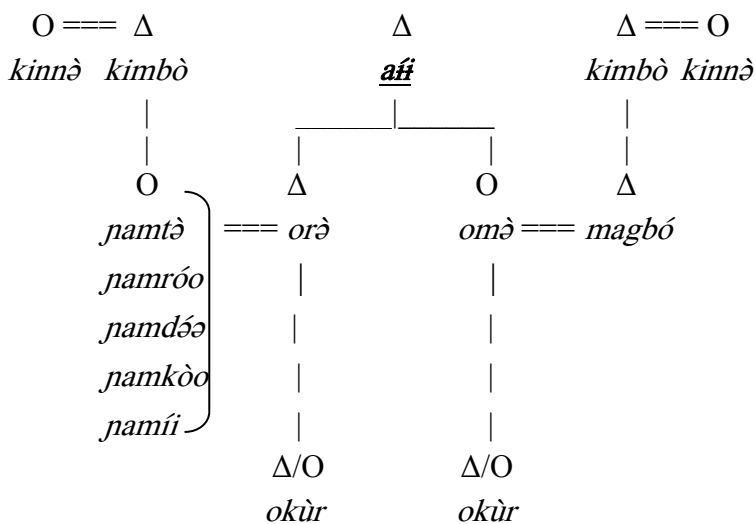


Figure 5.7 – Filial and filial-spousal relations

5.2.2.3. Fauna

A large number of terms denoting animals have been attested in Galo. In general, lower animals such as insects, crabs, certain fish and small reptiles occur with prefixed *ta-* (§5.3.1.1.2), while most higher animals exhibit a prefix *ho-* (§5.3.1.1.5). Most birds occur in *pV-* (§5.3.1.1.4). Many animal names exhibit taxonomic “generic-specific” classificatory characteristics, as *tabɔ́* ‘snake (generic)’ (< *ta-* ‘MDIM’ + *bɪ/ɔ́* ‘snake’) and *bɪtə́* ‘king cobra’ (< *bɪ/ɔ́* ‘snake’ + *tə́* ‘big’). Note that the “family” noun exhibits a generic *ta-* prefix, while the “species” noun exhibits the “family” root as its initial formative (for further discussion of taxonomic word-formation, see §5.3).

Animals with discernible gender and age often have corresponding gender- and age-specific terms, as *kiibò* ‘male dog’ (< *kii-* ‘dog’ + *bó-* ‘male; father’) and *kiicùu* ‘puppy’ (< *kii-* ‘dog’ + *cùu-* ‘baby/small animal’); however, not all such terms exhibit the same set of formatives (contrast *kiibò* ‘male dog’ with *rokpó* ‘rooster’, < *rók-* ‘chicken’ + *pó-* ‘male (animal)’, but **rogbó*); gender and word-formation is discussed and exemplified further in §5.3.1.3.1.

The overwhelming majority of terms denoting animals are core nouns.

5.2.2.4. Flora

A large number of terms denoting plants have been attested in Galo. Edible plants have the superordinate category-label *óo* ‘vegetable’, with subtypes often bearing an initial formative *ó-* ‘vegetable’, as *olàp* ‘variety of slippery vegetable (Asm *lapa*⁹⁶)’ (< *ó-* ‘vegetable’ + *làp-* ‘slippery’) or *oríi* ‘flat-leafed coriander (*Eryngium foetidum*)’ (< *ó-* ‘vegetable’ + *ríi-* ‘straight’). Woody plants, including trees, generally exhibit an initial formative *hɪ-* ‘wood; plant; tree’ (< PTs **cɪŋ*), as *hɪzò* ‘deciduous hardwood variety (*Zanthoxylum rhetsa*)’. The same root is used for plant derivatives, as *hɪtək* ‘wood pole’ (< *hɪ-* ‘wood; plant; tree’ + *tək-* ‘flat; wide; thin; fragment; crack’). The superordinate

⁹⁶ If *olàp* and *lapa* are cognate, the direction of borrowing is probably Tani (or other TB) into Indic; *làp-* ‘slippery’ is a well-attested Tani root, which is a perfect descriptor of this particular variety of vegetable. I am not aware of a good candidate Indic etymology, but cannot deny the existence of one either.

term *ih̃h̃* ‘wood’ is seemingly in the process of specializing; in modern Lare Galo, it prototypically denotes ‘firewood’, and cannot mean ‘plant’. Weedy plants have the superordinate term *h̃* ‘weed’, although few subtypes have been attested.

5.2.2.5. Nature

Among terms referring to features of the natural world, most features of topography or landscape exhibit an initial formative *móo-* (< PTs **mroŋ* ‘world’), as *moodii* ‘mountain/hill’ (< *móo-* ‘world’ + *dii-* ‘mountain/hill’) and *mootùm* ‘jungle’ (< *móo-* ‘world’ + *tùm-* ‘clump; fold’ (?)). Terms denoting entities related to water or soil typically take initial formatives *hì-* and *kó-* respectively, as *hipùu* ‘flood’ (< *hì-* ‘water’ + *púu-* ‘spread’) and *kocáə* ‘channel; ditch’ (*kó-* ‘soil’ + *cáə-* ‘finger; extension’); ‘water’ reflects PTs **çi* ‘water’; ‘soil’ has not yet been reconstructed. Terms denoting fire-related entities typically exhibit a formative root *mə-* (< PTs **mə* ‘fire’), as *mərəə* ‘ember’ (< *mə-* ‘fire’ + *réə-* ‘non-uniform; busy; multicoloured’), and stone-based entities and implements generally exhibit formative *li-* (< PTs **liŋ* ‘stone’), as *linə* ‘boulder’ (< *li-* ‘stone’ + *nə-* ‘female; mother; large; cow’).

Weather features and other features of the sky or heavenly forces typically exhibit an initial formative *dóo-* (< PTs **doŋ* ‘weather prefix’), as *dooní* ‘sun’ and *dooràk* ‘lightning’ (< *dóo-* ‘celestial’ + *ràk-* ‘lightning’). As in some other Tibeto-Burman languages, there is an etymological relationship in Galo between *dooní* ‘sun’ and *nidóo* ‘rain’, although the precise nature of the correspondence (especially, the provenance of common root *ni-*) is not yet understood.⁹⁷ Used as nouns, weather terms may denote the overall phenomenon, construed more or less as an entity 2090(57); some may also be used directly as intransitive predicates, as in 2091(58). More commonly, weather terms must enter a Pivotal root construction in order to stand as a process-denoting predicate 2092(59). Pivotal root constructions are discussed from a more general perspective in §5.3.2.2.

⁹⁷ *ni-* ‘person’ is tempting, although note that the sun and moon are traditionally viewed as feminine and masculine, respectively, in Tani *dooní-poolò* cosmogony.

- (57) *ɲidó odù.*
 ɲidóo ò-dùu
 rain fall-IPFV
 ‘Rain is falling.’
- (58) *ɲidóo dù.*
 ɲidóo-dùu
 rain-IPFV
 ‘It’s raining.’
- (59) *doorák ragdù. (*doorák dù)*
 doorák rák-dùu
 lightning lightning-IPFV
 ‘Lightning’s flashing.’

5.2.2.6. Body parts

Many body part terms are among core nouns, with superordinate terms usually exhibiting an *a-* prefix, as *alák* ‘hand/arm’ and *alə* ‘foot/leg’. Subordinate terms to do with arms/hands accordingly exhibit initial formative *lák-* ‘hand/arm’ (< PTs **lak* ‘hand/arm’), as *lagbók* ‘right hand/arm’ and legs/feet *lə-* (< PTs **lə* ‘foot/leg’), as in *ləhìn* ‘toenail’. Items to do with the head typically exhibit an initial formative *dúm-* (< PTs **dum* ‘head’), as *dumcì* ‘headache’, while the superordinate *a-*prefixed term *adúm* ‘head’ has specialized to mean ‘head hair’; ‘head’ is now given by *dumpóo* (< *dúm-* ‘head; main’ + *póo-* ‘trunk; breadth; rotundity’). Terms associated with eyes typically exhibit a formative root *ɲík-* ‘eye’ (< PTs **mik* ‘eye’), as *ɲíkpin* ‘eyelid’ (< *ɲík-* ‘eye’ + *pìn-* ‘skin’); the ‘ear’ root *rúu-* (< PTs **ruŋ*) as in *ɲerùu* ‘ear’ appears cognate with (is probably derived from) *rúu-* ‘hole’. A minor “genital overlap” is observed in *ítí* ‘vagina’ and *ítúum* ‘scrotum’, although the more common roots *tí-* ‘vagina’ and *màk-* ‘penis’ are quite distinct.

A number of “body sensation/disposition” terms such as *dumcì* ‘headache’ and *lakpée* ‘arm cramp’ may be used as nouns or adjectives; their use is further described in §5.2.3.7.

5.2.2.7. Culture/artifacts

A large set of terms denoting cultural features and/or man-made artifacts is attested. Many of these are core nouns denoting superordinate entities such as *opòo* ‘liquor’ (among the Lare Galo, prototypically black rice beer), with subordinate terms bearing a cognate root such as *poogɛ̃* ‘rice beer filtering framework’ (< *pòo*- ‘liquor’ + *gɛ̃*- ‘structure; pillar; back; neck’). Terms denoting knives or other iron-based implements generally bear a formative root *rók*- ‘knife; iron’ (< PTs **ɾjok* ‘iron’), as *rogrék* ‘sharp edge of a blade’ (< *rók*- ‘iron’ + *rék*- ‘sharp; blade’) while stone-based implements generally bear a formative *lɛ̃*- ‘stone’ (§5.2.2.5). Types of baskets are treated as distinct superordinate/subordinate sets, according to the type of weave, as *igìn* ‘large, densely-woven conical basket’ with subordinate term *ginci* ‘small, densely-woven conical basket’ (< *gìn*- ‘densely-woven conical basket’ + *cì*- ‘Diminutive (var.)’). A large number of nouns describe features of the Galo house and house-construction technology. Among the most important are the *imik* ‘fireplace’ and the various assigned seating areas surrounding it, such as the *baagóo* ‘father’s/privileged men’s seating area’ and *noosi* ‘women’s seating area’.

A large number of terms denoting cultural activities and ritual objects fall under the general heading ‘religious/ritual’; the vast majority of these are viewed by speakers as falling within *goŋkù* ‘classical language’ (§1.2.6), and are usually etymologically obscure. Due largely to this fact (and to my lack of proper training in the anthropology of animist/shamanist traditions), I have been unable to effectively analyse almost any such terms beyond simply recording their pronunciation and the probably quite partial or limited use or relevance which was explained to me by a single individual (often not an expert) at the time of attestation. As many such terms are known only to the dwindling number of Galo *jibò* ‘shaman’, it is imperative that a proper study be undertaken by a trained anthropologist at the earliest possible opportunity.

5.2.2.8. Humans

Most nouns denoting humans or their properties/affections exhibit a formative *ɲí-* ‘person (human being)’ (< PTs **mii* ‘person’), as *ɲizɛ̃* ‘girl’ (< *ɲí-* ‘person’ + *zɛ̃-* ‘girl; young female’) or *ɲimàa* ‘figure; shadow’ (< *ɲí-* ‘person’ + *màa-* ‘shadow’). Several Tani tribes and clan groupings bear a cognate formative, as **Minyong** (Galo *ɲínóo*). The term “**Tani**” itself bears the same core root; Galo *taníí* ‘human being’ is irregularly retained (resisting Regressive palatalization (§2.4.3.3)) in high-register references, as to the legendary Tani progenitor *abó taníí* ‘the father of humankind’.

Terms denoting properties of humans may often be used as adjectives, as *ɲimáa* ‘poor (person)’ (< *ɲí-* ‘person’ + *máa-* ‘not (have)’ (cf. §5.1.2); such terms generally also include nouns/adjectives denoting age or stages of development, as *ɲikám* ‘old (woman)’ or *jaamée* ‘boy; young, of a male’. Gender-oriented human nouns often bear prefixes *ta-* ‘MDIM’ or *ja-* ‘FDIM’; these are discussed in a more general context in §5.3.1.1.2 and §5.3.1.1.3 respectively.

5.2.2.9. Shapes, physical types, sorts and quantities/measures

Roots denoting shapes and physical types are prominent in Galo, reflecting traditionally close interaction with a richly-varied natural environment. Many such roots occur in both common nouns and classifiers (basically a functional subtype of noun), and sometimes also as verb or adjective roots, as *ták-* ‘flat; wide; thin; fragment; crack’, reflected in *tagzék* ‘shard’ (N), *aták* ‘(a) fragment’ (CLF), *taktə̀* ‘broad’ (ADJ), and *ták-* ‘crack; split (via overhand strike)’ (VT). Most terms denoting measures and/or sorts occur as classifiers in Galo; examples are *ahú* ‘(a) group of four’ and *ajùm* ‘(a) handful’. For discussion and a full list of attested forms, see §8.2.2.

5.2.2.10. Relative and absolute orientation

Terms denoting absolute orientation are not particularly rich in Galo; compass points ‘east’ and ‘west’ are weakly lexicalized as sunrise and sunset directions, as *caagóo* ‘east/side of sunrise’ (< *càa-* ‘ascend’ + *góo-* ‘(place of) origin’) and *aagóo* ‘west’ (< *áa-* ‘come (return to home)’ + *góo-* ‘(place of) origin’). There are no nouns denoting ‘north’ and ‘south’. ‘right’ and ‘left’ concepts are denoted by *lagbók* and *lakci*, meaning ‘right hand’ and ‘left hand’ respectively.

Terms denoting relative orientation often occur as both common nouns and relator nouns, as *kookh* ‘back (side of an entity); behind/rear’ and *taajòo* ‘top (position on an entity); top/above’. Further discussion of the syntax and semantics of relator nouns is found in §8.1.

By far the richest, most frequent and productive set of terms denoting orientation are structurally Demonstratives in Galo. These are discussed in detail in §7.4.

5.2.2.11. Cardinal numerals

Cardinal numerals are subdivided into *simple* (1-10) and *derived* (> 10) sets, with simple nouns further divided into *core* (1-6 and 10) and *peripheral* (7-9) sets. Numerals are basically nouns in Galo, although they have a number of unique characteristics (in particular, the productive formation of numeral root-classifier root “Classifier expressions”) which merit their full description in a separate section §8.2.1.

Numerals in citation form (including derived numerals) may also be used as atransitive predicates, as *ɔ̀ni-dùu* ‘two-IPFV’ ‘it’s two; (the quantity) is two’ and *aúm-ré* ‘three-IRR’ ‘it will be three’. A few numerals also have extended qualifying noun senses, as *akèn* ‘one; alone/as one; same’ (§8.3).

5.2.2.12. Ordinal numerals

Ordinal numbers occurring as lexemes in Galo refer to ordered event-iterations only (*once/first time, twice/second time...*), not to ordered sequences of entities (*second, third (child)...*). A set of ordinal roots denoting positions in an ordered sequence of

entities is fully or partially reflected in a small number of lexical sets, mainly kin terms (§5.2.2.2). This is exemplified in Table 5.7.

| Root | Sense as ordinal | Other sense | Example | Gloss |
|-------------|------------------|-------------|---------------|--------------------------|
| <i>tə-</i> | ‘first’ | ‘big’ | <i>ɲamtə</i> | ‘first daughter-in-law’ |
| <i>róo-</i> | ‘second’ | -- | <i>ɲamróo</i> | ‘second daughter-in-law’ |
| <i>déə-</i> | ‘third’ | -- | <i>ɲamdéə</i> | ‘third daughter-in-law’ |
| <i>kòo-</i> | ‘fourth’ | -- | <i>ɲamkòo</i> | ‘fourth daughter-in-law’ |
| <i>íi-</i> | ‘last’ | ‘youngest’ | <i>ɲamíi</i> | ‘last daughter-in-law’ |

Table 5.7 – Ordinal roots

Since the set of ordinal roots only reaches four before resorting to ‘last’, it is worth wondering how Galo speakers cope with ordered sets larger than five. I have asked this question of numerous consultants, and found an almost equal number of different responses. Some of my consultants claimed they would cycle through the list again (i.e., ‘first’ could be used to denote ‘fifth’ or ‘sixth’), while others insisted that sets larger than five are never encountered in the applicable semantic domains. Others suggested that ‘last’ could be used *ad infinitum*, and a few speakers – probably in (albeit truthful) resignation – simply admitted resort to English and Indic loans. The most reasonable-seeming response in my view (though not the majority response by far) was the sometime suggestion that a superordinate term could be used, together with a periphrastic ordinal expression using a numeral-based ordinal limiting modifier, as *ɲaméə akkəə naanà* ‘daughter-in-law six LMT.ORD’ ‘sixth daughter-in-law’. For the syntax of ordinal limiting constructions, see §14.3.7.2.

Iterative ordinal lexemes all bear an ordinal prefix *lə-*, and are based on the set of *core* numeral roots only (Table 5.8). Ordinal expressions greater than six are formed periphrastically with use of numerals (again, see §14.3.7.2).

| Term | Gloss |
|---------------|--------------|
| <i>ləkən</i> | ‘once’ |
| <i>ləɲi</i> | ‘twice’ |
| <i>ləúm</i> | ‘thrice’ |
| <i>ləppíi</i> | ‘four times’ |
| <i>ləɲɲó</i> | ‘five times’ |
| <i>ləkkəə</i> | ‘six times’ |
| <i>ləríí</i> | ‘ten times’ |

Table 5.8 – Iterative ordinals

5.2.2.13. Quantification and qualification

Non-numerical and non-classificatory quantification and qualification concepts are basically nouns in Galo; all may head a noun phrase, although most are also denotationally “incomplete”, and depend to an extent on prevailing discourse context. In addition, many such terms participate either in “referential qualifying expressions” (§6.3.2), a subtype of appositional noun phrase construction, or occur as NP-internal post-head modifiers, again with a quantifying or qualifying function. For full discussion of the properties of such terms – described in this grammar as “qualifying nouns” – see §8.3.

5.2.2.14. Places

Native Galo proper place names are usually either disyllabic or quadrisyllabic. Village names are often identical to clan names of area inhabitants, such as *baasár* ~ *baahár* (town and/or clan); in some cases, it is clear that a village derives its name from that of a prominent clan among a group of migrants, as *əətə* village of the Assam border area (*əətə* is the name of the largest clan of Pugo Galo, primarily found around the West Siang district capital *aalóo* (Along)). In some other cases, it may not be clear whether village name follows clan name or whether it is the reverse.

When a village name has a clear native Galo etymology, it often relates to nearby geological features, as *lītə-moorĥ* (village of Gensi circle, < *lītə* ‘boulder’ + *moorĥ* ‘plateau’). Many village names exhibit formatives *hì-* ‘water’, *hĥ-* ‘origin; head (of a river/stream)’, *móo-* ‘world’, *dīi-* ‘mountain/hill’ or *lĥ-* ‘stone’. Since the tendency among Galo (not always followed) is to preserve local and traditional pronunciations of place names, some conservative phonotactic features are found among them (as the more common pronunciation *baasár* over the expected (and sometimes attested) pronunciation *baahár* for Basar town (West Siang District), following the post-PG process of Fricative split (§2.4.4.7)). However, most Galo do not pronounce the final *-ŋ* which is found in the “official” names of many Galo towns, such as Along (Galo *aalóo*) and Daring (Galo *daarĥ*). Seemingly, these reflect archaic (probably Proto-Galo) pronunciations which have been retained in official records (cf. §2.4.3.5.2).

A very small number of Assam-bordering Galo villages have Assamese-derived place names, as *osóm-puríi* (village of Gensi circle, seemingly < Asm *oxom puri* ‘Assam town’). Additionally, several village and river names exhibit a formative *di-* or *dɪ-* (as *dɪpɔ́* river and village of lower West Siang), seemingly reflecting PTB **t(w)i(y)* ‘water’ (Matisoff 2003: 674). It is possible that such names are not of Tani origin as such, but rather reflect the previous occurrence of non-Tani populations – probably, Bodo-Kachari – in parts of the modern-day Tani area (cf. also Phukan (2001) for an overview of Bodo-Kachari place names in the Assam valley, many bearing an initial formative *di-*). When dealing with river names, one can be relatively certain that a *di-* formative reflects this non-Tani etymon for ‘water’, but care must be exercised when approaching other place names to avoid confusion with cognates of PTs **di* ‘mountain/hill’; in some cases, there may be no clear basis for a determination.

Proper place names and common nouns denoting locations appear to distribute identically; both may head a locative NP marked in *lo* or an appropriate locative demonstrative/postposition, as *namɔ́ tolò* ‘house DST.LOC.UP’ ‘(at) the/our house up there’ or *daarɪ́ tolò* ‘PLACE DST.LOC.UP’ ‘(in) Daring village up there’. For more on Locative noun phrase marking and functions, see §14.3.5.

5.2.2.15. Human proper names

Formation of human proper names follows a patrilineal naming and lineage-recording system (Lare *mennənəm*⁹⁸). In this system, a newborn child receives a disyllabic given name in which the *initial syllable* identifies the *child’s father*, and the *final syllable* identifies the *child itself*. For convenience of reference, we will call these the *patrisyllable* and the *autosyllable* respectively.

An autosyllable may be meaningful, and frequently indicates the child’s birth order in a sequence of siblings (e.g. *tɔ́r-* ‘endpoint’ *ɪi-* ‘last’, *tə́-* ‘big’, etc.). When a male later has a child himself, his *autosyllable* in turn becomes his son’s or daughter’s *patrisyllable*. Thus, *ɪimɪ́* has sons *mɪlɪ́* and *mɪzùm*, and daughter *mɪɲàa*. And, *mɪlɪ́* in

⁹⁸ From *mèn-* ‘say’ + *-nɔ́* ‘APPL:INSTEAD.OF.O’ + *-nam* ‘NZR:RLS’. Literally, ‘to say instead’ or ‘to replace by saying’.

turn has a son *lɪcàa*, and so on. Thus, although there is no difference in the procedure for naming a male or female child, only a male child's autosyllable will be incorporated into the clan lineage as a patrisyllable, assuming he is able to pass his name on to children of his own.

Effectively, the structure of the Galo naming system may be viewed as a basically *classificatory* system – together with most common nouns and adjectives (§5.3.1) – in which the *patrisyllable* represents a type or superordinate set (i.e., the set of children pertaining to a particular father) and the *autosyllable* an exemplar or subordinate set (i.e. an instance of such a child) (Figure 5.8).

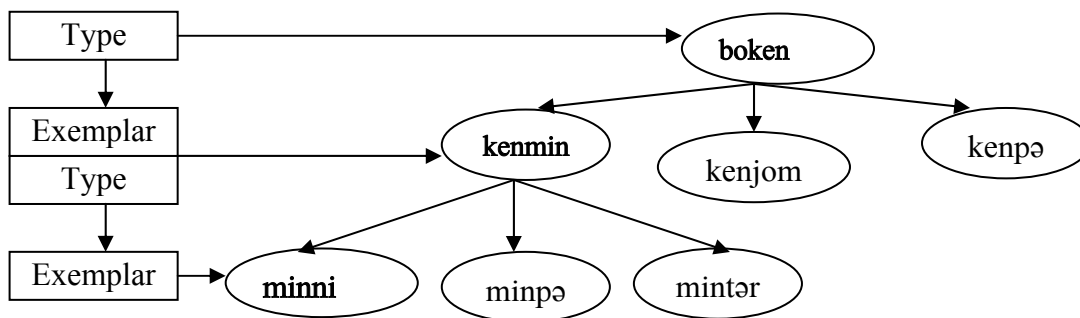


Figure 5.8 – Classificatory structure of the Galo naming system

As also discussed in §5.3.1.1.2-5.3.1.1.3, *diminutive* proper names may be actively formed by prefixing the autosyllable of a male or female child with prefixes *ta-* ‘MDIM’ and *ja-* ‘FDIM’ respectively. For example, *kenmín* and *kentər* may be addressed as *tamín* and *jatər* respectively by their elders. Less common, more jocular-sounding naming prefixes include *ma-* ‘MDIM’ and *tu-* ‘FDIM’. Other naming prefixes are reserved for use by an individual with a particular kin relation to an individual, as *jáa-* ‘MDIM.AVNC’ and *məə-* ‘FDIM.AVNC’, for avuncular address of a male and female child respectively. It is likely that more such prefixes once existed, and may well be in use in some areas, however they are not well-known to most of my consultants and may be falling into disuse.

Among early generations of Galo and/or their ancestors, it appears that human proper names were limited to a disyllable of the type described above. Thus, the complete lineage of the *ɾibáa* clan ancestor as it is recounted from (*abó*) *taníi*, ‘the father of mankind’ is shown in Figure 5.9. Note that in many places, segments of an autosyllable do not correspond perfectly with those of a corresponding patrisyllable (for example, *toopó* becomes *panə*, and *panə* becomes *naür*). In most cases, these alternations reflect

attested sound changes; for example, *panè* (PG **panà*) reflects post-PG Word-final weakening in Lare (§2.4.4.5).

tanfi → *niitoo* → *toopó* → *panè* → *naùr* → *urcì* → *cikár* → *karkóo* → *kooró* → *rikée*

Figure 5.9 – Lineage of the *ribáa* clan ancestor *rikée*

For reasons which are not yet clear to me (other than the obvious legal/bureaucratic requirement in modern India of having both given names and surnames), all modern Galo take as their clan name or “title” the given name of a particular individual in their lineage; as with any surname, this is inherited by a Galo child together with their patrisyllable. Thus, the son of *miilhi podù* – a member of the *podù* clan – takes as his full name *hiicàa podù*. It may be that the shift to quadrisyllabic names is one feature of the more general shift from disyllabic to quadrisyllabic compound formation in Galo (§5.3.1.4), or it may be simply a response to a changing cultural context; in either case, it is not clear to me or to the majority of my consultants why one particular ancestral name was chosen rather than any other. This problem must be left to further investigation.

Human proper names distribute somewhat differently from other types of nominal, as discussed in §6.1.4.

5.2.2.16. Time

Galo has a very large and highly structured class of time nouns, many of which exhibit unique distributional characteristics among nominals. Although all are structurally nouns, a few might, on distributional and semantic grounds, be better described as (perhaps an emergent class of) adverbs.

Time nouns may be broadly subclassified on the basis of structural, distributional and semantic characteristics:

- | | |
|---|---------------|
| 1) Calendrical (<i>July, August, winter, summer...</i>) | (§5.2.2.16.1) |
| 2) Units and dimensions (<i>day(time), night(time), afternoon, the past...</i>) | (§5.2.2.16.2) |
| 3) Temporal shifters (<i>today, yesterday, next year...</i>) | (§5.2.2.16.3) |
| 4) Adverb-like time nouns (<i>now, later, earlier...</i>) | (§5.2.2.16.4) |

§5.2.2.16.1-§5.2.2.16.4 first discuss the internal structure and semantics of the time noun subclasses; time noun distribution is then discussed in §5.2.2.16.5.

5.2.2.16.1. Class 1: Calendrical

Calendrical time nouns seem to have been traditionally used with absolute reference to each of the thirteen lunations (moon cycles) of an agricultural calendar, as well as to the two Galo seasons. In modern Galo, the prevailing tendency is to link calendrical nouns to the months of the international calendar – when native calendrical nouns are used at all. Many younger speakers are only aware of two or three native Galo calendrical nouns, and prefer to use the corresponding English terms (Table 5.9).

| Term | Gloss | Etymology/composition |
|--------------|---|--|
| <i>deecʰ</i> | ‘first moon cycle/January’ | <i>dée-</i> ‘soil’ + <i>cʰ</i> ‘cool/cold’ |
| <i>aglò</i> | ‘second moon cycle/February’ | ? |
| <i>lumí</i> | ‘third moon cycle/March’ | ? |
| <i>lukʰ</i> | ‘fourth moon cycle/April’ | ? |
| <i>lucʰ</i> | ‘fifth moon cycle/May’ | ? |
| <i>ilò</i> | ‘sixth moon cycle/June’ | ? |
| <i>tenlò</i> | ‘seventh moon cycle/July’ | <i>tèn-</i> ‘far away’ + <i>lò-</i> ‘day’ ? |
| <i>hìò</i> | ‘eighth moon cycle/August’ | <i>hʰ</i> ‘water (alt.)’ + <i>ò-</i> ‘child’ |
| <i>hʰtò</i> | ‘ninth moon cycle/September’ | <i>hʰ</i> ‘water (alt.)’ + <i>tò-</i> ‘big; adult’ |
| <i>píráa</i> | ‘tenth moon cycle/October’ | ? |
| <i>lubʰ</i> | ‘eleventh moon cycle/November’ | ? |
| <i>ratò</i> | ‘twelfth moon cycle/December’ | ? |
| <i>ralʰ</i> | ‘twelfth moon cycle (var.) or thirteenth moon cycle (arch.)’, ⁹⁹ | ? |
| <i>dʰcʰ</i> | ‘winter (cool season)’ | <i>dʰ</i> ‘time’ + <i>cʰ</i> ‘cool/cold’ |
| <i>dʰgò</i> | ‘summer (warm season)’ | <i>dʰ</i> ‘time’ + <i>gò-</i> ‘warm/hot’ |

Table 5.9 – Calendrical time nouns

5.2.2.16.2. Class 2: Units and dimensions

Time nouns denoting units and dimensions form a heterogeneous set. A core subset denotes “basic” time periods such as *añʰ* ‘year’, *alóo* ‘day’, *arúm* ‘evening’, *aró* ‘morning’ and *ajò* ‘night’; all of these forms have related classifier roots, and may

⁹⁹ This form is not accepted by all of my consultants.

themselves be used as classifiers to enumerate time cycles (§8.2.2). Other terms denote more specific points in time, and are either derivative, as *foràa* ‘midnight’, or simplex, and difficult to etymologize (as *kozò* ‘midday’) (Table 5.10).

| Term | Gloss | Etymology/composition |
|----------------------|---|---|
| <i>ajî</i> | ‘year’ | <i>a-</i> ‘PFX’ + <i>jî</i> ‘year’ |
| <i>alóo</i> | ‘day’ | <i>a-</i> ‘PFX’ + <i>lóo</i> ‘day’ |
| <i>arúm</i> | ‘evening’ | <i>a-</i> ‘PFX’ + <i>rúm</i> ‘evening’ |
| <i>arò</i> | ‘morning’ | <i>a-</i> ‘PFX’ + <i>rò</i> ‘morning’ |
| <i>ajò</i> | ‘night’ | <i>a-</i> ‘PFX’ + <i>jò</i> ‘night’ |
| <i>pàa</i> | ‘dawn’ | ? |
| <i>(arò-)komcí</i> | ‘early morning’ | <i>kóm</i> ‘early morning’ + <i>cí</i> ‘half’ |
| <i>kozò</i> | ‘midday’ | ? |
| <i>loogàa</i> | ‘noon’ | <i>lóo</i> ‘day’ + <i>gàa</i> ‘fill up’ |
| <i>alóo-loopòo</i> | ‘noon’ | <i>alóo</i> ‘day’ + <i>loopòo</i> ‘???’ |
| <i>(arúm-)roorîi</i> | ‘late afternoon; dusk’ | ? |
| <i>foràa</i> | ‘midnight’ | <i>jò</i> ‘night’ + <i>ràa</i> ‘inside’ |
| <i>korúm</i> | ‘(the) past; ancient times; (the time of the) ancestors’ | <i>kò</i> ‘old’ + <i>rúm</i> ‘family’ |
| <i>omòr</i> | ‘(the) good old days’ | <i>o-</i> ‘PFX’ + <i>mòr</i> ‘good old days’ |
| <i>omèe</i> | ‘childhood’ | <i>ò-</i> ‘child’ + <i>mée-</i> ‘male’ ¹⁰⁰ |
| <i>lòkàə</i> | ‘distant time (in past)’ | <i>lò</i> ‘Ordinal PFX’ + <i>kàə</i> ‘long time’ |
| <i>lòkîi</i> | ‘very distant time (in past)’ | <i>lò</i> ‘Ordinal PFX’ + <i>kîi</i> ‘long time’ |
| <i>kookîi</i> | ‘back; behind; after’ | <i>kòo-</i> ‘back’ + <i>kîi</i> ‘long time’ |
| <i>cəə</i> | ‘precise moment in time’ | <i>cəə</i> ~ <i>cəə</i> ‘PREC’ (cf. §13.5.2.5) |

Table 5.10 – Unit and dimensional time nouns

Most unit and dimensional time nouns can stand as argument noun phrase heads, taking common nominal referential and relational marking and denoting abstract temporal concepts such as ‘daytime’ and ‘nighttime’. As locative (oblique) noun phrase heads, most have relative reference within a given temporal frame (§5.2.2.16.5).

Common nouns with potential *episodic* senses (such as festival names, conventions, or types of ritual) may sometimes be used as time nouns. In this case, they tend to distribute like Class 2 unit and dimensional time nouns (§5.2.2.16.5).

¹⁰⁰ This is the only attested form for ‘childhood’. It is not yet known whether a different term would be used by female speakers.

(60) *okká, moopinám...mərùm uíjjəm*

okkáə moopín = əəm

mərùm

uìi = əəm

SCNJ festival.harvest=IRR.TMP.SPAN **last.evening** demon.spirit=ACC

menâa booló, hilò...

mèn-âa-boolo

hilòo

chant.to-TO.PRX-COND today

‘And so, at Moopin...if the spirits are invoked **since the previous night**,

today...[the women carry in fermented rice for use in the ritual].’ (LN, MF 034)

5.2.2.16.3. Class 3: Temporal shifters

The traditional Galo system of temporal shifters is in principle extremely rich. There are *five sets* of terms, each denoting *thirteen* points or spans on one of five dimensions: *mornings*, *evenings*, *nights*, *days*, and *years*. In practice, the system is being rapidly subjected to decay as many speakers shift to the Indo-European system of reference to invariant “days of the week”. The present description records the fullest expression of the system that I was able to attest in regular use – if only, in some cases, by a few older speakers.

All five dimensions of temporal shifters have as their core a term denoting a deictic centre, or nearest qualifying point relative to a deictic centre, consisting of a Speaker-proximate demonstrative formative *hì-* ‘this’ plus a core unit time noun/temporal classifier root (as *hilòo* ‘today’, < *hì-* ‘SPRX’ + *lòo-* ‘day’). From this deictic centre, up to *six* further units may be counted forward (into the future) and backward (into the past). Not all possible places have been attested for all dimensions as of this writing. In addition, some terms, such as *tenèe* ‘five days/years hence’ refer to a position on more than one dimension; such terms may be the result of a historical generalization leading to a synchronic polysemy, although it is not currently known precisely whether or how this might have taken place. Other terms such as *kenzúr-alóo* ‘six days ago’ appear likely to have been adapted from a term for the same position on another dimension (*kenzúr* ‘six years ago’ + *alóo* ‘day’). In other cases, terms from one dimension have been imported into another wholesale, leaving an unfilled gap in the other paradigm; for example, *rorə* ‘three days hence’ quite clearly derives from the sense ‘three mornings hence’; however, the latter term seems to have completely fallen out of use. Finally, in at least one case, what may have been a term historically in competition with the etymologically paradigmatic term PG **mə̀lòo* ‘yesterday’ (< *mə̀-* ‘yester’ + *lòo-* ‘day’; cf. Pugo Galo

məlòo ‘yesterday’), Lare Galo *məròo* ‘yesterday’ (< *mə̀* ‘yester’ + *ròo* ‘finish’) seems to have replaced it.

Temporal shifters have relative reference to time periods prior to or following a shifting deictic center. In practice, the deictic center is usually the time of speaking, but it need not be. In (61), a speaker is describing his experiences over several days harvesting cane for rope-making in the deep jungle. The temporal shifter *allò* ‘tomorrow’ is used to refer *not* to the day following that on which he was telling the narrative, but rather to the day following that on which that point of his narrative was located; the deictic center is thus located within the timeframe of the narrative, not at the time of speaking.

- (61) *əmbə ɲunù allô nè ìitə rə əmdâk*
 əmbə ɲunù **allô** = nè ìi-tà-rə óm-dàk
 ANAP.PADV 1.PL **tomorrow**=TMP.IRR.PUNC descend-INCP-IRR tell-COS
ogkú...
 ogò = kú
 TMP.RLS=CMPL
 ‘So, **the next day** when we were to return...(instead we set the fish traps and caught a few fish).’ (RmR, CC 048)

Table 5.11-Table 5.15 summarize the attested terms corresponding to days, years, mornings, evenings and nights respectively.

| Position | Term | Gloss | Etymology/composition |
|----------|--------------------|-------------------------------|---|
| BACK | <i>kenzúr-alóo</i> | ‘six days ago’ ¹⁰¹ | <i>kenzúr</i> ‘six years ago’ + <i>alóo</i> ‘day’ |
| | <i>kenkúr-alóo</i> | ‘five days ago’ | <i>kenkúr</i> ‘five years ago’ + <i>alóo</i> ‘day’ |
| | <i>kendalòo</i> | ‘four days ago’ | <i>kèn-</i> ‘one’ + ??? + <i>lòo-</i> ‘day’ |
| | <i>kenkəlòo</i> | ‘three days ago’ | <i>kèn-</i> ‘one’ + ??? + <i>lòo-</i> ‘day’ |
| | <i>kenlòo</i> | ‘two days ago’ | <i>kèn-</i> ‘one’ + <i>lòo-</i> ‘day’ |
| | <i>məròo</i> | ‘yesterday’ | <i>mà-</i> ‘yester’ + <i>ròo-</i> ‘finish’ |
| CTR | <i>hilòo</i> | ‘today’ | <i>hì</i> ‘SPRX’ + <i>lòo-</i> ‘day’ |
| FWD | <i>allò</i> | ‘tomorrow’ | <i>áa</i> ‘DST.SLEV’ + <i>lò-</i> ‘sun; day’ ¹⁰² |
| | <i>ròo ~ roə</i> | ‘two days hence’ | <i>rò-</i> ‘morning’ + <i>əə</i> ‘APRX’ ? |
| | <i>rorə</i> | ‘three days hence’ | <i>rò-</i> ‘morning’ + <i>rə-</i> ‘live/exist’ ? |
| | <i>rotèn</i> | ‘four days hence’ | <i>rò-</i> ‘morning’ + <i>tén-</i> ‘far away’ |
| | <i>tenèe</i> | ‘five days hence’ | <i>tèn-</i> ‘far away’ + <i>èe-</i> ‘ANT’ ? |
| | <i>tenkùr</i> | ‘six days hence’ | <i>tèn-</i> ‘far away’ + <i>kùr-</i> ‘return’ ? |

Table 5.11 – Temporal shifters 1: Days

| Position | Term | Gloss | Etymology/composition |
|----------|-----------------|---------------------|--|
| BACK | <i>kenzúr</i> | ‘six years ago’ | <i>kèn-</i> ‘one’ + <i>zúr-</i> ‘time formative (six)’ ? |
| | <i>kenkúr</i> | ‘five years ago’ | <i>kèn-</i> ‘one’ + <i>kùr-</i> ‘return’ ? |
| | <i>kendaŋhì</i> | ‘four years ago’ | <i>kèn-</i> ‘one’ + ? + <i>ŋhì-</i> ‘year’ |
| | <i>kenkəŋhì</i> | ‘three years ago’ | <i>kèn-</i> ‘one’ + ? + <i>ŋhì-</i> ‘year’ |
| | <i>kenŋhì</i> | ‘two years ago’ | <i>kèn-</i> ‘one’ + <i>ŋhì-</i> ‘year’ |
| | <i>məŋhì</i> | ‘last year’ | <i>mà-</i> ‘yester’ + <i>ŋhì-</i> ‘year’ |
| CTR | <i>hìŋhì</i> | ‘this year’ | <i>hì</i> ‘SPRX’ + <i>ŋhì-</i> ‘year’ |
| FWD | <i>luuŋhì</i> | ‘next year’ | <i>luu-</i> ‘?’ + <i>ŋhì-</i> ‘year’ |
| | <i>ŋhìə</i> | ‘two years hence’ | <i>ŋhì-</i> ‘year’ + <i>əə</i> ‘APRX’ ? |
| | *unattested* | ‘three years hence’ | -- |
| | <i>ŋhìtèn</i> | ‘four years hence’ | <i>ŋhì-</i> ‘year’ + <i>tén-</i> ‘far away’ |
| | <i>tenèe</i> | ‘five years hence’ | <i>tén-</i> ‘far away’ + <i>èe-</i> ‘ANT’ |
| | <i>tenkùr</i> | ‘six years hence’ | <i>tén-</i> ‘far away’ + <i>kùr-</i> ‘return’ ? |

Table 5.12 – Temporal shifters 2: Years

¹⁰¹ Note that none of these terms are clearly cognate to either numeral or ordinal roots three through six; see §5.2.2.12 and §8.2.1.

¹⁰² If the etymologies here are correct, it is intriguing that ‘today’ and ‘tomorrow’ appear to be based on different ‘day’ roots. The first reflects PTs **loŋ* ‘day’, also reflected in *alóo* ‘day’, while the second reflects PTP **lo* ‘sun; day’, also reflected in *lò-* ‘sun-dry (e.g. chili peppers or other fruits)’ and *loùu* ‘light’ (< *úu-* ‘shine; awaken’). It is likely that these roots were derivationally related at some PPT stage, like numerous other *-V/-ŋ* and High tone/Low tone root pairs, however they may have been distinct at the time these terms were lexicalized; for further discussion, see §2.4.2.

| Position | Term | Gloss | Etymology/composition |
|----------|-------------------|----------------------|---|
| BACK | <i>kenzúr-arò</i> | ‘six mornings ago’ | <i>kenzúr</i> ‘six years ago’ + <i>arò</i> ‘morning’ |
| | <i>kenkúr-arò</i> | ‘five mornings ago’ | <i>kenkúr</i> ‘five years ago’ + <i>arò</i> ‘morning’ |
| | <i>kendarò</i> | ‘four mornings ago’ | <i>kèn-</i> ‘one’ + ??? + <i>rò-</i> ‘morning’ |
| | <i>keṅkərò</i> | ‘three mornings ago’ | <i>kèn-</i> ‘one’ + ??? + <i>rò-</i> ‘morning’ |
| | <i>kenrò</i> | ‘two mornings ago’ | <i>kèn-</i> ‘one’ + <i>rò-</i> ‘morning’ |
| | <i>mərò</i> | ‘yester-morning’ | <i>mə-</i> ‘yester’ + <i>rò-</i> ‘morning’ |
| CTR | <i>hirò</i> | ‘this morning’ | <i>hi</i> ‘SPRX’ + <i>rò-</i> ‘morning’ |
| FWD | *unattested* | *unattested* | *unattested* |

Table 5.13 – Temporal shifters 3: Mornings

| Position | Term | Gloss | Etymology/composition |
|----------|-------------------|----------------------|--|
| BACK | <i>kenzúr-arò</i> | ‘six evenings ago’ | <i>kenzúr</i> ‘six years ago’ + <i>arúm</i> ‘evening’ |
| | <i>kenkúr-arò</i> | ‘five evenings ago’ | <i>kenkúr</i> ‘five years ago’ + <i>arúm</i> ‘evening’ |
| | <i>kendarò</i> | ‘four evenings ago’ | <i>kèn-</i> ‘one’ + ??? + <i>rúm-</i> ‘evening’ |
| | <i>keṅkərò</i> | ‘three evenings ago’ | <i>kèn-</i> ‘one’ + ??? + <i>rúm-</i> ‘evening’ |
| | <i>kenrùm</i> | ‘two evenings ago’ | <i>kèn-</i> ‘one’ + <i>rúm-</i> ‘evening’ |
| | <i>mərùm</i> | ‘last evening’ | <i>mə-</i> ‘yester’ + <i>rúm-</i> ‘evening’ |
| CTR | <i>hirùm</i> | ‘this evening’ | <i>hi</i> ‘SPRX’ + <i>rúm-</i> ‘evening’ |
| FWD | *unattested* | *unattested* | *unattested* |

Table 5.14 – Temporal shifters 4: Evenings

| Position | Term | Gloss | Etymology/composition |
|----------|-------------------|---|---|
| BACK | <i>kenzúr-ajò</i> | ‘six nights ago’ | <i>kenzúr</i> ‘six years ago’ + <i>ajò</i> ‘night’ |
| | <i>kenkúr-ajò</i> | ‘five nights ago’ | <i>kenkúr</i> ‘five years ago’ + <i>ajò</i> ‘night’ |
| | <i>kendajò</i> | ‘four nights ago’ | <i>kèn-</i> ‘one’ + ??? + <i>jò-</i> ‘night’ |
| | <i>keṅkəjò</i> | ‘three nights ago’ | <i>kèn-</i> ‘one’ + <i>kə-</i> ‘?’ + <i>jò-</i> ‘night’ |
| | <i>kenjò</i> | ‘two nights ago’ | <i>kèn-</i> ‘one’ + <i>jò-</i> ‘night’ |
| | <i>məjò</i> | ‘last night’ | <i>mə-</i> ‘yester’ + <i>jò-</i> ‘night’ |
| CTR | <i>hòo</i> | ‘nearest night (tonight or last night)’ | Prob. < <i>hi</i> ‘SPRX’ + <i>jò-</i> ‘night’ |
| FWD | *unattested* | *unattested* | *unattested* |

Table 5.15 – Temporal shifters 5: Nights

5.2.2.16.4. Class 4: Adverb-like time nouns

Adverb-like time nouns are generally used to reference a vague temporal frame relative to a shifting deictic centre (Table 5.16).

| Term | Gloss | Etymology/composition |
|-------------------------|-----------------------------------|---|
| <i>izi</i> | ‘the present; now; a moment away’ | ? |
| <i>izzàa</i> | ‘the present; now; a moment away’ | ? |
| <i>kozzúu</i> | ‘awhile’ | <i>kozò</i> ‘midday’ + EXPR ? |
| <i>kozzûu</i> | ‘quite awhile ago’ | <i>kozzúu</i> ‘awhile’ + EXPR |
| <i>hilòo-məròo</i> | ‘these days; recently’ | <i>hilòo</i> ‘today’ + <i>məròo</i> ‘yesterday’ |
| <i>hírùm-hirò</i> | ‘nowadays; currently’ | <i>hírùm</i> ‘this evening’ + <i>hirò</i> ‘this morning’ |
| <i>məròo-kenlòo</i> | ‘those days; the old days’ | <i>məròo</i> ‘yesterday’ + <i>kenlòo</i> ‘day before yesterday’ |
| <i>məròo-kenlùu</i> | ‘long ago; way back when’ | <i>məròo-kenlòo</i> ‘those days; the old days’ + EXPR |
| <i>məp̄h̄i-kenp̄h̄i</i> | ‘a few years back’ | <i>məp̄h̄i</i> ‘last year’ + <i>kenp̄h̄i</i> ‘two years ago’ |
| <i>kozò-allò</i> | ‘the future’ | <i>kozò</i> ‘midday’ + <i>allò</i> ‘tomorrow’ |
| <i>allò-roə</i> | ‘the coming days’ | <i>allò</i> ‘tomorrow’ + <i>roə</i> ‘day after tomorrow’ |

Table 5.16 – Adverb-like time nouns

As Table 5.16 shows, several adverb-like time nouns have simplex and expressive variants, as *kozzúu* ‘awhile’ and *kozzûu* ‘quite awhile’. Some can be used straightforwardly as nouns, heading a referring argument NP; others are clearly derived from such nouns, but cannot themselves head referring argument NPs. For more on time noun distribution, see §5.2.2.16.5.

5.2.2.16.5. Time noun functions

The subclassification of time nouns is first repeated for ease of reference:

- 1) Calendrical (*July, August, winter, summer...*) (§5.2.2.16.1)
- 2) Units and dimensions (*day(time), night(time), afternoon, the past...*) (§5.2.2.16.2)
- 3) Temporal shifters (*today, yesterday, next year...*) (§5.2.2.16.3)
- 4) Adverb-like time nouns (*now, later, earlier...*) (§5.2.2.16.4)

Time noun classes 1-3, as well as some but not all terms in 4, may stand as common nominal head of a genitive phrase (63) or argument noun phrase (62), taking genitive modification and standard referential and relational marking.

(62) *hilôo mərə̀o gə̀ rənám duunəmə ʔɲíɡ*

[[[**hilò-məròo**]_{NP} = gə̀]_{GENP} rə́-nam dùu-nam = əə]_{NP} ʔɲíí = go
today-yesterday=GEN live/exist-NZR:RLS stay-NZR:RLS=TOP bit=IND
adək duukù î.

adək-dùu-kú (ə)î

different-IPFV-CMPL ETAG

‘The lifestyle of **nowadays** has become a bit different, eh?’ (MN, FYG 005)

(63) *ɲunûk îzi kudá ɲóm məədír modù.*

[[ɲunù-kə̀]_{GENP} [**izi**]_{NOM} kú = da]_{NP} ɲó-m məə-dír mò-dùu
 1.PL-GEN **present** CMPL=CNTR 1.SG-ACC think-EXHAUSTED make-IPFV
 ‘But now our **present** [age/era] on the other hand makes me gloomy.’ (MN, T10:48)

Far more commonly however, temporal nouns head oblique (non-argument)

Temporal noun phrases. In Temporal NPs, there is a division in marking between Classes 1-2 and Classes 3-4:

All Class 1-2 time nouns may head a Locative oblique NP marked in simple Locative *lo* ‘LOC’ (§14.3.5), with a basically *generic* temporal reference. Thus *aglò = lo* ‘1st month=LOC’ may have the sense ‘in (any given) January’ or ‘in (the past/coming/closest to deictic centre) January’. Ablative senses (‘from/since’) are in a fused Locative/Genitive postposition *lokə̀* ‘ABL’ (§14.3.6.2), while Dumessive senses (‘until/up to’) are in a fused Locative/Dative postposition *lobə̀* (§14.3.7). Class 1-2 time nouns capable of *realis* (generally, past or habitual) temporal reference may head an oblique NP marked in Proximal and Anaphoric senses of Speaker/Addressee-proximate locative and ablative demonstrative postpositions *hogò/ogò* and *hokə̀/okə̀* (§7.4.5.3), as *ləkə̀ə ogò* ‘distant time TMP.RLS’ ‘long ago’ or *omèè okə̀* ‘childhood ANAP.ABL’ ‘since/from childhood’. Class 1 and 2 time nouns capable of habitual/iterative reference (as *each/every*) may head a Dative oblique NP, as in *komcì = bə̀* ‘early.morning=DAT’ ‘[he would arrive] by dawn’ (§14.3.3). Selective (‘(on) one’) and Sequential (‘(the) next’) senses of Class 1-2 time nouns are marked in fused postpositions *golo ~ gollo* and *gona* respectively (§14.3.7).

Class 3-4 time nouns do not, in general, take any of these types of marking.¹⁰³

Rather, Class 3-4 time nouns with realis time reference generally appear “bare”, with no phrasal marking (64).

- (64) *nó mərə̀rò guhatí inbéé rè?*
 [nó]_S [mərə̀rò]_{OBL} [guhati]_E [ín-bée]_{PRED} ree
 2.SG **yesterday** PLACE go-EPF PQ
 ‘Did you go to Guwahati **yesterday**?’ (TR, 9:174)

Class 3-4 time nouns with Ablative temporal reference take marking in a complex postposition *gəlokə* (< *gə* ‘GEN’ + *lokə* ‘ABL’) (often realized [gəlkə]), as *hilòo gəlokə* ‘from today onward/since today’; Dumessive senses of Class 3-4 time nouns (i.e., ‘up to a point’) are in *gobə* (§14.3.7) – a fusion of *go* ‘IND’ and *bə* ‘DAT’ – as *izì gobə* ‘now LMT.TMP’ ‘up to now’.

Most Class 1-2 time nouns also contrast with most Class 3-4 time nouns in terms of marking of *irrealis* temporal reference. Most Class 1-2 time nouns with *irrealis* temporal reference take marking in a form homophonous with the Accusative case enclitic *əəm*, while most Class 3-4 time nouns are marked in a form homophonous with Non-agentive *nè*. (65) is an example in which both types occur.

- (65) *allôn^e arròm ŋunù, indûu kubə*
 allò = **nè** arò = **əəm** ŋunù ín-dûu-kú = bə
 tomorrow=TMP.IRR.PUNC morning=TMP.IRR.SPAN 1.PL walk-IPFV-CMPL=SJNC
əmdù.
 əm-dûu
 say-IPFV
 “‘Tomorrow morning we can leave,’ they said.’ (IR, FA 070)

Where there is a clear semantic difference associated to temporal phrase marking in *əəm* or *nè*, *əəm* denotes a *span* of time, while *nè* denotes a *point* in time. Thus, *kozò-allò* ‘the

¹⁰³ A few exceptions appear sporadically in my data; for example, *kozzúu ogò* ‘awhile TMP.RLS’ has the past time sense ‘just now/a moment ago’ (*kozzúu* aligns in all other respects with Class 3-4 time nouns in terms of marking). These may represent cases of cross-class polysemy, or there may be more general semantic factors which enable marking to cut across the classes more readily than I have suggested is possible here. More research in this area is required.

future’ takes irrealis marking in *əəm*, while *allò-roə* ‘(some point in) the coming days’ takes irrealis marking in *nè*.

A few (mainly derivative) Class 4 time nouns can *only* appear in “bare” form, whether they have habitual/general, past or future time reference. For example, although *kozzúu* ‘awhile’ can have both realis and irrealis temporal references, as *kozzúu* ‘awhile’ ‘awhile ago’ and *kozzúu nè* ‘awhile TMP.IRR.PUNC’ ‘in awhile; in just a moment’ *kozzúu* ‘quite awhile ago’ can *only* occur in bare form with a realis sense; the same is true of *mərò-kenlùu* ‘long ago; way back when’. It is possible that such forms, while clearly derived from nouns, would be better-described as adverbs.

The syntax of temporal noun phrases/time adverbs at the clause level is discussed in §9.2. Temporal phrase marking is summarized in Table 5.17.

| Marker | Gloss | Principal function | Temporal function | Marks |
|---------------|--------------|--|--|------------------------------------|
| Ø | Ø | generic reference/ non-referentiality | realis temporal context | Class 3-4 |
| <i>lo</i> | LOC | general/deictically- unspecified spatial location/goal | general/habitual temporal context | Class 1-2 |
| <i>lokə</i> | ABL | general/deictically- unspecified spatial source | general/habitual temporal source | Class 1 1-2 |
| <i>gəlokə</i> | TMP.ABL | comitative/accompaniment | punctual temporal source | Class 3-4 |
| <i>hogò</i> | TMP.PRX | speaker-proximate spatial location/goal | proximate temporal context | Class 1-2 |
| <i>ogò</i> | TMP.DST | addressee-proximate spatial location/goal | distal temporal context | Class 1-2 |
| <i>hokə</i> | TMP.PRX.ABL | speaker-proximate spatial source | proximate temporal source | Class 1-2 |
| <i>okə</i> | TMP.DST.ABL | addressee-proximate spatial source | distal temporal source | Class 1-2 |
| <i>bə</i> | DAT | various dative/adverbializing | habitual/iterative temporal reference | Class 1-2 |
| <i>lobə</i> | LMT.RANGE | limit of quantity, range construal | temporal limit | Class 1-2 |
| <i>gobə</i> | LMT.UNIT | limit of quantity, unit construal | temporal limit | Class 3-4 |
| <i>go</i> | IND | individuation | individuation | Class 1-2 |
| <i>golo</i> | SLCT | range selection from set | temporal selection from set | Class 1-2 |
| <i>əəm</i> | TMP.IRR.SPAN | common noun-headed O NPS (ACC) | irrealis temporal spans | Class 1-2 (and some 3- 4) |
| <i>nè</i> | TMP.IRR.PUNC | highly animate O NPS (NAGT) | irrealis temporal points | Class 3-4 |

Table 5.17 – Summary table of temporal phrase marking

5.2.3. Adjective class semantics and subclassification

5.2.3.1. Overview

Most basic Galo adjectives denote *properties* of entities. Among the prototypical adjectival semantic fields identified by Dixon (1977; 2004), most are at least partially represented in Galo by basic lexical adjectives. Fields mentioned by Dixon (2004) which are not well-represented among adjectives in Galo include QUALIFICATION and QUANTIFICATION; most such terms are basic nouns in Galo, although some do have adjectival uses (see §5.2.2.13). CARDINAL NUMBERS are derived from basic numerals by what looks like a dedicated adjectivalizing suffix or postposition *naanà* (see §14.3.7.2);

they do not occur as basic adjectives. Finally, NUMERALS may be zero-derived for use as adjectives; see §5.2.2.11.

| Status | Field | Ref. |
|------------------|--------------------|-----------|
| Core | DIMENSION | §5.2.3.3 |
| | AGE | §5.2.3.4 |
| | VALUE | §5.2.3.5 |
| | COLOUR | §5.2.3.6 |
| Peripheral | PHYSICAL PROPERTY | §5.2.3.7 |
| | HUMAN PROPENSITY | §5.2.3.8 |
| | SPEED | §5.2.3.9 |
| Extra-peripheral | DIFFICULTY | §5.2.3.10 |
| | SIMILARITY | §5.2.3.11 |
| | POSITION | §5.2.3.12 |
| | (CARDINAL NUMBERS) | §14.3.7.2 |
| | (NUMERALS) | §5.2.2.11 |

Table 5.18 – Prototypically adjectival semantic fields

All Galo adjectives have the ability to stand as Copula Complement (§9.3.2), as head of an intransitive predicate (§10.2), and as head of a derived adverbial (§5.3.3, §16.5.2). On structural and distributional grounds, it is useful to further distinguish among several adjectival subclasses in Galo, with some further, mostly semantically-based subclassification. The most well-defined set is that of “*inner core*” adjectives, which consists of a small and probably closed set of monosyllabic roots. A much larger set is *basic* adjectives, which includes all and only those (mainly disyllabic) lexemes which may head an intransitive predicate or stand as CC. This set of *basic* adjectives may then be further subdivided between *core* adjectives, or those which *cannot* generally occur in a prototypically nominal or verbal function (such as NP head or transitive predicate head), and *peripheral* adjectives, or those which *can* occur in a prototypically nominal or verbal function; in the latter case, it may be difficult to determine the “basic” class-membership of the lexeme in question (see §5.1.2). Finally, we can identify a set of *derived* adjectives, which includes all and only terms resulting from application of an adjectivalizing *predicate derivation* to a qualifying verb root (see §11.2.4.2). In principle, the adjective class is open both to expansion by loanwords and through adjectivalization of verb roots. In practice, however, loanwords may not be accessible to every type of prototypically adjectival construction (for example, loaned adjectives cannot in usually participate in Adjectival root-combining constructions (§5.3.2.2)). Table 5.19 summarizes the basic semantic/distributional subclassification of Galo adjectives.

| Class | Subcl. 1 | Subcl. 2 | Contains | Ex. | Gloss | Members |
|------------|------------|----------|--|-----------------|------------------------------|----------|
| Inner core | -- | -- | Monosyllabic roots | <i>tə-</i> | ‘big’ | 4-7 |
| Basic | Core | -- | Lexical adjectives | <i>hik̩r</i> | ‘cool/cold’ | ≥ 250 |
| | Peripheral | Nounlike | Lexemes which may function as N or ADJ | <i>adòo</i> | ‘distance; distant’ | ≥ 100 |
| | | Verblike | Lexemes which may function as ADJ or V | <i>bohó</i> | ‘be afraid; fear something’ | ≥ 50 |
| Derived | -- | -- | Adjectivalized verbs | <i>mə́ə-kèn</i> | ‘think-GOOD/EASY’ ‘happy’ | Hundreds |

Table 5.19 – Structural/distributional subclasses of Galo adjectives

Semantic and structural/distributional subclassifications of Galo adjectives exhibit a partial but not complete overlap. As an overall tendency, structurally/distributionally “core” adjectives also contain terms from “core” adjectival semantic fields; for example, Galo “inner core” adjectives contain *only* terms from the fields DIMENSION and AGE. However, most structural/distributional classes contain terms from more than one adjectival semantic field, and vice versa. For example, within the field of SPEED, *dəmóə* ‘slow’ is a core lexical adjective, which cannot be used as a noun or verb. However, the typical means of expressing the notion ‘fast’ is via a Manner predicate derivation *-báa* ‘FAST’. A verb root derived in *-báa* distributes in many ways like an adjective, but in other ways more closely resembles an intransitive verb.¹⁰⁴

Thus, although it is clear that there is a semantic basis to the structure and distribution of Galo adjectives, it is also clear that there is no one to one correspondence between adjectival semantic fields and structural/distributional subclasses. Thus, the following subsections will provide a partial overview, but cannot substitute for what is truly needed: an independent, full-length study.

¹⁰⁴ For example, a term in *-báa* is straightforwardly adverbialized in *bə́* – a prototypically adjectival trait – but cannot always occur as Copula Complement – another prototypically adjectival trait; for further discussion and examples, see §11.2.4.2.

5.2.3.2. “Inner core” adjectives: Monosyllabic adjectival roots

Inner core adjectives form a very small and probably closed class of four to seven members, according to what may amount to subdialectal variation. They are unlike any other nouns or adjectives in being unable to stand as grammatical words. Instead, they occur as bound, monosyllabic roots which must be *compounded to a classifier root* (an “Adjectival classifier expression”) in order to function as a word; in absence of the classifier roots shown in (66), the sentence is ungrammatical. For further discussion of Classifier expressions, see §8.2.2.4. Table 5.20 illustrates the set of monosyllabic adjectival roots attested in my corpus.

- (66) *akên nə dôrtə dù, okkə akên nə*
 akên = na **dór-tə**-dùu okkə akên = na
 one=SLCT CLF:HIGH.ANIMAL-**big**-IPFV SCNJ one=SLCT
dorjää dù.
 dór-**jää**-dùu
 CLF:HIGH.ANIMAL-**small**-IPFV
 ‘One of (the dogs) is big, and the other is small.’ (KZ, 9:45)

| Term | Gloss |
|-------------|-----------------------|
| <i>tə-</i> | ‘big’ |
| <i>ɲí-</i> | ‘small’ (preferred) |
| <i>jää-</i> | ‘small’ (possible) |
| <i>lìi-</i> | ‘new’ |
| <i>kò-</i> | ‘old’ (inanimate) |
| <i>dəə-</i> | ‘short’ (bamboo only) |
| <i>hòo-</i> | ‘long’ (bamboo only) |

Table 5.20 – “Inner core” adjectives: monosyllabic adjectival roots

Among the forms shown in Table 5.20, the first five are fully productive and may be compounded to any classifier root. The two forms for ‘small’, *ɲí-* and *jää-*, are more- and less-frequently attested respectively; use of one or the other seems to be largely a matter of preference, with some speakers freely using either and reportedly sensing no semantic difference. The final two forms *dəə-* and *hòo-* are used in conjunction with the

classifier root *tə̀ə*- ‘CLF:BAMBOO.SECTIONS’ *only*, and denote relatively short and long sections respectively.¹⁰⁵

Most inner core adjectives have core adjectival counterparts, usually bearing an *a*-prefix, as *ajáa* ‘small; cute (ADJ); love (N, VT)’ *akò* ‘old.INAN’, *alìi* ‘new’ and *ahòo* ‘long/tall’. A few exhibit irregular medial gemination, as *addəə* ‘short’ and *appíi* ‘small; little bit (N)’ (which also exhibits irregular rhyme lengthening), and one –*attə* ‘big’ – occurs in my data in the Pugo dialect only; in Lare, this term has been replaced by *kai* ‘big’, whose etymology is unknown (but which may be cognate with Paadam *kai* ‘elder brother’ (data from my field notes)). Thus, it is clear that while inner core adjectives are clearly relatable to adjectival lexemes, inasmuch as the relationship is not fully regular, the two sets must be analysed as (synchronically) lexically distinct.

The occurrence of *dəə*- and *hòo*- in the set of inner core adjectives is interesting, inasmuch as their distribution is much more restricted than that of the other attested forms. It is likely that their occurrence represents an irregular retention from a previously larger and richer system of monosyllabic adjectives, in which many more types of classifier root-adjectival root combinations were possible. As to the reason for irregular retention in this particular semantic area, I can only say that while it is certainly true that bamboo is a culturally critical and frequently referred-to type of entity – and one of highly variable size and length, at that – it seems to me that many other types of entity might just as easily have met such criteria. Thus, while an irregular retention motivated by salience and/or frequent reference would be understandable in this case, it hardly seems inevitable or self-evident. Further cross-dialectal research in this area of the grammar would seem well-warranted.

5.2.3.3. Dimension

Terms denoting DIMENSIONS of entities mostly occur as *inner core* (§5.2.3.2) and/or *core* adjectives, as *ahòo* ‘long/tall’ and *addəə* ‘short’ (note that height and length

¹⁰⁵ As lexical roots in a general sense, *dəə*- and *hòo*- have the senses ‘short’ and ‘long/tall’ respectively, and occur in the basic adjectives *addəə* ‘short’ and *ahòo* ‘long/tall’, among other forms. Note, however, that while *addəə* ‘short’ and *ahòo* ‘long/tall’ may be freely applied as descriptors of animate or inanimate entities of various kinds, this is not the case when *dəə*- and *hòo*- function as monosyllabic adjectival roots, i.e. as elements of Adjectival classifier expressions. For example, they *cannot* replace *tə̀ə*- and *jáa*- in (66), regardless of the type of animal being referred-to.

are not distinguished). Dimensions of constructed entities (prototypically, houses) generally take specialized terminology, as *oén* ‘tall/high, of a constructed thing’ and *oñ* ‘short/low, of a constructed thing’.

SHAPE and DIMENSION may be simultaneously encoded via an Adjectival classifier expression (§8.2.2.4), in which the SHAPE of an entity is encoded by a classifier root and the DIMENSION by an adjectival root, as *př-tə* ‘CLF:EGG-big’ ‘big, of a spherical/egg-like thing’. Such formations have the syntactic status of adjectivals, and are generally preferred by my consultants to shape-unspecific terminology such as *kaí* ‘big’. Certain domain-specific DIMENSION terms which occur as basic adjectives appear likely to have been formed according to the same basic SHAPE-DIMENSION pattern, although the initial formative is a noun root rather than a classifier root, and the formation is non-productive. For example, *boksòo* and *bogjàr* both mean ‘long, of a river-diverting dam’; in both words, the initial formative *bok-* (tone unknown) is cognate with the final formative of *hibòk* ‘river diversion dam’, and their final formatives reflect *hòo-* ‘long/tall’ and *jàr-* ‘length(wise); long’ respectively. It is probable that both classifier expressions such as *př-tə* and compound adjectives such as *boksòo* have resulted from an earlier N-ADJ or N-V syntactic construction, but went on to develop somewhat differently in terms of the modern Galo lexicon.

5.2.3.4. Age

Age of inanimate entities is straightforwardly expressed by the basic adjectives *akò* ‘old.INAN’ and *alìi* ‘new’, as well as by cognate inner core adjectives (§5.2.3.2). Human age is more complex. There are no general terms meaning ‘old.ANIM’ and ‘young’; instead, such concepts are denoted by gender and relative-age-specific terms – also used as nouns – as *nikám* ‘old (woman)’ (< *ní-* ‘person’ + *kám-* ‘mature; hardened’) and *jaamée* ‘boy; young, of a male’ (< *jáa-* ‘small; cute’ + *mée-* ‘young.MASC’). The basic class-status of such terms is often difficult to determine (cf. also §5.2.2.8).

Age of non-human animates, such as dogs or goats, has proved a perplexing topic. Many of my younger consultants were unable to identify a clear set of terms to denote animal age, and insisted that they would only use terms such as *dór-tə* ‘CLF:HIGH.ANIMAL-big’ ‘big, of an animal’. Some more expert and/or experienced speakers were able to

identify several lexemes corresponding to species-specific stages in development, as *nəzìr* ‘female calf’ (< *nə-* ‘female; mother; cow’ + *zìr-* ‘girl’), although very few of these were found to be used as adjectives. Other speakers were found to apply human age-related terms to animals; for example, in §12.3.2.2, ex. (621) *nikám-horám* ‘old, wizened woman’ and *nizíh-hokám* ‘old, wizened man’ are found to describe mature female and male leeches (that these are originally terms denoting humans/human age is confirmed by the appearance of the root *ní-* ‘person’ in both cases).

I am unable to explain this seeming anomaly in the Galo lexicon except to suggest that it may have historically been more common to simply refer to animals in terms of their species-specific stages of development. With the breakdown in this as many other complex areas of the Galo lexicon, as well as contact with Indo-European languages in which general concepts denoting age of animates are lexicalized, we may now be witnessing a period of shift. More research in this area should be conducted.

5.2.3.5. Value

There are very few terms denoting VALUE-related concepts in Galo. *alə* ‘good’ is a very frequent term, usually subject to Syncope (§4.1.4.5) as *alə-dùu* ‘good-IPFV’, usually realized [ˈaldù]; it is found in the typical Galo formal greeting *alə-dùu ree* ‘good-IPFV PQ’ ‘are you well?’, as well as the typical Galo expression of thanks *alə-dó(o)* ‘good-STAT’ ‘thank you’ (lit., ‘it’s good’). *alə* ‘good’ is subject to emphatic realization as *allí* ‘well; excellent (ADJ)’, as well as adverbial modification by derived basic adjective *maazí=bə* ‘very.much=AVZR’. Items of high inherent value – especially, items which are viewed as delicate – are described via *dinci* ‘care; precious’ (etymology/composition unknown). Concepts denoting negative value are generally not lexicalized; the normal way of saying ‘bad’ is *alə-máa* ‘good-NEG’. Distasteful items or those which cause a disagreeable experience (but which are neutral in terms of inherent value) are described using the adjectivalizing Manner predicate derivation *-nək* ‘BAD’ (§11.2.1).

5.2.3.6. Colour

Most COLOUR terms employ the prefix *ja-* ‘FDIM’ (§5.3.1.1.3). They structurally resemble nouns, and may also be used as nouns. The only real motivation for viewing COLOUR terms as basic adjectives is that while use as an adjective denotes the colour concept itself, a nominal use usually denotes an *entity* of that type, as *jakàa-dùu* ‘black-IPFV’ ‘(it’s) black’ but *jakàa = go* ‘black=IND’ ‘(a) black one’; to denote the abstract concept for nominal use, a COLOUR term must be *nominalized*, as *jakàa-nam* ‘black-NZR:RLS’ ‘blackness; being black; (the concept of) black’.

The basic or “core” set of colour roots is *kàa-/kà/ə-* ‘black’,¹⁰⁶ *púu-* ‘white’ and *lí-* ‘red’; all three occur in both *ja-* prefixed forms and, less frequently, compounded in *mír-* ‘hue/tint/complexion’. All three also occur as compound initials, in words which are seemingly fully synonymous with the basic *ja-* prefixed forms. Only slightly less central is *jazèe* ‘grue (green/blue)’, which is an extremely rare example of a potentially monosyllabic, simplex adjective in Lare; *zèe* alternates freely and is synonymous with *jazèe* for most of my consultants. Other forms are less common, and are often not known or used by some younger speakers.

The set of attested colour terms is listed in Table 5.21.

¹⁰⁶ The short/long rhyme alternation here seemingly reflects two distinct etyma, which, however, may have shared a historical derivational relation. In various compounds, only one or the other occurs. The [a/ə] alternation reflects Lare Word-final weakening (§2.4.4.5), in which **-a* weakened to *ə* word-finally; word-initially, the *a* form is retained.

| Term | Gloss |
|----------------------|---|
| <i>jakàa</i> | ‘black’ |
| <i>jakè</i> | ‘black (var.)’ |
| <i>jakɛ̃</i> | ‘deep, resonant black, with a blue/purple overtone’ |
| <i>japúu</i> | ‘white’ |
| <i>jalɛ̃</i> | ‘red’ |
| <i>jalɛ̃-jabó</i> | ‘off-red; reddish’ |
| <i>jazì</i> | ‘yellow’ |
| <i>(ja-)zèe</i> | ‘grue (green/blue)’ |
| <i>jamàr</i> | ‘brown’ |
| <i>jamùk(-jarùk)</i> | ‘maroon’ |
| <i>jarèe</i> | ‘multicoloured; busily-patterned’ |
| <i>jagóo-jarèe</i> | ‘striped’ |
| <i>kajàa</i> | ‘black (var.)’ |
| <i>liicɛ̃</i> | ‘red’ |
| <i>puulúu</i> | ‘white’ |
| <i>mirkè</i> | ‘black in hue/tint/complexion’ |
| <i>mìrpùu</i> | ‘white in hue/tint/complexion’ |
| <i>mìrlɛ̃</i> | ‘red in hue/tint/complexion’ |

Table 5.21 – Colour terms

5.2.3.7. Physical property

Many PHYSICAL PROPERTY terms occur as basic adjectives in Galo, often exhibiting an *a-* prefix (§5.3.1.1.1), as *aí* ‘heavy’, *agò* ‘warm/hot’ and *arɛ̃k* ‘cold (to the touch *or* of an internal feeling)’. Some PHYSICAL PROPERTY subclasses may be identified on structural grounds, as the *pa-* prefix-bearing “shape/disposition” set (§5.3.1.1.6), including *pagér* ‘crooked; wavy’ and *pagùu* ‘bent; U-shaped’. Most intriguing from a historical-grammatical perspective are the “body sensation/disposition” set, most of which are also available for use as nouns (cf. §5.2.2.6). In this set, the first formative is always a *nominal* root, while the second formative is always a verbal and/or adjectival root, as *dumcì* ‘(have a) headache’ (< *dúm-* ‘head’ + *cì-* ‘pain; disease’) and *jigmìi* ‘downward-pointing, of eyes’ (< *jɛ̃k-* ‘eye’ + *mìi* ‘downward-pointing’). From a synchronic perspective, it is often exceedingly difficult to determine the basic lexical class-membership of many of these forms, as some may be used as nominals as well as in intransitive and transitive predicates alike; for example: *jigjáp* ‘blink of the eyes (N);

blinking (ADJ); wink (at someone) (VT)’. However, the semantic values of the various senses can usually be kept distinct (67)-(68).

(67) *ḡó ḡḡkḡḡ ðù.*

ḡó ḡḡkḡḡ-ðùu

1.SG sightless-IPFV

‘I’m (congenitally) blind.’ (MN, B2:127) (intransitive/adjectival sense)

(68) *ḡó ḡḡḡḡ ḡḡkḡḡ ðù.*

ḡó ḡḡḡ = ḡḡm ḡḡkḡḡ-ðùu

1.SG eye=ACC close.eyes-IPFV

‘I’m closing my eyes.’ (MN, B2:127) (transitive verbal sense)

From a diachronic perspective, body sensation/disposition terms can be supposed to have arisen via N-ADJ and/or N-V syntactic constructions. It is very interesting to note, then, that the same sort of construction has arisen in modern Galo, using (often partially cognate) modern Galo lexemes rather than roots; in (70), the noun *ḡumpóo* ‘head’ is arrayed adjacent to the predicate *acì* ‘be in pain’ in precisely the same way *ḡúm-* – as an earlier lexical noun – would quite likely have been arrayed adjacent to a predicate in *cì-* ‘be in pain’.

(69) *ḡó ḡúmci ðù.*

ḡó ḡumcì-ðùu (< *ḡúm-cì-ðùu*)

1.SG headache-IPFV (< head-be.in.pain-IPFV)

‘I have a headache.’ (TZ, 11:19)

(70) *ḡó ḡumpó acì ðù.*

ḡó ḡumpóo acì-ðùu

1.SG head be.in.pain-IPFV

‘I have a headache.’ (TZ, 11:19)

A small selection from the fairly rich set of body sensation/disposition terms found in Lare is given in Table 5.22, representing the main attested semantic fields of mouth area, head area, foot/leg, hand/arm, face, eyes and ears.

| Term | Gloss | Root 1 | Gloss | Root 2 | Gloss |
|---------------|--------------------------|-------------|---------------|-------------|------------------------|
| <i>naptúu</i> | ‘short nose(d)’ | <i>náp-</i> | ‘mouth area’ | <i>túu-</i> | ‘part; stump; section’ |
| <i>dumpúu</i> | ‘white hair(ed)’ | <i>dúm-</i> | ‘head’ | <i>púu-</i> | ‘white’ |
| <i>lädəə</i> | ‘short leg(ged)’ | <i>lə-</i> | ‘foot/leg’ | <i>dəə-</i> | ‘short’ |
| <i>mookòp</i> | ‘sunken cheek(ed)’ | <i>mòo-</i> | ‘cheek; face’ | <i>kòp-</i> | ‘dent(ed)’ |
| <i>lakpèe</i> | ‘arm cramp(ed)’ | <i>lák-</i> | ‘hand/arm’ | <i>pèe-</i> | ‘cramp(ed)’ |
| <i>ruugók</i> | ‘ring(ing,) of the ears’ | <i>rúu-</i> | ‘hole; ear’ | <i>gók-</i> | ‘call’ |
| <i>ɲigróm</i> | ‘lazy eye(d)’ | <i>ɲík-</i> | ‘eye’ | <i>róm-</i> | ‘look askance/to side’ |

Table 5.22 – Body sensation/disposition terms

5.2.3.8. Human propensity

I have attested relatively few HUMAN PROPENSITY terms, and those terms which are attested appear in many cases to be derived by metaphor from PHYSICAL PROPERTY terms (whether basically nominal or adjectival). For example, *alùk* ‘depressed; forlorn’ is related to the noun *alùk* ‘burning/irritating sensation’, reflecting an *a*-prefixation of *lùk*- ‘burning sensation; chili pepper’. Other HUMAN PROPENSITY terms have both nominal and adjectival uses with basically the same semantic value – one denoting a property and the other an entity with the property, as *peccáa* ‘fool(ish)’. However, the majority of HUMAN PROPENSITY concepts by far are encoded by Manner predicate derivations – many if not most of which have adjectivalizing functionality, as *məə-kèn* ‘think-GOOD/EASY’ ‘happy’ or *məə-cák* ‘think-BOLDLY’ ‘bold; straightforward and unhesitating’ (both of which may be used as adjectives). For further discussion of Manner predicate derivations, see §11.2.1.

5.2.3.9. Speed

Very few SPEED terms are attested. *dəməə* ‘slow’ is a basic adjective, while *-báa* ‘FAST’ is a Manner predicate derivation with limited adjectivalizing capability. In some subdialects, a probably recent formation *bɪbáa* (seemingly reflecting *bíi*- ‘swell; fill up’ + *-báa* ‘FAST’) has the generalized sense ‘fast’, although not all speakers use (or even particularly appreciate) this word. Certainly, a large number of younger speakers prefer the recent Indic loan *zoldi* ‘fast’, which has been borrowed into foothills Galo as an adjective. Degrees of speed are seemingly not lexicalized in Galo, although numerous

periphrastic modifications of basic SPEED terms are of course possible (including various adverbial and particle emphatics, and also onomatopoeia; see §13.7.7).

5.2.3.10. Difficulty

DIFFICULTY is not robustly lexicalized in Galo. The single attested term is an adjectivalizing Manner predicate derivation *-kèn* ‘GOOD/EASY’, which may have the sense ‘good (to do V)’ or ‘easy (to do V)’, according to the semantics of the situation. For example, *dó-kèn* ‘eat-GOOD/EASY’ generally has the sense ‘delicious’ (lit., ‘good to eat’), but in a situation in which the relative difficulty of eating a particular kind of food (or using a particular type of utensil, such as chopsticks) is under discussion, the sense may be ‘easy to eat (with)’. Difficulty (lack of ease) is expressed by the same form in negative polarity, as *dó-kèn-máa* ‘eat-GOOD/EASY-NEG’ ‘not nice to eat’. This situation is basically parallel with that of VALUE terms (cf. §5.2.3.5).

5.2.3.11. Similarity

Basic SIMILARITY values are expressed by basic adjectives *adók* ‘different’ and *ləjí#* ‘similar; same’. The default sense is of implied similarity, as ‘S/CS is the same as/different from (something else)’; monoclausal comparisons among two items are handled by coordination of the S argument noun phrase, with reflexive marking on the predicate (71).

- (71) *galòo agóm ə̀lə̀ nɪ́nóo agómə̀ lə̀jí# hídu.*
galòo agóm ə̀lə̀ = laa nɪ́nóo agóm = ə̀lə̀ lə̀jí#-hí-duu
TRIBE speech TOP=NCNJ TRIBE speech=TOP similar-REFL-IPFV
‘Galo is similar to Minyong (language).’ (Sili, 10:9)

5.2.3.12. Position

POSITION terms functioning as adjectives in Galo generally also occur as nouns, as *nə̀ci* ‘vicinity; near’ and *adòo* ‘distance; distant’. There are few if any POSITION terms which are exclusively adjectival; most often, relative position of an entity is referenced using a deictic demonstrative, of which there is a very rich system in Galo (§7.4).

5.2.4. Verb class semantics and subclassification

5.2.4.1. Overview

There are fewer verb roots as a percentage of lexemes overall in Galo than may be typical across languages. The principal reason for this appears to be the richness of the system of *predicate derivations* (§11). Although the core semantics of most types of event – concepts such as ‘speak’, ‘see’, ‘eat’ and ‘make’ – are handled by lexical verb roots in Galo, many aspects of event/state manner, temporal/procedural structure, degree of realization and other related concepts which may be lexicalized as inherent features of verb roots in other languages are often handled separately by productively stem-expanding predicate derivations in Galo. This is not an absolute generalization – for example, there is a very large set of ‘cut’ type verbs in Galo, most of which have lexicalized distinctions related to manner, result and/or type of entity affected – but it is fairly noticeable all the same.

The basic subclassification of Galo verbs is in terms of *transitivity*, by which is meant the number of participants for which the event or state depicted by a verb is underlyingly specified, as well as the semantic roles which are assigned to them. A more detailed discussion of the overall derivation from verb semantics to grammatical marking of participant noun phrases at the clause level may be found in §14.1; here we mention only basic lexical-semantic features of verb roots.

In Galo, verbs may be atransitive, intransitive, transitive or extended atransitive/intransitive/transitive, as well as ambitransitive (S=A and S=O). Atransitive verbs do not subcategorize for any obligatory arguments.

| Verb Type | Example | Gloss |
|-----------------------|--------------|---|
| atransitive | <i>dooní</i> | ‘sun; be sunny’ |
| extended atransitive | <i>ám-</i> | ‘be said (that)’ |
| intransitive | <i>ú-</i> | ‘boil; be boiling’ |
| extended intransitive | <i>ín-</i> | ‘go (to GOAL)’ |
| transitive | <i>cír-</i> | ‘boil something’ |
| extended transitive | <i>zí-</i> | ‘give (something to someone)’ |
| ambitransitive S=A | <i>gók-</i> | ‘sing’ (intransitive sense) ‘call (someone)’ (transitive sense) |
| ambitransitive S=O | <i>kér-</i> | ‘be twisted’ (intransitive sense) ‘twist (something)’ (transitive sense) |

Table 5.23 – Transitivity classes of Galo verbs

It is also possible to subclassify verbs on the basis of *event semantics*. In some cases, event semantics line up closely with particular transitivity classes; for example, verbs of Position such as *dùu*- ‘sit’ and *dàk*- ‘stand’ are always intransitive. In other cases, semantic types cut across transitivity classes. For example, among verbs of locution, we find extended intransitive *mèn*- ‘speak’, transitive *gók*- ‘call (someone)’, and extended transitive *záp*- ‘talk (about something to someone)’. Sometimes, a single verb may have multiple senses, with multiple transitivity specifications, while yet retaining a unified semantic core; *ám*- is such a verb, with extended atransitive (‘be said (that)’), transitive (‘say something’), and extended transitive (‘tell someone something’) senses.

In what follows, we will not attempt to take either a strictly transitivity-oriented approach or a strictly event-semantically-oriented approach, since the scope of the enquiry in either case would exceed that of this work. Instead, we simply identify a number of verbal subclasses which have salient, important or unique characteristics *in some sense*, and whose elucidation will aid in comprehension of other aspects of the grammar. A fuller study of the Galo verbal lexicon remains under preparation.

5.2.4.2. Motion

Galo motion verbs are either activity-oriented or goal-oriented. Activity-oriented motion verbs are basically intransitive. Goal-oriented motion verbs are extended intransitive, subcategorizing for an Actor S and an E argument Goal (Source arguments are Oblique/non-core). Marking and syntax of motion verbs at the clause level is discussed in §9.2.2.4.1. Goal-oriented motion verbs lexicalize *directionality* on three topographical planes – upward sloping, downward sloping and on the same (or an unknown) level – as well as *relationship to a deictic center* and *relationship to a confining space*. Sometimes, the same verb participates in one or more semantic paradigms; in some cases, this reflects an inherent polysemy between goal-oriented and activity-oriented senses (as with *ín*- ‘walk; go (to)’ and *áa*- ‘come; enter; move on the same/unknown level’). Table 5.24 presents the set of goal-oriented, directionally-specified motion verbs. Activity-oriented motion verbs are in Table 5.25-Table 5.26.

| Category | Value | Term | Gloss |
|-------------|--------------------|-------------|---------------------------------|
| Directional | Up | <i>càa-</i> | ‘ascend’ |
| | Down | <i>ìi-</i> | ‘descend’ |
| | Same/unknown level | <i>áa-</i> | ‘move (on same/unknown level)’ |
| Deictic | Ablative | <i>ín-</i> | ‘go (away from deictic centre)’ |
| | Allative | <i>áa-</i> | ‘come (toward deictic centre)’ |
| Space | Egressive | <i>nèn-</i> | ‘exit’ |
| | Ingressive | <i>áa-</i> | ‘enter’ |

Table 5.24 – Goal-oriented motion verbs

| Category | Value | Term | Gloss |
|-----------------------|------------------------------|-------------|---|
| Speed | Slow/default | <i>ín-</i> | ‘go; move; walk’ |
| | Fast | <i>zúk-</i> | ‘speed; zip; run’ |
| Increments | Small | <i>kór-</i> | ‘step’ |
| | Large | <i>zòk-</i> | ‘jump’ |
| | Medial | <i>tó-</i> | ‘bounce’ |
| Means | Legs | <i>ín-</i> | ‘walk’ |
| | Non-fully-formed legs | <i>ηέθ-</i> | ‘crawl; slither’ |
| | Paddle ¹⁰⁷ | <i>zàa-</i> | ‘swim’ |
| | Wings | <i>zár-</i> | ‘fly; flap wings’ |
| | Animal | <i>jòo-</i> | ‘gallop’ |
| Medium | Land | <i>ín-</i> | ‘walk; go (on land)’ |
| | Air | <i>déθ-</i> | ‘fly; soar’ |
| | Ether | <i>dèp-</i> | ‘cruise (unimpeded, through air <i>or</i> water)’ |
| Boundary/ Obstacle | Ground | <i>ráp-</i> | ‘move across (an area)’ |
| | Ground-based figure | <i>kòo-</i> | ‘cross (a river/field)’ |
| | Substance | <i>hí-</i> | ‘sludge; trudge (through mud/swamp)’ |
| | Figure | <i>bòo-</i> | ‘cross over (a fence)’ |
| | Vertically-positioned figure | <i>hén-</i> | ‘climb’ |
| | Vertical ground | <i>gá-</i> | ‘scale’ |

Table 5.25 – Activity-oriented motion verbs 1

¹⁰⁷ It seems that the means of *paddling* in water is the sense lexicalized here, rather than the sense of motion through water per se. For example, a fish cannot perform *zàa-*, apparently because it has no limbs. Instead, a fish must perform *dèp-* ‘cruise’, which is the same motion performed by a soaring bird or plane, or a speeding vehicle.

| | | | |
|---|----------------------|-------------|------------------------|
| Non-prototypical participant or condition | Liquid | <i>bíK-</i> | ‘flow’ |
| | Vegetal | <i>máa-</i> | ‘creep’ |
| | Vapour | <i>hùu-</i> | ‘rise; float (vapour)’ |
| | Head | <i>báa-</i> | ‘move one’s head’ |
| | Head | <i>dúr-</i> | ‘go headfirst’ |
| | Hips | <i>kàr-</i> | ‘move one’s hips’ |
| | Butt | <i>kòo-</i> | ‘move one’s butt’ |
| | Knees | <i>nùu-</i> | ‘move at the knees’ |
| | Foot | <i>dáa-</i> | ‘move one’s foot’ |
| | Unintentional | <i>lóm-</i> | ‘slip’ |
| | Uncontrolled | <i>ràə-</i> | ‘stagger’ |
| | Fixed | <i>rú-</i> | ‘fall out; slide’ |
| | Captive | <i>kéK-</i> | ‘flee; escape’ |
| | Axal (through space) | <i>lòo-</i> | ‘swing; roll’ |
| | Axal (stationary) | <i>jéK-</i> | ‘spin’ |
| | Composite | <i>ják-</i> | ‘cascade; fall apart’ |

Table 5.26 – Activity-oriented motion verbs 2

5.2.4.3. Existence and possession

Verbs of existence are intransitive, and include *rə-* ‘live/exist’ and *káa-* ‘have/exist’. Both are basically regular intransitive verbs, not copulas (for definition of “copula”, see §9.3). As existential verbs, the difference between *rə-* and *káa-* is one of *construed animacy*, with *rə-* more usually predicating the existence of animate S referents, and *káa-* more usually predicating the existence of inanimate S referents. Although *rə-* ‘live/exist’ can never predicate the existence of an inherently inanimate referent, *káa-* ‘have/exist’ *can* predicate the existence of an animate referent *if* its animacy is not under focus or is for some reason suppressed. For example, in (72), the first clause in *rə-* predicates the active existence of a group of people in a particular place; predication in *káa-* in this case would establish their existence as a general feature of the world, but would detract from a sense of their activity as a population of concrete individuals. The final clause mentions that no one else was there; in this case, only existence or non-existence of a population is under consideration, hence predication in *káa-* is appropriate.

Predication in *rɔ́-* in this case would suggest that other people were or had been present, but were all dead, had moved on, etc.

- (72) *kocarí əkə̀ akèn-ə̀pigo rətó. ní kə̀bè kaamá.*
 kachari əkə̀ akèn-ə̀pì = go **rɔ́-tó** ní kə̀bè **káa-máa**
 TRIBE IDEF.PL one-two=IND **live/exist**-PFV person other **have/exist**-NEG
 ‘One or two Kacharis **were** (here). There **wasn’t** anyone else.’ (NyR, MDS 009-010)

káa- ‘have/exist’ can also predicate *possession*, basically being construed as the existence or non-existence of a particular entity, *within* a domain of reference to another entity. This “other entity” may occur with genitive marking – arguably, a phrase-internal modifier of the S argument noun phrase head – or without – in the latter case, as a pre-clause topic.¹⁰⁸ Only two illustrative examples are given here (73)-(74); for a fuller discussion of the syntax, semantics and argument marking of existential possession constructions in the broader context of Double topic constructions, see §14.2.2.1.

- (73) *b̃iik ədd̃iñ bóol kaadù.*
b̃iik-kə̀ ədd̃iñ-nà bool **káa-dùu**
3.SG-GEN incredible-NZR:SUB force(<Ind) **have/exist**-IPFV
 ‘It (the mithun) **has** great girth.’ (lit., ≡ ‘**Its** great girth **exists**.’) (LN, MH 034)

- (74) *“purùune...ŋó jòo híin-nombór*
 purùu = nè **ŋó** jòo híin-nombor
 whitecrested.laughing.thrush=NAGT **1.SG** any sign(<Asm)-token(<Asm)
zihí kaakú mâ.”
 zí-há **káa-kú-máa=**_
 give-NZR:IRR **have/exist**-CMPL-NEG=FI
 “(And) to Whitecrested Laughing Thrush...**I’ve** no token (of affection) left to give [having given everything away to other individuals].” (lit., ≡ ‘**As for me, there’s** no token (of affection) left to give (**among all things pertaining to me**)’) (MK, TT 143)

| Term | Gloss | Basic senses | Extended senses |
|-------------|--------------|--|-----------------|
| <i>rɔ́-</i> | ‘live/exist’ | active existence of animate entities | -- |
| <i>káa-</i> | ‘have/exist’ | simple existence of animate/inanimate entities | possession |

Table 5.27 – Verbs of existence and possession

¹⁰⁸ In fact, a case can be made that the genitive-marked possessor is in fact also syntactically pre-clausal, and not inside the S argument noun phrase at all. However, due to the impossibility of NP-extraction of a genitive phrase in Galo, this turns out to be extremely difficult to conclusively show.

5.2.4.4. Posture and location

A variety of verb roots denote various states of body posture/position, such as *gék*- ‘lie down/back; recline’ and an obligatorily result derivation-taking sense of *gǎ*- ‘carry; wear; be disposed’ (as in *gǎ-rǎp* ‘be.disposed-UPRIGHT’ ‘get up’). Among them, posture verbs *dàk*- ‘stand’ *dóo*- ‘lie down (as though to sleep)’ and *dùu*- ‘sit’ also have a variety of extended functions (Post forthcoming 2008). First, they may be used as common intransitive verbs indicating the *posture* or *position* of an *animate S* (75)-(77).

(75) *upái kaamáa lèem jidûmæ...*

upai káa-máa-lèe = əəm = əə jidûm = əə
means(<Ind) have/exist-NEG-SSEQ=ACC.TSUB=TOP everybody=TOP
daktûm doolà.

dàk-túm-dó(o)-là(a)

stand-CLOSED-STAT-NF

‘It was incredible, everyone was **standing** there to block [the deer’s escape].’
(NyR, MDS 108)

(76) *níktúm tóm búl jùptə là doonəmə.*

ník-túm-tó = əəm bulù jùp-tà-là(a) **dóo**-nam = əə
punch-CLOSED-PFV=ACC.TSUB 3.PL sleep-INCP-NF **lie.down**-NZR:RLS=COP.IPFV
‘After pushing (the door) closed they **lay down** to sleep.’ (TR, FA 025)

(77) *akên nà da êm iiják hilà duutò.*

akên = na da əmə íi-ḡák-hí-là(a) **dùu**-tó
one=SLCT CNTR fire bask-INTENSELY-REFL-NF **sit**-PFV
‘And then one of them was **sitting** and warming himself intently.’ (TR, FA 022)

In addition, all three position verbs may be used as *locational (existential)* verbs, predicating the existence of an S argument referent (a figure) at a given location (ground). In this case, verb selection is based on a variety of criteria:

- (1) **animacy/agentivity** of S argument referent
- (2) **duration/permanence** of S at location
- (3) **physical characteristics** of S argument referent¹⁰⁹
- (4) **orientation/disposition** of S argument referent vis-à-vis location

Generally speaking, *dùu-* ‘sit’ tends to select for an *animate* S which is viewed as *temporarily* occupying a location (78), and/or an *inanimate* S viewed as relatively *bulky* and in an *upright* position vis-à-vis the ground (79).

(78) *arúm ogò ñùn tòl duulâa kú.*

arúm ogò ñùn tòl **dùu**-là(a)-kú
 evening ANAP.LOC 1.PL DST.LOC.UP **sit**-NF-CMPL
 ‘That evening we **stayed** up there.’ (RmR, CC 035)

(79) *duubâə dù, ìlîə.*

dùu-bâə-dù ìlî = əə
sit-DUR-IPFV stone=TOP
 ‘It’s still **there**, the stone.’ (LN, TG 086)

dóo- ‘lie down’ tends to select for an *inanimate* S, prototypically viewed as relatively *extended* and in a *prostrate* position vis-à-vis the ground (80), and/or an *animate* S, viewed as *permanently* occupying a given location (as a home, village, or settlement) (81).

(80) *ìhîə doolà cintù airə.*

ìhî = əə **dóo**-la(a)cìn = tu ài-ré
 wood=TOP **lie down**-CONC=FOC(<Asm) heavy-IRR
 ‘Even if **there’s** wood (to be found in the shady side of the mountain), it will be heavy (because it will probably be wet).’ (RmR, CC 192)

¹⁰⁹ For this and other reasons, Aikhenvald (2000: §6.2.3, esp. 155-156), also citing LaPolla (1994), views the operation of locational/existential verbs in Tibeto-Burman (and in other languages) as basically *classificatory* (see also Merlan, Roberts et al. (1997) for a description of a similar phenomenon in Papuan languages). This approach seems well-motivated, although it is also worth noting that some aspects of locational verb selection – such as duration of location – are not as obviously classificatory in nature.

(81) *mootùm b́ doodák ogò...*

mootùm = b́ **dóo**-dák ogò

jungle=DAT **lie.down**-COS ANAP.TMP

‘Back when (we) **lived** in the jungle [lots and lots of wild animals were there].’

(LN, GMW 061)

dák- ‘stand’ freely selects for an *animate* or *inanimate* S; however, the entity in question is usually one with *legs* or *leg-like features*, and in a more-or-less *vertical/upright posture* (82). Interestingly, *dák*- is also used to predicate existence/location of *inanimate entities* which are construed as *contained within* and/or *attached to* another entity (83).¹¹⁰

(82) *áb-taníin takâa dù, “nokkâ hobâ-hîpîk*

abó-taní = nè takâa-dùu nó-kâ = əə hobâ-hîpîk

Abo.Tani=NAGT ask-IPFV 2.SG-GEN=TOP mithun-mithun.pen

dâgdâ rê?” “má, kaamá.”

dák-dó(o) = ree máa kâa-mâa

stand-STAT=PQ NEG have/exist-NEG

‘(She) asked Abo Tani, “**Do you have** a mithun pen¹¹¹ [lit., “Concerning your (possessions), **is there** a mithun pen standing]?” “Nope, (he said,) I’ve none.”’

(83) *əgbâ dagnâm gò dagdù. túrnâ gò.*

əgâ = b̂ dák-nam = go **dák**-dùu túr-nâ = go

ANAP.IND=DST.DOWN stand-NZR:RLS=IND **stand**-IPFV be.alive-NZR:SUB=IND

‘So, that’s to say that something **is** (down) **in there** [lit., ‘a standing (thing) is standing]. Something alive.’

Some variations to the basic themes may be found, generally with marked or non-prototypical senses. For example, *dóo*- ‘lie down’ may sometimes be used to predicate the existence of an animate entity which is *not* in fact in a lying-down position or permanently-settled situation. The effect in this case is to *suppress* the animacy and/or thematic importance of the referent in question. For example, in (84), which is a sentence from a picture book-based narration based on the so-called “Frog Story” (Mayer 1969) it is quite clear from the picture being described (picture #18) that the dog is in fact *standing*; use of *dóo*- in this case highlights the dog’s lack of activity/agentivity, and/or marginal relevance to the main event-line of the narrative.

¹¹⁰ The same phenomenon may be found among Apatani examples in Abraham (1985: 70).

¹¹¹ Note that a mithun pen is construed as ‘having legs’ due to its being framed by fenceposts.

- (84) *oká..ikî əəcìn..ilî compíg bǎ kâhi là doodù.*
 okkǎə ikii əə = cìn ilî compík = bǎ kahì-là(a) **dóo**-dùu
 SCNJ dog TOP=ADD stone underneath=DAT hide-NF **lie.down**-IPFV
 ‘And so...the dog also...**was there** hiding by the base of the stone.’

Table 5.28 summarizes the selectional criteria discussed.

| Verb type → Selectional criterion ↓ | ‘sit’ | ‘lie down’ | ‘stand’ |
|--|---------|------------|---|
| animacy/agentivity | high | low | any |
| permanence | low | high | any |
| physical features | bulky | extended | with legs |
| orientation/disposition | upright | prostrate | upright (<i>iff</i> with legs) contained/attached (otherwise) |

Table 5.28 – Selectional criteria of positional verbs in locational function

5.2.4.5. Auxiliary of completion *á-* ‘keep’

á- ‘keep; place; set’ occurs as a common transitive verb of manipulation, as *ogò á-tó = kée* ‘APRX.LOC keep-IPTV.ODIR=HORT.POL’ ‘keep it over there (near to you)’. When occurring as the final predicate of a predicate- or clause-chain in *-là(a)* (cf. §16.4.2), *á-* has a weakly grammaticalized auxiliary-like use. In this use, *á-* does not code an independent event, nor even an analytically distinct aspect of the main event, but rather has the modifying sense ‘affect O completely/finally (with no event-residue remaining)’.

In the context of manipulation predicates, the sense of *á-* may be polysemous among ‘keep; place; set’ and ‘affect O completely’; for example, in (85), *á-* seems to project *both* a sense of manipulation of the door (‘keeping’ it in a propped-closed manner), *and* a sense of complete or final affecting of O (as though no further door-opening-and-shutting was likely to take place). In non-manipulation predicates, however, the sense of *á-* is *only* one of final or complete affecting of O. In (86), there is no sense of the speaker manipulating his land directly; rather, the sense is that the entire area of his land will be affected by the fencepost-setting event, as opposed to any partial subset.

- (85) *əɾəpəm hɪɪdâago lâagərəmɔ...tuutûml*
 əɾáp = əəm hɪɪdâa = go lâa-gərɔ = əəm = əə tùu-túm-là(a)
 door=ACC stick=IND take-ACNC=ACC.TSUB=TOP prop-CLOSED.S/O-NF
aká.
 á-káa
keep-PF
 ‘Taking a stick, they propped the door shut.’ (IR, FA 033)
- (86) *ŋôk kodeəm dîirə là arɔ.*
 ŋó-kə kodée = əəm dîi-rə-là(a) á-rɔ
 1.SG-GEN soil=ACC piledrive-MARK.S/O-NF **keep-IRR**
 ‘I’m going to demarcate my land (by setting up fenceposts).’ (MN, B3:103)

5.3. Word-formation processes

This section describes language-general patterns underlying the internal structure of Galo lexemes, and also assesses the extent to which they are productive in the formation of new words. It is divided into major subsections on nouns and adjectives (§5.3.1), verbs (§5.3.2) and adverbs (§5.3.3).

5.3.1. Word structure 1: Nouns and adjectives

The structure of Galo nouns and adjectives is primarily based upon two types of template. Both are essentially two-part templates, where each “part” may be, in principle, an affix, root, or word (according to the subtype).

The templates are further structured in two ways: they may be *symmetrical* or *asymmetrical*. In an *asymmetrical* template, the two formatives do not have the same status. In this case, the first term is always relatively *generic*, and invokes a relatively broad *semantic type*, while the second term has a more *specific* sense, narrowing the denotation to a *particular exemplar* or *quality* of the type. In a *symmetrical* template, the two terms are balanced with respect to semantic generality, and may each be (arbitrarily) described as “specific” (Figure 5.10).

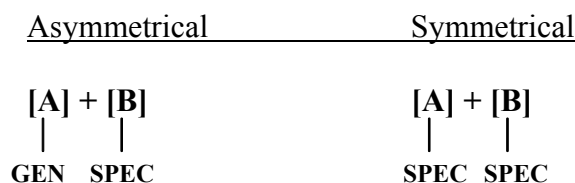


Figure 5.10 – Types of word-formation template

Asymmetrical Generic-Specific composition is the most frequently-attested of the two types, with examples found among prefixed roots, root-root compounds, and two-term compound nouns and adjectives. In (87), the prefix *a-* designates the term quite broadly as a basic noun or adjective, while the root narrows the denotation. In (88), the prefix *ho-* designates the term as a type of animal, while the root again narrows the denotation.

- (87) *abó*
 a- bó-
 PFX male; father
 GEN SPEC
 ‘father’ (prefixed root)

- (88) *hoó*
 ho- ó-
 PFX cattle
 GEN SPEC
 ‘cattle’ (prefixed root)

Similarly, in the compounds (89) and (90), the first formative designates a type of snake or dog respectively, while the second formative again narrows the denotation; however, while in (89) the two terms are roots, the terms in (90) are words, which in turn have their own asymmetrical internal structure. In this sense, the templates may be understood as applying recursively.

- (89) *bità*
 bí- tà-
 snake big
 GEN SPEC
 ‘king cobra’ (root-root compound)

- (90) *ikii kiibò*
 ikii kiibò
 dog male.dog
 GEN SPEC
 i- kii- kii- bó-
 PFX dog dog male; father
 GEN SPEC GEN SPEC
 ‘male dog’ (two-term compound)

It might be wondered whether the Generic-Specific patterning exemplified here and below might not be more straightforwardly described in terms of “Modifier-Modified”, “Head-Modifier”, or “Head-Dependent” relations, concepts which are perhaps more commonly employed in the analysis of linear ordering relations in language. However, it would appear that the prefixes in (87)-(88) “modify” or “depend” on the following root at the same time as the second, more adjectival or descriptive formatives in (89)-(90) “modify” or “depend” on the first. Thus, the “order of modification” in Galo word-internal structure, to the extent that it exists, would appear mixed: there are both H-MOD and MOD-H types.

An alternative view, and the view taken in this work, is that a general concept of “modification” is basically inapplicable to Galo word-formation, and that the relevant concept is in fact “classification” (in the sense of a Type-Exemplar/Quality or, as it has been described here, a Generic-Specific type of patterning). A more complete discussion of this phenomenon in the Tani languages will be found in (Post in preparation-a).

Symmetrical ordering is primarily found among two-term compounds such as in (91)-(92). These are discussed in more detail below (§5.3.1.4.1).

- (91) *hottúm-horé*
 hottúm-horé
 bear-boar
 ‘wild animals’ (two-term compound)

- (92) *donám-tiinám*
 donám-tiinám
 eating-imbibing
 ‘sustenance’ (two-term compound)

5.3.1.1. Prefixed roots

A large number of basic nouns and adjectives in Galo have the internal structure [PFX-ROOT]. Although such patterns are largely unproductive in modern Galo, due to a probable earlier high productivity there are large numbers of exemplars in the lexicon, as well as some vestiges of productivity in certain semantic domains. Prefixes have no status as underlying TBUs in Galo, meaning that the surface tone of a noun or adjective composed of a prefixed root will always be a direct reflex of the underlying tone of that root (§4.1.4.2).

5.3.1.1.1. *a*- prefix

A very large percentage of basic nouns and adjectives have initial *a*- or a short vowel of another quality *Vα*-, both of which may be traced to an earlier prefix PTs **a*- (ultimately probably < PTB non-pronominal **a*- (Lehman 1975)). *Vα*- reflexes of **a*- reflect harmonization with a root-nuclear vowel -*Vα*-, a sporadic and seemingly unpredictable process which has had different outcomes among different Tani languages (as in Galo *ə-mə* and Milang *a-mi* (Tayeng 1976:36), both < PTs **a-mi* ‘fire’; cf. §2.4.3.1). Often, lexicalization of prefixal vowel harmony introduced a segmental contrast at the word level at the same time that root-internal sound changes had rendered two terms otherwise segmentally homophonous, e.g. *akii* ‘guts’ (< PTs **a*- + **kri* ‘guts’) and *ikii* ‘dog’ (< PTs **a*- + **kwii* ‘dog’).¹¹²

Not every word-initial *a*- or *Vα*- is a true reflex of **a*-. For example, although *ənə* ‘(cattle) cow’ looks similar in form to *əmə* ‘fire’, the second reflects a genuine earlier **a*- prefixation in PTs **a*- + **mi* ‘fire’ (again, cf. Milang *ami*) while the first is a compound of the form *ə*- ‘cattle’ + *nə*- ‘female’ (cf. *əbó* ‘(cattle) bull’ and *hoə* ‘cattle’).

Due to historical harmonization processes, it is sometimes extremely difficult to discern the correct etymology. For example, does *okò* ‘broadleaved nonwoody shrub’

¹¹² It may be that lexicalization of vowel harmony in some words but not others was in part motivated by the need to preserve lexical contrasts in the face of ongoing syllable erosion, although this is difficult to prove. No perfect predictor of the lexicalization of vowel harmony has yet been discovered, however it is somewhat more frequently attested among terms denoting cultural artifacts and objects of the natural world, in that order. Very little can be said beyond this for the present.

reflect pre-Lare **a-* + **kò-* ‘broadleafed nonwoody shrub’ (with root-nuclear harmonization of the initial prefix)? Or is it a compound *ó-* ‘vegetable’ + *kò-* ‘ibid.’? On a language-internal basis alone, it is probably impossible to determine with any certainty.¹¹³

Additionally, it appears that in some cases reanalysis of a vowel-harmonized prefix as a root may have occurred. Compare *opòo*, ‘liquor’ with *odáa* ‘prime liquor (from first filtration)’. *opòo* almost certainly reflects PTs **a-* + **poŋ* ‘liquor’ (cf. Minyong, Mising, and Padam *apoy* ‘liquor’), followed by root-nuclear harmonization at or before the PG stage. Then what is the composition of *odáa*? The second element *dáa-* is a root meaning ‘big; first; fast’ (cf. *cəədáa* ‘thumb finger’ (< *cəə-* ‘finger; extension; protrusion’ + *dáa-* ‘big; first; fast’)); the sense of ‘liquor’ therefore seems to derive from a reanalysis of post-vowel-harmony prefixal *o-* as a root *ó-* ‘liquor’ (cf. also the apparently synonymous form *poodàa* ‘prime liquor’). While not altogether common, other cases of prefix-reanalysis may be found.¹¹⁴

Terms exhibiting true reflexes of PT **a-* are typically “core vocabulary” items, denoting basic, common, familiar and frequently referred-to terms from among the semantic fields presented in Table 5.29.

¹¹³ The fact the *okò* leaves are not, in general, eaten (more often, they are used to wrap food in and/or used as plates), but terms bearing the initial compound element *ó-* ‘vegetable’ usually *are* eaten suggests that the prefixal etymology is the more likely. However, this evidence is not overwhelming.

¹¹⁴ E.g. *hocùu* ‘mithun calf’, from reanalysis of prefixal *ho-* ‘animal prefix’ in *hobé* ‘mithun’ plus *cùu-* ‘infant’. The logic behind this reanalysis would seem to entail a view of mithuns as prototypical higher animals – something quite robustly evidenced by their critical importance to Galo traditional culture.

| Semantic Type | Term | Gloss |
|-------------------|-------------|---------------------------|
| Kinship | <i>abó</i> | ‘father’ |
| | <i>anə</i> | ‘mother’ |
| Body Parts | <i>alák</i> | ‘hand/arm’ |
| | <i>alə</i> | ‘foot/leg’ |
| Nature | <i>adí</i> | ‘mountain/hill’ |
| | <i>abúu</i> | ‘river’ |
| Culture | <i>írɔ́</i> | ‘bow’ ¹¹⁵ |
| | <i>amèn</i> | ‘gift’ |
| Numerals | <i>akèn</i> | ‘one’ |
| | <i>íríí</i> | ‘ten’ |
| Classifiers | <i>apáa</i> | ‘one long thing’ |
| | <i>ahú</i> | ‘one set of four’ |
| Physical property | <i>ajàr</i> | ‘length; long’ |
| | <i>apóo</i> | ‘breadth(wise)’ |
| Human propensity | <i>anèk</i> | ‘hat(red)’ |
| | <i>ajáa</i> | ‘small; cute; love(able)’ |

Table 5.29 – Representative set of terms with *a-* ~ *Va-* + root composition

It is difficult to reconstruct the proto-function of **a-*, in Tani as in Tibeto-Burman more generally. As a prefix to nominal roots, it may have been related to *individuation*. Modern reflections of this possible proto-function are found among classifiers (§8.2.2), which are productively prefixed in *a-* – not by vowel-harmonized forms – and inherently denote an individual (not a generic concept).

It is also possible that some if not all *a-* prefixed adjectives represent earlier derivations from – possibly, nominalizations of – basic verb roots. For example, *adɛk* ‘irritating’ has verb root counterpart *dɛk-* ‘irritate’, from which it is very probably historically derived. In Meithei, a (not very closely) related Tibeto-Burman language spoken in nearby Manipur, precisely such a derivation is found; Meithei adjectives, which are reported not to occur as a major non-derived lexical class, are instead derived synchronically via prefixation of verb roots with a morpheme *ə-* ‘Attributive’, a possible cognate of PTs **a-* (Chelliah 1997:86).

¹¹⁵ PTs **-ɪ* underwent Word-final weakening in Lare and Pugo Galo (§2.4.4.5), which explains the modern prefixal non-homophony with the root-nuclear vowel to which it had historically harmonized; cf. Zirdo Galo *írɔ́* ‘bow’.

All these facts notwithstanding, *a*-prefixation is not a productive word-formation process among ordinary lexemes in modern Galo; *adùp* ‘chafing’ is not derived from a verb root **dùp-*, inasmuch as no such verb root occurs in Galo (or, at least, it is not used, and is rejected, by my consultants who do, nevertheless, use *adùp*), and *zî* ‘(be) plump’ has no adjectival counterpart **azî* ‘plump’. *a*-prefixation is best described as an important, widespread earlier process or set of processes which, once productive, is now mainly reflected only in the structure of the lexicon.

5.3.1.1.2. *ta-* prefix

Many nouns, and a much smaller number of adjectives, bear initial *ta-*, reflecting an earlier prefix PTs **ta-* which, unlike PTs **a-*, almost never vowel-harmonized (§2.4.3.1).¹¹⁶ Reflexes of **ta-* are found on terms denoting insects and other lower animals, types of plant or plant products (such as grains or fibers), features of the natural world, as a diminutive prefix to the given name of a male when addressed by an elder, and by certain other terms relating to males. Table 5.30 illustrates the distribution of Galo *ta-*. In Table 5.30, note especially that the nuclear root of *taîi* ‘youngest son’ is *îi-* ‘last; youngest’, not ‘last/youngest male’; therefore, the semantic component ‘Masculine’ seems to be fully projected by *ta-*.

¹¹⁶ Rare seeming exceptions are *təpə* ‘maize/corn’ and *tîjîr* ‘variety of stubby-headed fish’.

| Semantic Type | Term | Gloss |
|----------------------|--------------|---|
| Insects | <i>takə</i> | ‘body louse’ |
| | <i>taik</i> | ‘head louse’ |
| Lower animals | <i>takə</i> | ‘squirrel’ |
| | <i>taci</i> | ‘crab’ |
| Plants | <i>takée</i> | ‘ginger’ |
| | <i>taín</i> | ‘mushroom’ |
| Plant products | <i>tacək</i> | ‘cotton’ |
| | <i>taó</i> | ‘thorn’ |
| Natural objects | <i>taí</i> | ‘hail (ice rain)’ |
| | <i>talóə</i> | ‘sky’ |
| Diminutive Masculine | <i>tapə</i> | ‘nickname of a man named Kenpə’ |
| | <i>tapúu</i> | ‘whitey’ |
| Other Masculine | <i>taii</i> | ‘youngest son’ |
| | <i>taníi</i> | ‘man; the father of humankind; the Tani languages and their speakers’ |

Table 5.30 – Representative set of terms with *ta-* + root composition

As a Diminutive prefix for male proper names, *ta-* prefixation remains fully productive in Galo (§5.2.2.2). On the basis of the overall distribution it may be possible to reconstruct a proto-value ‘(Masculine) diminutive’ for **ta-*.

5.3.1.1.3. *ja-* prefix

**ja-* seems to occur largely as a feminine-gender counterpart to **ta-*, although its distribution is relatively narrower. In addition its use as a diminutive prefix for younger female given names, *ja-* prefixes are principally found on colour terms and a small number of terms mainly denoting concepts with a negative connotation. Although *ja-* prefixed colour terms may be used as adjectives or nouns, when used as nouns they do not have an abstract reference, but rather refer to an *individual* with the property (§5.2.3.6).

Table 5.31 exemplifies the attested distribution of the *ja-* prefix.

| Semantic Type | Term | Gloss |
|----------------|--------------|--|
| Colour terms | <i>japúu</i> | ‘white (one)’ ¹¹⁷ |
| | <i>jakàa</i> | ‘black (one)’ |
| Negative value | <i>japóm</i> | ‘malevolent fairy; demon’ |
| | <i>jarì</i> | ‘starvation’ |
| | <i>jasì</i> | ‘urine’ |
| Feminine | <i>jaì</i> | ‘last daughter’ |
| | <i>jatèr</i> | ‘nickname of a woman named <i>kentèr</i> ’ |

Table 5.31 – Representative set of terms with *ja-* + root composition

5.3.1.1.4. *pV-*prefix

Roots prefixed by reflexes of PTs **pa-* almost always refer to *birds* (cf. §5.2.2.3), although a few terms referring to objects associated with birds and/or the act of flying are also found. The PG nucleus is not easy to reconstruct, since it occurs in Galo as *pə-* in some cases (such as *pətáa* ‘bird’), exhibits root-nuclear vowel harmony in other cases (such as *pokóo* ‘peacock *spp.*’, and occurs as a completely different vowel in a small number of other cases (such as *pilàm* ‘myna (*Acridotheres tristis*)’. Accordingly, **pa-* is reconstructed mainly for sake of symmetry with other prefixes in **-a-*, and is potentially subject to revision (Table 5.32).

¹¹⁷ Note the semantic contrast with *tapúu* ‘whitey’; while *tapúu* must be used as a term of address for a male, *japúu* can be used to denote any white-coloured entity, as well as the abstract property ‘white’.

| Term | Gloss |
|---------------|---|
| <i>pətáa</i> | ‘bird’ |
| <i>porók</i> | ‘chicken (domestic fowl)’ |
| <i>pupə</i> | ‘owl <i>spp.</i> ’ |
| <i>pucùp</i> | ‘sparrow/finch <i>spp.</i> ’ |
| <i>paàk</i> | ‘raven <i>spp.</i> ’ |
| <i>pokóo</i> | ‘peacock <i>spp.</i> ’ |
| <i>pəróo</i> | ‘pigeon <i>spp.</i> ’ |
| <i>pəzàp</i> | ‘duck/waterfowl <i>spp.</i> ’ |
| <i>pəbèe</i> | ‘parrot/parakeet <i>spp.</i> ’ |
| <i>pokòk</i> | ‘blackbrowed tree pie (<i>Dendrocitta frontalis</i>)’ |
| <i>purúu</i> | ‘whitecrested laughing thrush (<i>Garrulax leucolophus</i>)’ |
| <i>pilàm</i> | ‘myna (<i>Acridotheres tristis</i>)’ |
| <i>pudùr</i> | ‘great barbet (<i>Megalaima virens</i>)’ |
| <i>pəgáa</i> | ‘great pied hornbill (<i>Buceros bicornis</i>)’ |
| <i>pimùu</i> | ‘whitecheeked hill partridge (<i>Arborophila atrogularis</i>)’ |
| <i>pírík</i> | ‘k(h)aleej pheasant (<i>Lophura leucomelana</i>)’ |
| <i>píhík</i> | ‘rufousnecked hornbill (<i>Aceros nipalensis</i>)’ |
| <i>pítín</i> | ‘small owl <i>spp.</i> , incl. forest eagle-owl (<i>Bubo nipalensis</i>) and collared scops owl (<i>Otus bakkamoena</i>)’ |
| <i>picík</i> | ‘spotted munia (<i>Lonchura punctulata</i>)’ |
| <i>pírsìn</i> | ‘red jungle fowl (<i>Gallus gallus</i>)’ |
| <i>pítír</i> | ‘chicken coop’ |
| <i>pílii</i> | ‘chicken flea’ |
| <i>poróo</i> | ‘arrow flight(s)’ |

Table 5.32 – Representative set of terms with *pV-* + root composition

5.3.1.1.5. *ho-* prefix

Roots denoting higher animals are usually prefixed by *ho-* in Lare Galo.

Reconstructing **ca-*, Sun (2003) relates this prefix to PTB **sya* ‘meat/flesh/animal’ (Matisoff 2003:639). Reflexes vary among Tani languages, often irregularly; Apatani has *sí-* (cf. *síbi* ‘monkey’ (Abraham 1987:101)), Mising usually has either *ci-* ~ *si-* or *so(o)-* (cf. Pagro Mising *síbee* ‘monkey’ and *sooben* ‘goat’), and Galo usually has *co-* ~ *so-* ~

ho- (according to dialect). The provenance of the back, rounded vocalism in Galo is uncertain and intriguing, as it is not a regular reflex of **a* in Lare or Pugo Galo.¹¹⁸

The prefix has its closest lexical affinities to cattle and/or mithuns (*Bos frontalis*), perhaps relating to an idea of bovines overall as a prototypical or idealized source of meat. In Apatani A, *sɿ* ‘cattle’ seems to be a fully lexical noun (Abraham 1987:99). In Galo *hoɔ* ‘cattle’ seems to be, within reconstructible history, a prefixation of *ho-* to *ɿ-* ‘cattle’ (cf. *ənə* ‘cattle cow’ < *ɿ-* ‘cattle’ + *nə-* ‘female; mother; large; cow’), while *hobɔ* ‘mithun’ appears to have a like structure in which *ho-* is prefixed to a root PG **bo* (cf. *botə* ‘mithun bull’). At the same time, in *honə* ‘mithun cow’, the *ho-* element has now seemingly been reanalysed as signifying ‘mithun’ (Table 5.33).

| Semantic field | Term | Gloss |
|--------------------|---------------|----------------|
| Mithuns | <i>hobɔ</i> | ‘mithun’ |
| | <i>honə</i> | ‘mithun cow’ |
| | <i>hopìn</i> | ‘mithun hide’ |
| | <i>hocùu</i> | ‘mithun calf’ |
| Other high animals | <i>hoɔ</i> | ‘cattle’ |
| | <i>hobìn</i> | ‘goat’ |
| | <i>hobée</i> | ‘monkey’ |
| | <i>horɔ</i> | ‘boar’ |
| | <i>hodùm</i> | ‘barking deer’ |
| | <i>hocór</i> | ‘stag deer’ |
| | <i>homén</i> | ‘tiger’ |
| | <i>hottúm</i> | ‘bear’ |
| | <i>horám</i> | ‘otter’ |
| | <i>horák</i> | ‘rhinoceros’ |
| | <i>hocìk</i> | ‘pangolin’ |

Table 5.33 – Representative set of terms with *ho-* + root composition

5.3.1.1.6. *pa-* prefix

A prefix *pa-* – probably not cognate with **pa-* ‘PFX:FLYING’ – is found mainly on basic adjectives, as well as one or two nouns and verbs, mainly denoting shapes and/or

¹¹⁸ Short **a* → *o* is attested in Galo, particularly among northern dialects such as *karkóo*; however, it is not a regular change in any dialect for which my data are at all extensive (§2.4.4.7.2).

(body) dispositions (§5.2.3.7). This does not seem to reflect a synchronically productive formation (Table 5.34).

| Term | Gloss |
|--------------|---|
| <i>pagáp</i> | ‘clench (as a tree trunk between one’s legs) (VT)’ |
| <i>pagùu</i> | ‘bent; U-shaped (ADJ)’ |
| <i>pakóo</i> | ‘crossed, of the limbs (legs <i>or</i> arms) (ADJ)’ |
| <i>pakér</i> | ‘wavy (ADJ)’ |
| <i>pagér</i> | ‘crooked (ADJ)’ |
| <i>pazòm</i> | ‘sloping (ADJ)’ |
| <i>pazòo</i> | ‘supporting beam (N)’ |
| <i>padùm</i> | ‘confluence (N); merged (ADJ)’ |
| <i>papòo</i> | ‘drape one’s legs across something, as a sleeping partner (VT)’ |

Table 5.34 – Representative set of terms with *pa-* + root composition

5.3.1.1.7. *kVV-* prefix

Terms denoting *flavours* typically occur with a vowel-harmonized prefix *kVV-* (possibly reflecting PTB **ka* ‘mouth’ (Matisoff 2003:659)). The modern Galo composition is non-productive (Table 5.35).

| Term | Gloss |
|---------------|-----------------|
| <i>kaacàk</i> | ‘bitter’ |
| <i>kuucùk</i> | ‘sour’ |
| <i>k#icik</i> | ‘salty’ |
| <i>keebèk</i> | ‘starchy/green’ |

Table 5.35 – Representative set of terms with *kVV-* + root composition

5.3.1.2. Root-root compounds

Root-root compounds are the most frequently-attested structural type among nouns and adjectives. Most if not all reflect an underlying asymmetrical Generic-Specific pattern, in which the first formative denotes a type and the second formative denotes an exemplar or quality of the type (§5.3.1). Root-root compounds probably derive historically from, in most cases, N-N, ADJ-ADJ, or N-ADJ compositions (ADJ-N probably either did not occur, or was much less frequent); however, the word class status of the modern compound cannot be safely predicted from the semantic value and/or proto-word-

class-value of its constituent formatives; as also discussed in §5.1.2, many root-root compounds such as *dumpúu* ‘white hair(ed)’ (*dúm-* ‘head’ + *púu-* ‘white’) may function freely as either adjectives or nouns. Each formative of a root-root compound is always an underlying TBU, with the tone of the surface word derived from their interaction following the basic principle *low trumps high* (§4.1.3.2). Table 5.36 briefly analyses the composition of a few root-root compound nouns, adjectives, and categorically ambiguous terms.

| Compound | | Root 1 (Generic) | | Root 2 (Specific) | |
|---------------|---------------------|------------------|-----------------|-------------------|------------------------|
| Term | Gloss | Term | Gloss | Term | Gloss |
| <i>dumpìn</i> | ‘barking deer skin’ | <i>dùm-</i> | ‘barking deer’ | <i>pìn-</i> | ‘skin’ |
| <i>beehòr</i> | ‘langur’ | <i>bée-</i> | ‘monkey’ | <i>hòr-</i> | ‘length/long’ |
| <i>dumpúu</i> | ‘white hair(ed)’ | <i>dúm-</i> | ‘head (hair)’ | <i>púu-</i> | ‘white’ |
| <i>hibùu</i> | ‘river’ | <i>hì-</i> | ‘water’ | <i>búu-</i> | ‘pipe’ |
| <i>luuráp</i> | ‘fence gate’ | <i>lúu-</i> | ‘fence’ | <i>ráp-</i> | ‘door’ |
| <i>tələe</i> | ‘wild elephant’ | <i>tə-</i> | ‘elephant; big’ | <i>lèe-</i> | ‘wild (animal)’ |
| <i>lìcǎ</i> | ‘red’ | <i>lǎ-</i> | ‘red’ | <i>cǎ-</i> | ‘bright/glowing (red)’ |

Table 5.36 – Representative selection of root-root compounds

5.3.1.3. “Suffixlike” formatives

There are few if any true nominal suffixes in Galo. There are however some frequently-occurring root-root compound formatives which can easily be mistaken for suffixes, and which merit some discussion. The relevant semantic categories are *gender* (§5.3.1.3.1), *number* (§5.3.1.3.2) and *negativity* (§5.3.1.3.3).

5.3.1.3.1. Gender

Nouns do not inflect for gender in Galo, nor is there any gender agreement. However, a number of asymmetrical (Generic-Specific) root-root compounds include frequently-recurring final formatives which denote the semantic gender of an entity, as male, female or infant; for example, in *kiibò* ‘male dog’, *kiinà* ‘female dog’, and *kiicùu* ‘puppy’, the first formative *kìi-* ‘dog’ identifies the type ‘dogs’ and the second formatives *bó-* ‘father; male’, *nà-* ‘mother; female; large; cow’ and *cùu-* ‘infant’ narrow the reference to the male, female and infant members of that set respectively. The pattern is clearest among animal names (Table 5.37).

| Generic | | Male | | Female | | Infant | |
|--------------|--------------|--------------|-----------------|--------------|----------------|------------------------------|------------------------------|
| Term | Gloss | Term | Gloss | Term | Gloss | Term | Gloss |
| <i>ikii</i> | ‘dog’ | <i>kiibò</i> | ‘male dog’ | <i>kiinà</i> | ‘female dog’ | <i>kiicùu</i> | ‘puppy’ |
| <i>hotà</i> | ‘elephant’ | <i>təbò</i> | ‘elephant bull’ | <i>tənà</i> | ‘elephant cow’ | <i>təcùu</i> | ‘elephant baby’ |
| <i>hocér</i> | ‘stag deer’ | <i>cərbó</i> | ‘stag buck’ | <i>cərnà</i> | ‘stag doe’ | N/A | N/A |
| <i>hoó</i> | ‘cattle’ | <i>əbó</i> | ‘cattle bull’ | <i>ənà</i> | ‘cattle cow’ | <i>nəzìr</i> <i>bodíi</i> | ‘female calf’ ‘male calf’ |
| <i>hobó</i> | ‘mithun’ | <i>botà</i> | ‘mithun bull’ | <i>honà</i> | ‘mithun cow’ | <i>hocùu</i> | ‘mithun calf’ |
| <i>hobín</i> | ‘goat’ | N/A | N/A | N/A | N/A | <i>bincùu</i> | ‘baby goat’ |
| <i>taik</i> | ‘head louse’ | N/A | N/A | <i>ignà</i> | ‘mature louse’ | <i>ikcì</i> | ‘baby louse’ |
| <i>porók</i> | ‘chicken’ | <i>rokpò</i> | ‘cock’ | <i>rojnà</i> | ‘hen’ | <i>ròo</i> | ‘chick’ |
| <i>horó</i> | ‘boar’ | <i>iróm</i> | ‘male boar’ | <i>ranà</i> | ‘female boar’ | N/A | N/A |

Table 5.37 – Generic, male female and infant animal names (N/A = Not attested)

Note in Table 5.37 that numerous irregularities may be found. For example, among mithuns, the root *tə-* ‘big’ is employed to form the male-gendered term; **bobó*/**bəbó* are both rejected by speakers. Among head lice, *cì-* ‘Diminutive’ is used to form the ‘infant’ term; **ikcùu* is rejected. Among fowl, **rogbó* is non-occurring; instead, the male-gendered term employs a competing (and possibly distantly related) root PG **pó-* (cf. *apó* ‘male animal’ and *lampó* ‘dispute mediator’ (< PTs **lam* ‘way’)). ‘Chick’ in turn appears to be an irregular formation, possibly reflecting PG **rók-* ‘chicken’ + **ò-* ‘child’ with loss of the medial voiced stop **rogò*, although this cannot currently be confirmed. Among cattle, an unusual division between male and female infants is made, involving reanalysis of the *nə-* root in *ənà* ‘cattle cow’ to form *nəzìr* ‘female calf’ (cf. *nizìr* ‘girl’ < *ní-* ‘human’ + *zìr-* ‘girl’); *bodíi* ‘male calf’ is currently unexplained. Finally, the expected **rabó*/**rəbó* is unattested as ‘male boar’.

Reflexes of PTs **bo* ‘father; male’ and **nə* ‘mother; female’ are found in numerous other pairs and singletons denoting male- or female-gendered entities, such as different kin relations. For example: *bərbó* ‘wife’s sister’s husband’ and *bərnà* ‘husband’s brother’s wife’, *kimbò* ‘child’s spouse’s father’ and *kinnà* ‘child’s spouse’s mother’,

pagnò ‘male slave’ and *pagnà* ‘female slave’, and so on. Finally, the root *cùu-* occurs in numerous terms denoting infants, although a more general pair of (possibly historically-relatable) ‘Diminutive’ roots are *cì-* ~ *cɛ̀-* and *cík-* ~ *cɛ́k-* (Table 5.38).

| Term | Gloss | Initial root | Gloss |
|---------------|-----------------------------------|--------------|--------------------------|
| <i>ikcì</i> | ‘baby louse’ | <i>ik-</i> | ‘louse’ |
| <i>d̥ircì</i> | ‘small strips of bamboo’ | <i>d̥ir-</i> | ‘break, of a long thing’ |
| <i>məcì</i> | ‘matchlike ember’ | <i>mə-</i> | ‘fire’ |
| <i>pərcì</i> | ‘small moth (compound formative)’ | <i>pər-</i> | ‘Lepidoptera’ |
| <i>l̥icì</i> | ‘pebble (compound formative)’ | <i>l̥i-</i> | ‘stone’ |
| <i>barcì</i> | ‘small loose conical basket’ | <i>bár-</i> | ‘loose conical basket’ |
| <i>kiicik</i> | ‘small waist’ | <i>k̥i-</i> | ‘belly; guts’ |
| <i>rokcik</i> | ‘knife’ | <i>ròk-</i> | ‘iron; blade’ |

Table 5.38 – Terms employing formatives *cì-* ~ *cɛ̀-* and *cík-* ~ *cɛ́k-* ‘Diminutive’

5.3.1.3.2. Number

Galo has no true nominal number inflection (personal pronouns index referent number, although non-compositionally; see §7.1). However, two common nominal ‘group’ roots bear mention, *t̥ɛ́-* ~ *t̥ɛ̀-* ‘flock; herd; grove’ and the probably historically related forms *lúu-* ‘group; crowd; enclosure; place’ and *lùu-* ‘grove’. *t̥ɛ́-* ~ *t̥ɛ̀-* ‘flock; herd; grove’ occurs in *at̥ɛ́* ~ *a(t)t̥ɛ̀* ‘group’, *luut̥ɛ́* ‘crowd of people’, *akt̥ɛ́* ‘flock of ravens’ *tət̥ɛ́* ‘herd of elephants’ and *luut̥ɛ́* ‘wild plantain grove’,¹¹⁹ among other words. *lúu-* (< PTs **luŋ*) occurs on *doolúu* ‘village’, *beelúu* ‘group of monkeys’, and also occurs as initial formative of *luut̥ɛ́* ‘crowd of people.’ In the context of root-pivotal compounding (§5.3.1.4.2.2), *lùu-* is productive as a ‘grove’ formative, as in *ə̀ə̀lùu* ‘bamboo grove’, *kopák paglùu* ‘banana grove’, *taək ə̀glùu* ‘fan palm grove’, *inín ninlùu* ‘tapioca vine grove’, and so on apparently including any plant variety up to and including reanalysed Assamese loans, as in *nahór horlùu* ‘Ceylon ironwood tree grove.’ A cognate of *lùu-* may also occur as a pronominal plural formative, as in *bulù* ‘3.PL’; again, see §7.1.

¹¹⁹ Note that the initial *lúu-* formative in this word is seemingly not cognate with *lúu-* ‘group; crowd; enclosure; place’, but rather has the sense ‘wild plantain’ as in *kolúu* ‘wild plantain variety’.

5.3.1.3.3. Negativity

A small number of nouns and adjectives include reflexes of the pan-Tani ‘Negative’ root PTs **maŋ* ‘not (have)’, although again this does not in general reflect a productive modern derivation (Table 5.39).

| Term | Gloss | Other root | Gloss |
|---------------|-----------------|-------------|------------|
| <i>gommáa</i> | ‘mute (person)’ | <i>góm-</i> | ‘speech’ |
| <i>himáa</i> | ‘corpse’ | <i>hí-</i> | ‘die’ |
| <i>jə́máa</i> | ‘poor (person)’ | <i>jé-</i> | ‘???’ |
| <i>jimáa</i> | ‘poor (person)’ | <i>jí-</i> | ‘human’ |
| <i>moomàa</i> | ‘busy’ | <i>mòo-</i> | ‘leisure?’ |

Table 5.39 – Terms employing formative *máa-* ‘not (have)’

In addition, a possibly cognate ‘Intensifier’ formative *máa-* is represented among a few Galo lexemes with generally emphatic values, such as *maazí* ‘very much’ and *maazâa* ‘very real/true’ (note here that the relative orders of the ‘Negative’ and ‘Intensifier’ morphemes are opposite). Although the correspondence is not certain, there are other examples in Galo of forms with basically intensive or emphatic values apparently deriving from negative forms; for example, see the set of ‘tag rejoinder’ particles illustrated in §13.3.2.3.4.

5.3.1.4. Two-term compounds

Two-term compounds are usually *quadrissyllabic* constructions composed of two disyllabic nouns or adjectives, with the overall prosodic status of a *phonological phrase* (§4.1.4), and with the grammatical status of a *single grammatical word* (usually a noun). Although many two-term compounds are not synchronically analyzable to speakers, the patterns on which they are formed *are* in general productive in modern Galo.

Two-term compounds may be *symmetrical* (§5.3.1.4.1) or *asymmetrical* (§5.3.1.4.2). Asymmetrical two-term compounds are further subdivided into *common* (§5.3.1.4.2.1), *root-pivotal* (§5.3.1.4.2.2) and *expressive* (§5.3.1.4.2.3) subtypes.

5.3.1.4.1. Symmetrical two-term compounds

Symmetrical two-term compounds (a.k.a. “coordinative compounds”) are composed of two *structurally and semantically parallel* terms (usually nouns and deverbal nominalizations, but sometimes also adjectives). In a symmetrical two-term compound, each term denotes a *prototypical exemplar*, or a particularly salient or inalienable feature of a natural class or type denoted by the whole. For example, in *hodúm-horé* ‘big game’, *hodúm* ‘barking deer’ and *horé* ‘boar’ are each among the most commonly hunted ‘big game’ animals, and *donám* ‘eating’ and *tínám* ‘imbibing’ are the most important aspects of a person’s *donám-tínám* ‘upkeep; sustenance’. Ordering appears largely conventional, as opposed to semantically hierarchical; for example, although *anè* ‘mother’ certainly precedes *namé* ‘daughter-in-law’ in Galo social hierarchy, and likewise precedes it in the compound *anè-namé* ‘mature women’ – the reverse is the case for *ací-abó* ‘elder brother-father’ ‘mature men’ (Table 5.40).

| Term | Gloss | Term 1 | Gloss | Term 2 | Gloss |
|---------------------|------------------------------|---------------|-------------------------|----------------|-----------------------|
| <i>cărăă-căkò</i> | ‘every nook and cranny’ | <i>cărăă</i> | ‘corner’ | <i>căkò</i> | ‘notch’ |
| <i>ací-abó</i> | ‘(mature) men’ | <i>ací</i> | ‘elder brother’ | <i>abó</i> | ‘father’ |
| <i>anè-namé</i> | ‘married women’ | <i>anè</i> | ‘mother’ | <i>namé</i> | ‘daughter-in-law’ |
| <i>hottúm-horé</i> | ‘wild animals’ | <i>hottúm</i> | ‘bear’ | <i>horé</i> | ‘boar’ |
| <i>hodúm-horé</i> | ‘big game’ | <i>hodúm</i> | ‘barking deer’ | <i>horé</i> | ‘boar’ |
| <i>pîhîk-păgăă</i> | ‘hornbills (of any variety)’ | <i>pîhîk</i> | ‘rufousnecked hornbill’ | <i>păgăă</i> | ‘great pied hornbill’ |
| <i>talăă-kodée</i> | ‘environment’ | <i>talăă</i> | ‘sky’ | <i>kodée</i> | ‘soil’ |
| <i>azèk-apăă</i> | ‘valuable; useful(ADJ)’ | <i>azèk</i> | ‘expert (N)’ | <i>apăă</i> | ‘whippersnapper’ |
| <i>abín-akák</i> | ‘razed’ | <i>abín</i> | ‘cleared (ADJ)’ | <i>akák</i> | ‘clean (ADJ)’ |
| <i>donám-tínám</i> | ‘upkeep; sustenance’ | <i>dó-nam</i> | ‘eat-NZR:RLS’ | <i>tî-nam</i> | ‘imbibe-NZR:RLS’ |
| <i>innám-kennám</i> | ‘comings and goings’ | <i>ín-nam</i> | ‘go-NZR:RLS’ | <i>kéK-nam</i> | ‘flee-NZR:RLS’ |
| <i>cinám-ramnám</i> | ‘disease’ | <i>cì-nam</i> | ‘be in pain-NZR:RLS’ | <i>rám-nam</i> | ‘have fever-NZR:RLS’ |
| <i>rărò-duurò</i> | ‘artifacts of youth’ | <i>rè-rò</i> | ‘exist-NZR:ORIGIN’ | <i>dùu-rò</i> | ‘stay-NZR:ORIGIN’ |

Table 5.40 – Symmetrical two-term compounds

Symmetrical two-term compounds may derive historically from conjunctive or open disjunctive NP head-coordinations; for discussion, see §6.2.3.

5.3.1.4.2. Asymmetrical two-term compounds

Asymmetrical two-term compounds are composed of two structurally and semantically non-parallel terms, usually reflecting the Generic-Specific organization also found in root-root compounds (§5.3.1.2).

5.3.1.4.2.1. Common

Common asymmetrical two-term compounds are composed of two structurally unrelated terms, in which the first term usually denotes a type, and the second term denotes an exemplar or quality of the type. The internal composition is most often N-N or N-ADJ, although some ADJ-ADJ and possibly ADJ-N compositions are also found. In the latter case, it is difficult to describe the composition as Generic-Specific; possibly, in this case a more general MOD-H order may be represented (as in *kanó-zèè* ‘dark green/blue’). Unfortunately, such terms are exceedingly rare, and are accordingly difficult to generalize-over (Table 5.41).

| Term | Gloss | Term1 | Gloss | Term2 | Gloss |
|--------------------|----------------------|--------------|-------------|---------------|-------------------|
| <i>óo-takáa</i> | ‘edible fern’ | <i>óo</i> | ‘vegetable’ | <i>takáa</i> | ‘fern’ |
| <i>óo-gijíí</i> | ‘variety of mustard’ | <i>óo</i> | ‘vegetable’ | <i>gijíí</i> | ‘mustard variety’ |
| <i>hodùm-talíi</i> | ‘round tick’ | <i>hodùm</i> | ‘deer’ | <i>talíi</i> | ‘flea’ |
| <i>jimè-koodáa</i> | ‘women’s balcony’ | <i>jimè</i> | ‘wife’ | <i>koodáa</i> | ‘balcony’ |
| <i>aó-kaí</i> | ‘eldest child’ | <i>aò</i> | ‘child’ | <i>kaí</i> | ‘big’ |
| <i>kanó-zèè</i> | ‘dark green/blue’ | <i>kanó</i> | ‘dark’ | <i>zèè</i> | ‘green/blue’ |

Table 5.41 – Common asymmetrical two-term compounds

5.3.1.4.2.2. Root-pivotal

Root-pivotal constructions constitute an important, language-general process of word-formation in Galo, also reflected in verb formation (cf. §5.3.2.2). In a root-pivotal construction, two terms which share a root in common are compounded, with the commonly-held root serving as a uniting “pivot”; schematically: **A-B B-C**.¹²⁰

¹²⁰ Note that the syntactic notion of “pivot” as an S/A or S/O cross-clause coreferentiality constraint is *not* the sense intended here.

In a root-pivotal construction, the denotation of the whole is closest to that of the second term. In the case of a nominal compound, root-pivotal constructions generally follow a classificatory Generic-Specific pattern, in which case the whole has the same denotation as the second, Specific, element (93)-(94).

(93) *ikìi-kiibò*

| | | | |
|------------|------|------|-------------|
| i- | kìi- | kìi- | bó- |
| PFX | dog | dog | father/male |
| GEN | SPEC | GEN | SPEC |
| GEN | | SPEC | |
| 'male dog' | | | |

(94) *ərək-rəkùu*

| | | | |
|----------|------|------|--------|
| ə- | rək- | rək- | cùu- |
| PFX | pig | pig | infant |
| GEN | SPEC | GEN | SPEC |
| GEN | | SPEC | |
| 'piglet' | | | |

A root-pivotal construction may have a variety of functions in Galo; among nominal compounds, they are viewed by my consultants as “more specific” than a simple root-root compound which may be obscure, novel, unfamiliar, or have multiple potential interpretations. For example, *sáa-aalíí* ‘red (black) tea’ is preferred to simply *aalíí*, which possibly relates to the fact that *aalíí* is based on reanalysis of *sáa* as a complex term **sa-áa* (with *áa-* standing as the root for ‘tea’); note that *aalíí* would have been, at the time of coining, a relatively unusual word (*áa-* itself having probably never occurred in Galo or its ancestor languages as a lexeme meaning ‘tea’). At the same time, there seems to be a purely conventional and/or aesthetic value to root-pivotal constructions, as some of my consultants describe them as “sweeter” than the more abrupt-sounding single-term compound variety. A selection is given in Table 5.42.

| Term | Gloss | Term1 | Gloss | Term2 | Gloss |
|---------------------|------------------------------|--------------|------------------------|---------------|------------------------------|
| <i>oríi-riiták</i> | ‘wild coriander’ | <i>oríi</i> | ‘coriander’ | <i>riiták</i> | ‘wild coriander’ |
| <i>hotè-təpìn</i> | ‘elephant skin’ | <i>hotè</i> | ‘elephant’ | <i>təpìn</i> | ‘elephant skin’ |
| <i>isì-hilè</i> | ‘pond; lake’ | <i>isì</i> | ‘water’ | <i>hilè</i> | ‘deep section of river’ |
| <i>kodée-deerfi</i> | ‘plains’ | <i>kodée</i> | ‘soil; earth’ | <i>deerfi</i> | ‘flatland’ |
| <i>nahór-horpùu</i> | ‘white Ceylon ironwood tree’ | <i>nahór</i> | ‘Ceylon ironwood tree’ | <i>horpùu</i> | ‘white Ceylon ironwood tree’ |

Table 5.42 – Root-pivotal constructions in asymmetrical two-term compound formation

5.3.1.4.2.3. Expressive

Expressive two-term compounds are mainly adjectival. Also found among predicate derivations (§11.3.2), expressive compounds consist of an initial lexeme (in most but not all cases, an *a*-prefixed root) followed by a semi-reduplication in which the onset is replaced by a consonant, often *j*, *r*, *l* or *m*.¹²¹ Examples are in Table 5.43.

| Term | Gloss |
|----------------------|------------------|
| <i>amók-ahók</i> | ‘careless’ |
| <i>akók-arók</i> | ‘emaciated’ |
| <i>akìn-amìn</i> | ‘confused’ |
| <i>apək-arək</i> | ‘intelligent’ |
| <i>jamùk-jarùk</i> | ‘maroon’ |
| <i>bissòk-bibbòk</i> | ‘many-striped’ |
| <i>mookòp-mooròp</i> | ‘sunken-cheeked’ |

Table 5.43 – Expressive two-term compounds

In some cases, the semantic value of an expressive two-term compound is somewhat different from that of the initial formative lexeme. For example, *apək*, used alone, usually has the sense ‘perfect; clear’, but *apək-arək* is more usually used with the related but somewhat different sense ‘intelligent; clear in one’s words or thinking’. In many other cases, the expressive compound has a basically *intensive* value relative to the initial term. For example, *bissòk*, used alone, has the sense ‘single-striped’ (i.e., with a single stripe across the surface of an entity), but the semi-reduplication *bissòk-bibbòk* has

¹²¹ Such formations are clearly relatable to the “elaborate expressions” described for Thai by Haas (1964) and for Lahu by Matisoff (1973) (as well as by many others, for many other Mainland South-East Asian languages).

the sense ‘many-striped’ – a distributive intensification of the basic value. Finally, it is also common to find an expressive compound in which the initial term *cannot* (or can no longer) stand alone; in such cases, the expressive compound can be understood to have effectively lexically replaced the simplex form as the basic lexical entry for the given semantic value. For example, in *alák-aák* ‘be missing/yearning for someone (ADJ)’, although the *lák-* root can be confidently assigned the original value ‘miss’ by comparison with a related predicate derivation *-lák* ‘MISSED (TARGET) RESULT’, *alák* ‘miss’ does not seem to occur in modern Galo as a simple lexeme; only the derivative expressive compound *alák-aák* is used by my consultants.

The productivity of expressive compound formation is something of a grey area. There is certainly no shortage of them – at least there are dozens – and their use often constitutes a valuable rhetorical tool. However, attempts to define their formation in phonological terms have not so far been successful. Additional discussion and a large set of examples may be found in §11.3.2.

5.3.2. Word structure 2: Verbs

An initial distinction must be drawn between *verb formation* and *predicate formation*. By predicate formation is meant formation of the head of a predicative clause, which may or may not be headed by a grammatical verb (§10.2). By verb formation is meant formation of the verbal word that is often, but not always (and is not necessarily), head of a predicate.

The core of a Galo verb is a *verb root*. Most verb roots are bound monosyllables, as *ín-* ‘go’ and *dám-* ‘beat’. A few bound, synchronically unanalyzable disyllables are also found, such as *kahí-* ‘hide’ and *kazí-* ‘sneeze’. Only a few disyllabic verbs are found which may stand independently as a grammatical word, such as *nígjáp* ‘blink (VI); wink at (VT)’. Such forms are likely to have their origins in zero-derivation from nouns and/or adjectives, and they may sometimes be difficult to distinguish from adjectives if functioning intransitively. However, in the case of *nígjáp* at least, its capacity to be used transitively marks it clearly as a lexical verb.

In the subsections below, we focus on verbal structures from a lexical perspective, mainly at the root level. Complex verb formation is discussed in the context of

grammatical predicate formation in §10, as well as in subsequent chapters on predicate derivations §11 and inflections §12.

5.3.2.1. N-V compounding and/or “lexical incorporation”

It is very common to find predicate-adjacent nominals unmarked for case in Galo. The syntactic status of such forms is sometimes difficult to determine – are they noun phrases, or are they predicate-dependent nominals, and if the latter, does it constitute an instance of compounding or lexical incorporation (in the sense of Mithun (1984))? This question is addressed from a general syntactic perspective in §14.2.2.2. In this section, it is simply noted that to the extent that certain frequently-occurring unmarked N-V collocations become conventionalized – sometimes, with a sense greater than the sum of both parts – it is possible to view them as lexicalized constructions (whether with the morphosyntactic status of compounds, or as some looser syntactic formation).

A list of some commonly-attested N-V collocations with possible lexical compound status is given in Table 5.44.

| Form | Gloss | N | Gloss | V | Gloss |
|-------------------|------------------------------|--------------|-------------------|-------------|------------------------------------|
| <i>jimé-láa-</i> | ‘to marry (of a man)’ | <i>jimé</i> | ‘wife’ | <i>láa-</i> | ‘take’ |
| <i>jimé-zúk-</i> | ‘to cheat on one’s husband’ | <i>jimé</i> | ‘wife’ | <i>zúk-</i> | ‘run’ |
| <i>naméə-gí-</i> | ‘to sleep around (of a man)’ | <i>naméə</i> | ‘daughter-in-law’ | <i>gí-</i> | ‘go (arch.); plow’, ¹²² |
| <i>aò-bəə-</i> | ‘to have a baby’ | <i>aò</i> | ‘child’ | <i>bəə-</i> | ‘carry/hold’ |
| <i>jasì-hí-</i> | ‘to urinate’ | <i>jasì</i> | ‘urine’ | <i>hí-</i> | ‘urinate’ |
| <i>holúu-rák-</i> | ‘to lay fencing’ | <i>holúu</i> | ‘fence’ | <i>rák-</i> | ‘fence in’ |
| <i>isì-hú-</i> | ‘to bathe’ | <i>isì</i> | ‘water’ | <i>hú-</i> | ‘wash a body’ |

Table 5.44 – Selection of possible N-V compounds or cases of lexical incorporation

5.3.2.2. Cognate argument and adjectival root-combining constructions

“Cognate argument” and “adjectival root-combining” constructions together constitute a productive means of forming new verb roots from nominal or adjectival

¹²² It is likely that the relevant sense here is ‘go’ (as in ‘go to (someone’s side)’); however, the simplex verb root is no longer used with this sense in modern Lare Galo – it retains only the specialized meaning ‘plow’. The sense of ‘go’ may sometimes be found in Galo proverbs and other set expressions, such as §14.2.2.3 ex. (920)); it is also reflected in Pagro Mising *gi-* ‘go’. To the extent that this usage constitutes an archaism, it would presumably provide evidence in favour of viewing such forms as basically lexicalized N-V compounds.

lexical material. They are structurally related to both N-V compounding (§5.3.2.1) and root-pivotal constructions (§5.3.1.4.2.2), basically being a non-classificatory subtype of the latter.

In a cognate argument construction, the final root of a disyllabic nominal is repeated, with the repetition occurring in the stem position of an adjacent predicate – effectively, producing a novel verb root; for example: *doogúm-gumnám* ‘to thunder’ (lit., ≡ ‘to thunder thunder’) and *nabbèe-beenàm* ‘to drool’ (lit., ≡ ‘to drool drool’). Although the pivotal (repeated) root of a cognate argument construction is *usually* a lexical root, which could be imagined to have potentially developed an independent verbal function in Galo, it is in fact usually uninterpretable outside of the cognate argument construction; that is to say, *?gumnám* ‘to thunder’ is not generally used in absence of *doogúm*, and so on. In this sense, the resulting formation seems to have the basic lexical status of a N-V compound.

Just as root-pivotal constructions are a productive means of forming native-like Galo *nouns* from non-native lexical material (as *sáa-aal/hi* ‘black/red tea’; cf. §5.3.1.4.2.2) cognate argument constructions likewise have the capacity to produce native-sounding *verb roots*. For example, the Assamese loan *pori* ‘study’ (< Asm *porh-* ‘read; study’ + *-i* ‘NF’) has yielded the novel root *rì-* ‘study’ in the cognate argument construction *porì-rinàm* ‘to study’, seemingly reflecting a reinterpretation of the Assamese-derived form as having a Galo-like disyllabic root-root internal structure.¹²³

The majority of attested cognate argument constructions relate to situations involving *weather* or other *natural phenomena*, *human bodily functions* or *social/group functions*. A selection is in Table 5.45; note that the claim here is not that the left-column term (the verb root) has given rise to the right-column term (the cognate noun), but rather the reverse.

¹²³ Unfortunately, perhaps, such instances are exceptional; among modern Galo speakers, the overwhelming tendency is to simply borrow foreign lexemes intact.

| Sem. field | Verb root | Gloss | Cognate Noun | Gloss |
|---|-------------|--|---------------------------|----------------------|
| Weather/ nature | <i>gúm-</i> | ‘thunder’ | <i>doogúm</i> | ‘thunder’ |
| | <i>rák-</i> | ‘flash, of lightning’ | <i>dooràk</i> | ‘lightning’ |
| | <i>gók-</i> | ‘crack, of the earth’ | <i>deggók</i> | ‘crack in the earth’ |
| | <i>dú-</i> | ‘make sound’ | <i>adó</i> ¹²⁴ | ‘sound’ |
| Human bodily functions | <i>hík-</i> | ‘cough’ | <i>ihík</i> | ‘cough’ |
| | <i>bèe-</i> | ‘drool’ | <i>nabbèe</i> | ‘drool’ |
| | <i>péə-</i> | ‘fart’ | <i>əppə</i> | ‘fart’ |
| | <i>ìr-</i> | ‘sweat’ | <i>aír</i> | ‘sweat’ |
| | <i>púk-</i> | ‘crack knuckles’ | <i>lakpúk</i> | ‘knuckle crack’ |
| | <i>màa-</i> | ‘dream’ | <i>jumàa</i> | ‘dream’ |
| | <i>hòo-</i> | ‘grow up’ | <i>ahòo</i> | ‘long/tall’ |
| | <i>ró-</i> | ‘extend tongue’ | <i>aró</i> | ‘tongue’ |
| Human social/ cultural functions | <i>kíi-</i> | ‘disembowel’ ¹²⁵ | <i>akíi</i> | ‘guts’ |
| | <i>ée-</i> | ‘strip-harvest ripe rice’ ¹²⁶ | <i>amée</i> | ‘first ripe rice’ |
| | <i>báa-</i> | ‘hold meeting’ | <i>kəbáa</i> | ‘meeting’ |
| | <i>míi-</i> | ‘sing lullaby’ | <i>nimíi</i> | ‘lullaby’ |
| | <i>rì-</i> | ‘study’ | <i>porì</i> | ‘study/ies’ |
| | <i>càk-</i> | ‘spin cotton’ | <i>tacàk</i> | ‘cotton’ |
| | <i>gée-</i> | ‘perform reciprocal labor’ | <i>rigée</i> | ‘reciprocal labor’ |

Table 5.45 – Cognate argument verb roots attested to date together with cognate nouns and corresponding semantic field

Adjectival root-combining constructions are basically identical to cognate argument constructions, however their functional motivation is somewhat different. In the case of a cognate argument construction, the overall construction seems to function to license¹²⁷ a nominal which is *not* otherwise capable of standing as a predicate head. However, as mentioned in §5.1.2, and discussed in §9 and §10 in more detail, all Galo adjectives have the ability to stand as simple intransitive predicate heads, and require no

¹²⁴ Final short **-u* → *-o* is a regular post-PG sound change (§2.4.4.7.2); since it occurs word-finally, the nominal reflex of PTs **du* ‘sound’ undergoes this change, but the cognate verb root, since it occurs word-medially, does not.

¹²⁵ Most often used in a ritual sense, as after sacrificing an animal.

¹²⁶ Strip-harvesting of ripe rice (by pulling directly into a basket by hand) has a traditional ritual connotation. Only women are traditionally allowed to eat *amée* rice. Note that the composition of *amée* ‘first ripe rice’ is in fact *ám-* ‘grain’ + *ée-* ‘first ripe rice’ (cf. *amlíi* ‘new rice’), not **a-mée*.

¹²⁷ By “license”, here and elsewhere in this grammar, I mean “enable” or “allow”, in the sense of make something possible. For example, an inflection “licenses” a final predicate since a predicate would not be able to stand as a final clause head without an inflection. On the other hand, a particular type of predicate head may “license” a particular type of inflection, which may not be able to occur on other predicate types, and so on. I am aware that there are several more technical uses of the term “license” in the literature, some of which may accord with my usage and some of which may not.

special processes of derivation or structural adjustment. However, unlike verb roots, which are readily modified by a wide variety of predicate derivations, adjectives only rarely have the ability to combine with predicate derivations directly (§10.3). Accordingly, the adjectival root-combining construction makes use of the basic root-pivotal template to repeat the final root of a disyllabic adjective, with the repetition then standing as a novel *verb* root which may in turn be productively derived (95)-(96).

- (95) *nuŋmóo jalí lí-ráp-duukù.*
 [nuŋmóo]_S [jalí lí-ráp-dùu-kú]_{PRED}
 face red RCOM-ICEP-IPFV-CMPL
 ‘His face is getting red!’ (MN, OLB7:49)

- (96) *kaí íbén zaadù.*
 [kaí í-bén ≡ zâa ≡ dùu]_{PRED}
 big RCOM-INTS ≡ CERT ≡ IPFV
 ‘It’s too big.’ (KN, B1:41)

Interestingly, the same pattern holds for an adjectivalized verb. In (97), the transitive verb root *káa-* is first adjectivalized in *-kèn* ‘GOOD/EASY’; the adjectivalizing derivation is then repeated, with the repetition standing as a verbal predicate stem – just as though it were the second formative of a disyllabic lexical adjective. Note that *-kèn* is not capable of standing as a verb root independently, and has no cognate verbal form (in modern Galo at least).

- (97) *kaakên kenjek zâadu.*
 [káa-kèn kèn-ŋék ≡ zâa ≡ dùu]_{PRED}
 look-GOOD/EASY RCOM-EXCESSIVELY ≡ CERT ≡ IPFV
 ‘(She’s) too beautiful.’ (KN, B1:49)

Although it is statistically infrequent, the adjectival root-combining construction turns out to be an indispensable tool in the study of the Tani lexicon. This is because it has the unique ability to manipulate the second syllable of an adjective into a metrically strong (foot-initial) position; in this position, the full vocalic specification of terms with final short *-a*, *-o* and *-i* (ordinarily reduced to *-ə*) may be heard (98).

(98) *ardó dabá zâadu.*

[ardó dá-báa≡zâa≡dùu]_{PRED}

clever RCOM-QUICKLY≡CERT≡IPFV

‘He’s getting clever quickly (of a growing child).’ (KN, OLB1:43)

It is not currently possible to declare with certainty which of the very many predicate derivations discussed above has the ability to occur within the adjectival root-combining construction, or whether there are any limitations at all. Those derivations most commonly attested in this function to date have functions mainly to do with matters of *degree* or *extent*, such as *-bén* ‘INTS/FREQ’ (§11.2.3.10), *-ɲék* ‘EXCESSIVELY’ (97), and *-bòò* ‘OVER’ (§11.2.5.6; §11.2.1), although this list is quite likely not exhaustive.

While it is extremely rare, it is also possible in principle for at least some types of complex predicate derivation to combine with an adjectival root-combining construction. In (99), the combining repetition *dá-* stands as head of a Multiword predicate construction whose formation is projected by the Discontinuous predicate derivation *-kúp...-lék* ‘HELTER SKELTER’; this leads to the formation of an obligatorily sexesyllabic stem. For further discussion of Multiword predicates, see §10.5.

(99) *ardó dakúp dalék nà jí*

[[ardó dá-kúp

dá-lék-nà]_{RELC}

ní]_{NP}

clever RCOM-HELTER.SKELTER.1 RCOM-HELTER.SKELTER.2-NZR:SUB person

‘a real go-getter; a fast, clever and efficient person’ (MN, T7:12)

5.3.2.3. Discontinuous compound verbs

Discontinuous compound verbs are essentially lexical compounds which follow the basic symmetrical patterning earlier described in the context of two-term nominal and adjectival compounds (§5.3.1.4.1, cf. Table 5.40); examples are *dó...tí* ‘eat...imbibe’ ‘sustain oneself’ and *ín...kéK* ‘go...flee’ ‘come and go’. Semantically, also like symmetrical nominal and adjectival compounds, each formative of a Discontinuous compound verb represents a prototypical exemplar of the overall activity denoted by the whole. However, unlike symmetrical nominal and adjectival compounds, which always occur in a fixed, continuous unit, the two roots of a Discontinuous compound verb maintain a semi-independent structural status, with both formatives hosting nominalizers or other derivations, or inflections in the context of a Multiword predicate (discussed in

§10.5). In (100), the Discontinuous compound verb *dó-...tíí* ‘sustain oneself’ is nominalized and stands as the S argument of the clause. Note that each of the two formative verb roots *dó-* and *tíí* bear an iteration of the nominalizing suffix. In (101), the Discontinuous compound verb *pí-...pàa-* ‘craft...get’ ‘make a living’ occurs in a Multiword predicate within a non-final construction (clause chain). Note that both of the formative verb roots carry an iteration of the Non-final suffix.

(100) *oké donám tíínamé nэггə doodù.*

okkəə [[**dó-nam** **tíí-nam**]_{NOM} = əə]_S [nэггə = əə]_{RQE} [dóo-dùu]_{PRED}
 SCNJ **eat-NZR:RLS****imbibe-NZR:RLS**=TOP variety=TOP exist.lying.INAN-IPFV
 ‘And there was every kind of **food and drink**.’ (TR, FA 016)

(101) *narûuə pîla paalâa kú...*

[narûu = əə]_S [**pî-là(a)** **pàa-là(a)**-kú]_{PRED}
 everything/everyone=TOP **craft-NF** **get-NF-CMPL**
 ‘Everybody now **makes a living**.’ (LN, GMW 074)

The discontinuous compound verbs attested to date are given in Table 5.46.

| DCV | Meaning | Root 1 | Gloss | Root 2 | Gloss |
|--------------------|----------------------------|-------------|--------------|--------------|--------------------|
| <i>dó-...tíí-</i> | ‘sustain oneself’ | <i>dó-</i> | ‘eat’ | <i>tíí-</i> | ‘drink’ |
| <i>dó-...làa-</i> | ‘make/obtain provisions’ | <i>dó-</i> | ‘eat’ | <i>làa-</i> | ‘take’ |
| <i>pí-...pàa-</i> | ‘make a living’ | <i>pí-</i> | ‘craft’ | <i>pàa-</i> | ‘get’ |
| <i>ín-...kéK-</i> | ‘come and go’ | <i>ín-</i> | ‘go/walk’ | <i>kéK-</i> | ‘flee’ |
| <i>rî-...dó-</i> | ‘work; perform labour’ | <i>rî-</i> | ‘do’ | <i>dó-</i> | ‘eat’ |
| <i>cì-...ráam-</i> | ‘be ill’ | <i>cì-</i> | ‘be in pain’ | <i>ráam-</i> | ‘have fever’ |
| <i>mù-...rúm-</i> | ‘be/act insane’ | <i>mù-</i> | ‘be crazy’ | <i>rúm-</i> | ‘shout’ |
| <i>ré-...dùu-</i> | ‘live (in a certain way)’ | <i>ré-</i> | ‘live/exist’ | <i>dùu-</i> | ‘sit; stay’ |
| <i>cə-...béé-</i> | ‘pray; chant; intone’ | <i>cə-</i> | ‘curse’ | <i>béé-</i> | ‘chant’ |
| <i>zà-...gàm-</i> | ‘play joyfully’ | <i>zà-</i> | ‘be stylish’ | <i>gàm-</i> | N/A ¹²⁸ |
| <i>bəə-...gə-</i> | ‘have in one’s possession’ | <i>bəə-</i> | ‘carry/hold’ | <i>gə-</i> | ‘carry/wear’ |

Table 5.46 – Discontinuous compound verbs (DCV)

¹²⁸ This root is identified by my consultants as a meaningless element of the compound *zanàm-gamnàm*, and/or of having no independent meaning outside of this construction.

5.3.2.4. “Dummy” verb root *pa-*

pa- ‘RDUP’ is a “dummy” verb root used as a meaningless suffixal host in a semi-reduplication of the form [V_i-SFX_j][*pa*-SFX_j]. Taken as a whole, the semi-reduplication has a basically intensive/distributive function, as in (102).

(102) *balî palî là garí lo rədó.*

| | | | |
|--|----------------------|-------------------|-----------------|
| bá-lî | pa -lî-là(a) | garí = lo | rə-dó(o) |
| vomit-DESD | RDUP -DESD-NF | vehicle(<Ind)=LOC | live/exist-STAT |
| ‘We sit on the bus feeling all vomity- pomity .’ (KN, OLB4:122) | | | |

Very rarely, *pa-* has also been observed to stand as a semi-reduplicant *adjectival* compound initial, in this case replacing an initial formative root or prefix, as in *japúu-papúu* ‘whitey-blightey’.

5.3.3. Word structure 3: Adverbs

As was also discussed above, evidence for an independent lexical class of adverbs (as opposed to a grammatical class of adverbials) is not overwhelming in Galo, and there is no adverb-specific set of lexical word-formation processes analogous to those described above for nouns, adjectives and verbs. Candidate adverbs derived from nouns (via zero-derivation and/or expressive phonological change) include time words such as *mərò-kenlùu* ‘way back when’, discussed in §5.2.2.16.4. Adverb-like “adverbial particles” with mainly emphatic senses and a variety of scope possibilities such as *jûm* ‘DLMT’ ‘only; just’ and *rûu* ‘CERT’ ‘definitely; utterly; absolutely’, are all simplex and monosyllabic; their functions and distribution are discussed in §13.5.2. Adjective- and verb-derived manner and purpose adverbials are almost always based on fully-productive phrasal derivations in *bə* ‘AVZR’; these are discussed in the context of adverbial subordination in §16.5 (cf. also the related discussion of “pro-adverbials” such as *əmbə* ‘like that; in that way; thus’ in §7.5). Finally, it can be noted that adverb-like forms may be argued to result from phonological adjustment of some frequently used adjectives and/or adjective-derived manner adverbials. The most noticeable is *maazí* = *bə* ‘very.much=AVZR’, which

(104) *móok-móok^o lokè níí-níí adók-adók dù.*

[[mookó-mookó lokè]_{NMOD} níí-níí]_S [adók-adók-dùu]_{PRED}
 place-place ABL person-person different-different-IPFV
 ‘People from different places are different.’ (LN, WGD 038)

A few nominal reduplications appear basically lexicalized, or at least conventionalized in certain constructions; examples are *joojóò* ‘what sort’ (lit., ‘what-what’; cf. §7.3.5), *afí-afí* ‘self-self’ ‘one another’ (§8.3), *akèn-akèn* ‘one-one’ ‘reciprocally’ (§8.3), and *lakèn-lakèn* ‘once-once’ ‘sometimes’ (cf. §14.3.3 ex. (949)).

Reduplication of verbs is not common. In the context of Multiword predicates, the verbal host of a Discontinuous predicate derivation is repeated, as in *rì-nó rì-bó* ‘do-MOVE.1 do-MOVE.2’ ‘move; budge’ (vice-versa, in the case of a Discontinuous compound verb; the immediate verbal dependent is repeated); in such cases, however, the repetition itself has no functional value, and thus cannot be described as reduplication in the strict sense; see §10.5 for further discussion of Multiword predicates.

Rarely, a predicate derivation has been observed to undergo *predicate-internal* reduplication, basically with an intensifying effect as *dó-káa-íí-íí* ‘eat-TENT-DESD-DESD’ ‘really want to taste’. However, the number of predicate derivations which productively undergo this process is extremely limited; in my data, the only attested forms are Desiderative *-íí* ‘DESD’ (§11.2.6.4), Comparative *-jàa* ‘COMP’ (§11.2.5.11), and Continuous *-bǎǎ* ‘DUR’ (§11.2.3.8); the process as such may represent an archaic holdover from an earlier state of the language, but has little functionality and/or frequency in modern Galo.

5.6. Word classes – summary

At the outset of this chapter (§5.1), we discussed the prototypical semantic contents of open word classes cross-linguistically, as they have been described in several well-known studies cited in that section. We also noted that the structural and distributional expression of word classes, including that of various structurally and distributionally-defined subclasses, tends to have semantic correlates. Following the discussions of noun, adjective and verb structure and structural subtypes in §5.3, we are now in a better position to give a preliminary statement of the grammatical expression of

word classes in Galo, in relation to their semantic contents (Figure 5.11, to be compared with Figure 5.3 above).

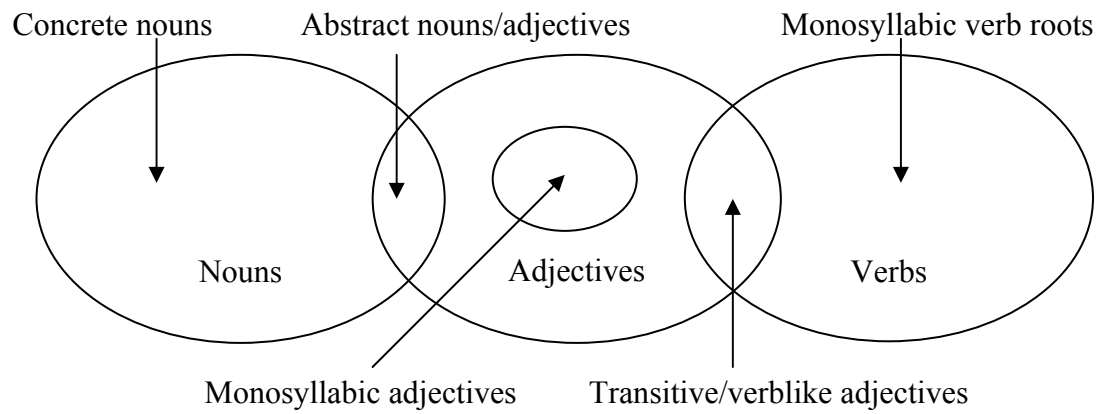


Figure 5.11 – Core-peripheral schematic of major lexical class associations

6. Noun phrase

This chapter discusses properties of Galo noun phrases (NP). §6.1 discusses NP *headedness and constituency*, and introduces the four major NP subtypes found in Galo – common, pronominal, proper and oblique – discussing their different heads, constituencies and syntactic functions. §6.2 discusses *coordination*, including NP-internal constituent-coordination and conjunctive and disjunctive coordination of NPs. §6.3 turns to NP *apposition*, and includes discussion of the important appositional subtype *referential qualifying expressions*.

6.1. Types of noun phrase, headedness, constituency and order

6.1.1. Overview

Four major types of NP are found in Galo. They differ in terms of head type, internal constituency, and inherent referentiality. They may be defined in terms of their respective heads (Table 6.1).

- 1) **common nominal**¹³⁰
- 2) **pronominal**
- 3) **proper name**
- 4) **temporal**

Table 6.1 – Types of noun phrase

In terms of structure and internal constituencies, common nominal-headed NPs offer the widest set of possibilities, while proper name-headed, pronominally-headed and temporal NPs are in general more restricted.

In terms of referentiality, *common* and *temporal* NPs may be indefinitely or definitely referential, according to subtype and marking. *Proper* and *pronominal* NPs are always definitely referential. Proper name-headed NPs are uniquely referential to a known individual in the world, while pronominally-headed NPs have shifting reference relative to a deictic centre.

¹³⁰ Includes both common lexical nouns and deverbal/deadjectival abstract/event and participant nominalizations (§15.3.1).

6.1.2. Common NPs

6.1.2.1. Structure

Table 6.2 presents the elements which may occur within a common nominally-headed NP. Figure 6.1 presents a linear view. (Parenthesized) elements may or may not be true constituents (see below); the head is underlined.

Pre-head modifiers

| | |
|---------------------------|------|
| a) Genitive phrase | GENP |
| b) Pre-head demonstrative | PRHD |
| c) Relative clause | RELC |
| d) Modifying nominal | MNOM |

Head

| | |
|---|------------|
| e) <u>Nominal</u> (noun or nominalized adjective or verb) | <u>NOM</u> |
|---|------------|

Post-head modifiers

| | |
|---|--------|
| f) (Relative clause) | (RELC) |
| g) Enumerator (classifier and/or numeral) | ENUM |
| h) Relator noun | RN |
| i) Qualifying noun | QN |
| j) Post-head demonstrative or article | PSHD |
| k) Postposition | POST |
| l) (Particle) | (PCL) |

Table 6.2 – Elements of a common nominally-headed noun phrase (in order of occurrence)

GENP – PRHD – RELC – MNOM – NOM – (RELC) – ENUM – RN – QN – PSHD – POST – (PCL)

Figure 6.1 – Order of common nominally-headed noun phrase elements

The major properties of each NP constituent are discussed in §6.1.2.2, in the following order (note that the order of discussion does *not* reflect the order in which the constituents discussed occur within an NP!):

| | |
|--------------------|--------------|
| Head | (§6.1.2.2.1) |
| Modifying nominals | (§6.1.2.2.2) |
| Genitive phrase | (§6.1.2.2.3) |
| Demonstratives | (§6.1.2.2.4) |
| Relative clauses | (§6.1.2.2.5) |

| | |
|--|--------------|
| Post-head modifying nominals (numerals, classifiers, relator nouns and qualifying nouns) | (§6.1.2.2.6) |
| Articles | (§6.1.2.2.7) |
| Postpositions | (§6.1.2.2.8) |
| Particles | (§6.1.2.2.9) |

6.1.2.2. Constituents

6.1.2.2.1. Head

The head of a common nominally-headed noun phrase may be a lexical noun or deadjectival/deverbal nominalization (105)-(106).

- (105) *ŋôk annə*
 [ŋó-kə [anə]_{NOM} = əə]_{NP}
 1.SG-GEN **mother**=TOP
 ‘my mother...’

- (106) *nôk ində go*
 [nó-kə [ín-də]_{NOM} = go]_{NP}
 2.SG-GEN **go-NZR:TIME**=IND
 ‘your time-to-go’

6.1.2.2.2. Modifying nominals

Most types of nominal modifiers of a noun phrase head are directly pre-posed to it, with no overt marker of dependency. As such, most modifying nominals are structurally identical to compound elements, and may be analysed in the same context. For example, a collocation such as *amée-taalí* ‘brass.bridal.platter-plate(<Ind)’ ‘brass bridal platter’ could be viewed either as a syntactic MOD-H construction, or as a productively-formed lexical compound. Such “two-term” N-N compounds are discussed in §5.3.1.4. Although there seems in principle to be no lexical restrictions on the types of nominal which can stand in the modifying nominal position, in practice, deverbal participant nominalizations are interpreted not as modifying nominals *per se*, but rather as relative clauses (§15.3.1.3). Furthermore, it is more likely that semantically more descriptive nouns occur in the modifying nominal position, although this seems to be a matter of construal; for example, *íhí-aapúk* ‘stone-heart’ ‘stubborn temperament’ (also zero-derived for use as an adjective

‘obdurate’) represents a metaphorical construal of a decidedly concrete, in principle non-descriptive type of noun ‘stone’ in modifying nominal position.

6.1.2.2.3. Genitive phrase

A genitive phrase prototypically consists of a noun phrase in genitive case. It may be headed by any type of nominal, including a common noun, deverbal nominalization, pronoun, time noun, etc. The usual genitive marker is a phrasal enclitic *gə* ‘GEN’ (107); only pronominally-headed genitive phrases exhibit a suffixal allomorph *-kə* ‘GEN’ (108).

- (107) *tabéegə abó*
 [[**tabée = gə**]_{GENP} abó]_{NP}
 NAME=GEN father
 ‘**Tabe’s** father.’

- (108) *bîk tatîk*
 [[**bî-kə**]_{GENP} tatîk]_{NP}
 3.SG-GEN frog
 ‘**his** frog’

Since genitive phrases are also noun phrases, they may be recursively embedded (109).

- (109) *bîk abógə tatîk*
 [[[**bî-kə**]_{GENP} abó = gə]_{GENP} tatîk]_{NP}
 3.SG-GEN father=GEN frog
 ‘**his father’s** frog’

In certain types of dependent clause, including relative clauses and other nominalized clauses, as well as temporal and adverbial subordinations, subject (S/A argument) noun phrases are expressed in genitive case. In some cases, this fact relates to the synchronic nominal status of the corresponding clause predicate, and reflects the noun phrase-like structure of the clause overall. In other cases, genitive subject-marking seems more likely to relate to a historical (but non-continuing) predicate nominalization. For discussion and examples, see §15 and §16.

Less commonly, a *locative-attributive* phrase may occur in the genitive phrase slot of an NP (schematically, *a person from Boston*). This patterning seems to relate to the probable origin of the locative-attributive construction in genitive marking of a locative

phrase; it continues to resemble a genitive phrase strongly, and seems best analysed as having the same syntactic status within an NP. In (110), note that the locative attributive phrase *cannot* be analysed as a clause-level oblique NP denoting a semantic source; this is because semantic sources are *always* topic-marked at the clause level in Galo (§14.3.6.2), but topic-marking is absent here.

- (110) *namə golòk lôu gò uulên doobə.*

[**[namə go = lokə]**]_{GENP} loù = go]_S [úu-lèn-dó(o) = bə]_{PRED}
house IND=ABL light=IND shine-OUT-STAT=SBRD
 ‘It was as though a light was emerging from a house.’ (lit., ‘a light **from a house** was emerging’) (TR, FA 006)

6.1.2.2.4. Demonstratives

Demonstratives in Galo occur *pre-head* (111), *post-head* (112) or *both* (113).

- (111) *higè...əm-iikò cìn doodù.*

[**higè** əmè-íi-kò cìn] dóo-dùu
 P_{TOP}.IND fire-bask-NZR:LOC/OBL ADD lie.down-IPFV
 ‘**This sort of...**hearth was also there.’ (IR, FA 025)

- (112) *zîhi-zîpnâk higè...doolúu amín gó naí.*

[zîhî-zîpnâk **higè**]_{NP} doolúu amín = go na = (ə)î
 Zîhi.spirit Zîpnâk.spirit P_{TOP}.IND village name=IND DECL=ETAG
 ‘**This** Zîhi-Zîpnâk (which you keep mentioning)...is the name of a village, is it?’
 (MN, LAT 158)

- (113) *ɲunù...higûm bostúr higùm jad̥ɬi locìn*

ɲunù [**higè**-m bostur **higè**-m]_{NP} jad̥ɬi lo = cìn
 1.PL P_{TOP}.IND-ACC gizmo(<Asm) P_{TOP}.IND-ACC ever LOC=ADD
əpâk maadú.
 əpâk-máa-dùu =_’
 discard-NEG-IPFV=NF1
 ‘We...at no time do we leave **this here** thing [rice beer].’ (LN, OPO 016)

The difference between pre-head and post-head demonstrative positioning is not easy to determine. Post-head position is the statistically most frequent position in my corpus, and is in this sense (at least) “unmarked”. In addition, demonstrative postpositions such as *tolò* ‘DST.LOC.UP’ may occur both pre- and post-head simultaneously, or post-head only; they do not seem to occur pre-head only. However, when a demonstrative *can*

occur either pre- or post-head, as in (111)-(112), speakers generally find no semantic difference.¹³¹

Simultaneous pre- and post-head positioning is perhaps unusual typologically,¹³² but it is extremely common in Tani languages. To many speakers, such demonstrative “bracketing” is viewed as the “most correct” use of demonstratives, and is the usual structure returned in context-free elicitation. In texts, demonstrative bracketing tends to occur in highly individuating uses, much as in English *this here (man)*. Interestingly, when two demonstratives bracket a Galo noun phrase, *both* iterations host a phrasal case marker; (113) above is such an example. As a general rule, bracketing demonstratives must be identical.

The bracketing function of demonstratives is criterial to their definition and recognition. Thus, although some demonstratives are partially cognate with postpositions (such as *tolò* ‘DST.LOC.UP’, which incorporates locative postposition *lo* ‘LOC’), the ability of the demonstrative – but not the postposition – to bracket an NP demonstrates the basic demonstrative, not postpositional, categorical status of the modern, fused forms. On the other hand, several demonstratives have developed extended pragmatic functions – such as *hi* ‘SPRX’, which is capable of post-phrasal marking of a highly topical noun phrase – however, demonstratives in such extended functions are *no longer* able to bracket a noun phrase. For extended discussion of demonstrative functions by subclass, see §7.4.

6.1.2.2.5. Relative clauses

Relative clauses are based on participant nominalizations in Galo, and are of *subject*, *non-subject (core)* and *locative/oblique* subtypes. Adjectival modification of noun phrase heads is also based on a subject nominalization, and is considered a subtype of relative clause in this grammar. All relative clause types and subtypes may occur pre-head (= externally-headed), or headless. As for post-head relative clauses, there are some difficulties associated with determining whether post-head relative clauses *are* in fact post-head relative clauses, or whether they might be better-described as *internally-headed* relative clauses.

¹³¹ It is likely that a pragmatic difference will eventually be determined, but this has so far eluded analysis.

¹³² It is of course common to find emphatic constructions such as *this dog here* or French *ce jour-là* ‘that there day’, but less common for the demonstratives involved to be identical, and for speakers to view such a construction as the most “basic” form of a demonstrative modification. I thank Stephen Matthews for reminding me of the French expression (in personal communication).

Only a single example of a pre-head/externally-headed relative clause is given here for reference (114); relative clauses are discussed and exemplified in more detail in §15.3.1.3.

- (114) *zoocôon nijé, âgə*
 [[zòo-còo-nà]_{RELC} [níi]_{NOM} [=əə]_{ART}]_{NP} əgə
 lift-FIRST-NZR:SUB person=TOP ANAP.IND
âra doonà ná!
 arə-dó(o)-nà = əə na
 be.subject.to.taboo-STAT-NZR:SUB=COP.IPFV DECL
 ‘The person **who lifts (the corpse) first**, that one’s taboo, you see!’ (LN, WGD 028)

6.1.2.2.6. Post-head modifying nominals: numerals, classifiers, relator nouns and qualifying nouns

A large number of forms are found in Galo which have the basic structural status of nouns (and which often have the ability to head a referential NP), but which also and more often occur as postposed modifiers of a distinct NP head. Such “post-head modifying nominals” include *numerals*, *classifiers*, *relator nouns* and *qualifying nouns*. Each of these types is discussed in detail in §8; here we provide only a brief discussion of their status as constituents of the noun phrase.

Classifiers and numerals occupy a single post-head “Enumerative” syntactic position; and may either occur in a two-word sequence, as *ikii adór kanə* ‘dog CLF:HIGH.ANIMAL seven’ ‘seven dogs’ or in a one-word “enumerative classifier expression”, as *ikii dór-jí* ‘dog CLF:HIGH.ANIMAL-two’ ‘two dogs’. Rules for numeral and classifier selection and the formation of enumerative classifier expressions are discussed in §8.2.

Relator nouns post-modify a nominal with abstract (usually but not always spatial) relational senses such as ‘top’, ‘back’ and ‘because’. It is difficult to determine their positional status relative to enumeratives, mainly due to semantic incompatibilities. No examples of relator noun-enumerative expression co-occurrence occur naturally in my corpus, and elicited examples are somewhat problematic for reasons discussed in §8.1. For the present, what may be said is that to the extent that relator nouns may occur together with enumerative expressions, they should follow them; however, further research in the area is required.

The relative positional status of qualifying nouns is similarly difficult, due both to the internal diversity of the class and to the frequent difficulty of determining whether a particular qualifying noun use is indeed an instance of phrase-internal post-head modification, or is rather an instance of NP-apposition; for further discussion on this point, see §8.3. Again here, what may be said for the present is that to the extent that qualifying nouns may co-occur with other post-head modifying nominals within the same noun phrase, the tendency seems to be that they will follow them; again, however, more research in the area is warranted.

6.1.2.2.7. Articles

A small number of *articles* – by which is meant non-deictic markers of noun phrase referential status – occur post-head only in Galo (Table 6.3).

| Term | Gloss | Reference |
|------------|----------------------------------|------------|
| <i>go</i> | Individuator | §14.2.1.2 |
| <i>əkə</i> | Plural indefinite | §7.4.3.3.2 |
| <i>əə</i> | Topic marker | §14.2.1.3 |
| <i>hi</i> | Proximal/cataphoric Topic marker | §7.4.2.3 |

Table 6.3 – Articles

Articles are in complementary distribution with demonstratives, and in some cases appear themselves to be demonstrative-derived. However, unlike all true demonstratives, no articles may “bracket” a noun phrase (cf. §6.1.2.2.4). Some articles are *functionally* in complementary distribution with case markers/postpositions – for example, Individuator *go* and Accusative marker *əəm* can never co-occur – however articles which *can* co-occur with postpositions occur in ART-POST order (as *go = lo* ‘IND=LOC’).

For discussion of the functions of articles in the broader context of noun phrase referential marking, see §14.2.1.

6.1.2.2.8. Postpositions

Postpositions mark noun phrase grammatical relations and semantic roles. Although there may be a grammatical basis for distinguishing “case marking” postpositions from other types of postposition, in terms of basic noun phrase syntax they occupy the same position class and are thus treated together here.

In many functions, postpositions have both demonstrative postpositional and pronominal-suffixal allomorphs. However, although they may be identical in their grammatical and/or semantic relational marking functions, these three morpheme classes are structurally/categorically distinct: true postpositions occur *post-nominally only*; this distinguishes them from demonstrative postpositions on the one hand – which may “bracket” a noun phrase – and suffixal allomorphs of relational markers on the other hand – which may depend on *both* iterations of a “bracketing” demonstrative (§6.1.2.2.4). The basic set of Galo postpositions is given in Table 6.4.

| Term | Gloss | Reference |
|-------------|---------------------------------|-----------|
| Ø | Nominative | §14.2.1.1 |
| <i>əəm</i> | Accusative | §14.3.2 |
| <i>nè</i> | Non-agentive | §14.3.2 |
| <i>bə</i> | Dative | §14.3.3 |
| <i>lo</i> | Locative | §14.3.5 |
| <i>gə</i> | Genitive | §14.3.6.1 |
| <i>lokə</i> | Ablative | §14.3.6.2 |
| Various | Complex and fused postpositions | §14.3.7 |

Table 6.4 – Postpositions

The question of postpositional co-occurrence (analogous to the phenomenon of “double case” (Dench and Evans 1988; Plank 1995)) is an interesting and complex one, which is discussed in more detail in §14. Certain co-occurrences are well-attested, are synchronically compositional, and have clear semantic motivations; for example, *nè* ‘NAGT’ may follow *əəm* ‘ACC’ with the basically emphatic effect of highlighting an O argument referent’s lack of agentivity (see §14.3.2). In other cases, synchronic compositionality is in doubt, and it may be preferable to analyse a particular sequence of simplex postpositions (or postpositions with another neighbouring form, such as a particle) as a fused unit; such cases are discussed individually in §14.3.7. As a general principle, it may be said that postpositional co-occurrence is possible in Galo. However, co-occurrences are limited to specific sequences of particular forms; furthermore, such sequences are not always (or not always obviously) synchronically compositional.

6.1.2.2.9. Particles

Particles may or may not be best analysed as noun phrase-internal constituents; many co-occur with other phrase types – always phrase-finally – and some “versatile”

particles occur in a wide variety of syntactic positions, including “interruptive” non-constituent positions – often observing prosodic rather than grammatical rules for insertion – in a variety of grammatical phrase types. Such matters are discussed and exemplified in detail in §13.

For the present, the important point to note is that if and to the extent that particles occur as noun phrase-internal constituents, their position is always *last* in the phrase. An example is given in (115).

(115) *moopín moozé...joojó ðmcìn*

[[moopín]_{MNOM} [moozé]_{NOM} [joojó]_{QNOM} [ðəm]_{CASE} [= cìn]_{PCL}]_{NP}
 festival.harvest festival and/or.such ACC=ADD

korùm...ḡunù rìtò.

korùm ḡunù rì-tó
 ancient.times 1.PL do-PFV

‘And, in the old days we did our Mopin festival and so on **as well**.’ (NyR, MDS 041)

6.1.2.3. Headless NPs

It is extremely common to find noun phrases which have “underlying”, or understood, nominal heads, but in which the head is not overtly expressed. Usually, such “headless” NPs occur in conditions of high contextual predictability, and are quite common in natural discourse.

Not all NP constituents may occur in, or “license” a headless NP. In general, constituents which are themselves nominals, or which are historically derived from nominals are more likely to license head ellipsis. They include genitive phrases (116), relative clauses (116), numerals and classifiers (117) and some but possibly not all relator nouns (118)-(119). NP constituents which can *not* license a headless NP include modifying nominals, case markers/postpositions, articles, and particles. “Standalone” use of demonstratives is regarded as a *pronominal* function in Galo rather than an instance of a headless NP. Evidence for this view lies in the fact that while all true demonstratives may “bracket” an NP, bracketing uses are not possible if the head is ellipsed (§7.4).¹³³ Similarly, qualifying nouns in “standalone” uses may be closer to pronominal uses than to headless NP uses *per se* (see §8.3).

¹³³ I.e., while it is possible to say simply *higì* ‘SPRX.IND’ ‘this one’ or *higì ikii higì* ‘SPRX.IND dog SPRX.IND’ ‘this here dog’, it is not possible to say **higì Ø higì* ‘SPRX.IND Ø SPRX.IND’.

- (116) *əə, əəm laakâa tó; kainə,*
 əə_i əəm làa-káa-tó [[kaí-nà]_{RELC} [Ø_i]_{NOM}]_{NP}
 bamboo ACC take-TENT-IPTV.ODIR big-NZR:SUB
kózzú gə.
 [[kózzúu = gə]_{GEN} [Ø_i]_{NOM}]_{NP}
 awhile.ago=GEN
 ‘Get the bamboo_i; the big [one_i], the [one_i] from just before.’ (lit., ≡ ‘just now’s’).
 (IR, MPO 003)
- (117) *dorumə...ərabné cínə cñbálà...*
 [[Ø_i]_{NOM} [dor-úm]_{ENUM} [= əə]_{PSHD}]_{NP} əráp = nè cíi-nó cñ-bó-là(a)
 CLF:HIGH.ANIMAL-three=TOP door=NAGT slap-MOVE.1 slap-MOVE.2-NF
 ‘The three [rats_i]...knocked on the door...’ (TR, FA 009)
- (118) *bulù kookñbə, jòo ríkàa kú*
 bulù [[Ø_i]_{NOM} [kookñi]_{RN} [= bə]_{CASE}]_{NP} jòo rì-kàa-kú =
 3.PL back=DAT what do-PF-CMPL=NF1
 ‘After [that_i], what did they do?’ (IR, FA 030)
- (119) *táajoo òg doodób môtə ke.*
 [[Ø_i]_{NOM} [taajòo]_{RELN} [ogò]_{PSHD}]_{NP} dóo-dó(o) = bə mò-tó = kée
 top APRX.LOC lie.down-STAT=SBRD make-
 IPTV.ODIR=HORT.POL
 ‘Make it lie on the top (of the stone_i).’ (IR, MPO 013)

Although most of the headless NP constituents in (116)-(119) are either themselves basically nouns or are historically derived from nouns, that they are not in fact standing as NP heads in these examples may be demonstrated by two facts. First, the denotational values of the bracketed noun phrases in (116)-(119) are all underdetermined by their constituents; i.e., it is clear from the discourse context that *dór-úm = əə*

‘CLF:HIGH.ANIMAL-three=TOP’ in (117) refers to three rats rather than any other set of three animals, and the semantic value ‘rat’ is not overtly carried within this NP due to head-ellipsis. Second, any additional modifiers which occur in the NP refer to the ellipsed head, not to the overt constituents. For example, if the adjectival subject relative clause *kaí-nà* ‘big-NZR:SUB’ is inserted into (119), the resulting sense is of the ‘top of a big stone’, *not* ‘big top of a stone’.

That said, there are certainly cases in which it becomes difficult to argue for the headedness of a particular noun phrase, due to the transparently nominal origin of many functional NP constituents. Numerous marginal cases may be found in the data, some of

which may be reflective of historical intermediacy as basic nouns develop increasingly functional statuses; this is of course to be expected. Some examples will be adduced in passing in §8 below.

6.1.3. Pronominally-headed NPs

Pronominally-headed NPs are headed by a pronominal, which may be a personal (120) or interrogative/indefinite pronoun (121), or else a demonstrative (120).

- (120) *ɲûn tolò caalîglà.*
 [ɲunù]_{NP} [tolò]_{NP} càa-lîk-là(a)
 1.PL DST.LOC.UP ascend-INTO-NF
 ‘We went **up there**.’ (RmR, CC 018)

- (121) *jâə bərə?*
 [jâə]_{NP} = əə bəree
 who=COP.IPFV CJEC
 ‘Who is it?’

Pronominally-headed NPs have the following, relatively restricted structure and constituency (Table 6.5 and Figure 6.2).

Head

- a) Pronominal (PRO)

Post-head modifiers

- b) Post-head referential modifier (PSHD)
 c) Case suffix (CASE)
 d) Particle (PCL)

Table 6.5 – Constituency of a pronominally-headed noun phrase (in order from top to bottom)

PRO – PSHD – CASE – PCL

Figure 6.2 – Structure of a pronominally-headed noun phrase (linear view)

Unlike a common nominally-headed NP (§6.1.2.3), the head of a pronominally-headed NP is obligatory; headless pronominally-headed NPs do not occur. The set of post-head operators in a pronominally-headed NP is relatively restricted; of the set of articles identified in §6.1.2.2.7, only Topic-marker *əə* occurs on a pronominally-headed NP, and

with relatively restricted distribution (see §14.2.1.3). A restricted set of case markers occurs by comparison with the common NP-marking set, most of which are suffixal allomorphs of phrasal case markers (Table 6.6; compare with Table 6.4).

| Function | OTHER | 3.SG, 1-3.DL/PL |
|----------------|-------------------|-----------------|
| Nominative | Ø | |
| Accusative | -m | -əəm |
| (Non-agentive) | nè ¹³⁴ | |
| Beneficiary | -pə | -əpə |
| Genitive | -kə | |

Table 6.6 – Pronominal case-markers

As shown, there is a paradigmatic distinction between Third person singular and all Dual and Plural personal pronouns and all other pronominal case-taking forms. This seems to be due not to a synchronic SAP/non-SAP (Speech Act Participant) distinction or anything similarly functionally-motivated, but rather to the historical fact that (if our etymologies are correct) forms other than 1.SG and 2.SG incorporate earlier following nominals; as a result, they seem to retain certain phrasal enclitic forms; see §7.1.3 for a more detailed discussion.

6.1.4. Proper name-headed NPs

Proper name-headed NPs are obligatorily headed by a proper name (122). Their structure and constituency is represented in Figure 6.3.

(122) *tamáa toî, toopó gón bî.*

tá-máa-tó (ə)î [[toopó-gonə]_{NOM} [bî]_{PSHD}]_{NP}
 listen/hear-NEG-PFV ETAG NAME 3.SG
 ‘She didn’t listen, eh, that Toopo Gona.’ (LN, TG 028)

¹³⁴ Following Accusative only.

Pre-head modifiers

- a) (Genitive phrase (GENP))
- b) (Pre-head demonstrative (PRHD))

Head

- c) Proper name (NAME)

Post-head modifiers

- d) Post-head demonstrative or article (PSHD)
- e) Postposition (POST)
- f) (Particle (PCL))

(GENP) – (PRHD) – NAME – PSHD – POST – (PCL)

Figure 6.3 – Order of elements in a proper name-headed NP

In addition to the different set of structural possibilities shown in Figure 6.3, proper name-headed NPs differ from other NP types in terms of the types of modification they may take. Among post-head modifiers, proper names are not modified by articles. Use of basic demonstratives with proper names is also relatively restricted; instead, demonstrative use of pronouns, as in (122), is relatively high (§7.1.5.1; §14.2). Among relational markers, proper names take most common nominal postpositions (§6.1.2.2.8); however, they obligatorily take Non-agentive marking (rather than Accusative marking) when heading a noun phrase in O function (cf. §14.3.2). Finally, as interjective terms of address, proper names are the only type of noun phrase head which may be modified by a Vocative interjective particle (§13.6.2).

The occurrence of pre-head demonstratives and genitive phrases in a proper name-headed NP is somewhat uncertain. Certainly, they are attested, but such uses are generally marked and may be better described as instances of taking a proper name to stand, in a syntactic sense, as a common nominal (as if one were to say, in English, *that Jim is a bastard* or *our Phil is a fine little boy*). In (123), note that the name *toopó-goné* is not only preceded by a genitive phrase, but is also followed by a Topic marker. Since topic-marking is not generally a property of proper name-headed NPs, we might infer that *toopó-goné* is here functioning syntactically as a common nominal.

(123) *izì, ɣunukà toopó-gonná, tã...adî móók' tã, jòo*

izì ɣunù-kà toopó-goná=əə tà adî mookó tà jòo
 now 1.PL-GEN NAME=TOP DST.UP Adi.macro-tribe place DST.UP what
zegá lobaré duudù?

zegáa lo = bəre dùu-dùu

place(<Hin) LOC=CJEC sit-IPFV

‘Nowadays, our Toopo Gona...up there...in the mountains, where might it [the stone into which she was swallowed up long ago] be found?’ (LN, TG 085)

6.1.5. Time noun-headed NPs

Time noun-headed NPs have a wide variety of structural possibilities, according to the subtype of time noun standing as head. These facts are reviewed in §5.2.2.16.

6.2. Coordination

6.2.1. Preliminary: coordination vs. apposition

By “coordination” in the noun phrase is meant a case in which two potentially referring expressions occur in some sequence, and in which each has a *different* referential value (as *[John]*, *[Bill]* and *[Mary]*). By “apposition” is meant a case in which two potentially referring expressions occur in some sequence, and share *the same* referential value (as *[the good ship][Lollipop]* or *[my neighbour][John]*).

6.2.2. Types of coordination in the noun phrase

Table 6.7 lists the major types of coordination found in Galo noun phrase syntax.

- | | | |
|----|--|----------|
| 1) | Coordination of NP heads | (§6.2.3) |
| 2) | Coordination of non-head NP constituents | (§6.2.4) |
| 3) | Simple NP-coordination | (§6.2.5) |
| 4) | “Listed” NP-coordination | (§6.2.6) |

Table 6.7 – Types of coordination in Galo noun phrase syntax

6.2.3. Coordination of NP heads

Conjunctive and *open disjunctive* coordination of nominal NP-heads consists of (only) two nominals which occur in immediate sequence, without any intervening morphology, under the same intonation contour and constituting a single phonological

phrase; case markers and any other occurring NP enclitics follow and have scope over both coordinated heads. Each coordinated term has a distinct reference; for example, in (124), *alə* ‘foot/leg’ and *alák* ‘hand/arm’ independently refer to the feet/legs and hands/arms of the individuals in a narrative. (124)-(126) illustrate conjunctive head-coordination (both *x* and *y*) of common nominals, derived nominals, and proper names respectively; (127) illustrates open disjunctive head-coordination, this time involving time nouns (*x* or *y*, or both). Pronominal head-coordination (within a single pronominally-headed NP) is unattested, and seems very unlikely to be accepted.

(124) *purâa âl-aləkóm tiŋám əné*

purâa [alə-alák = əəm]_{NP} tíi-ŋám = əə né
 everything(<Ind) **foot/leg-hand/arm**=ACC bite-EXH=COP.IPFV DECL.ADM
 ‘(Our) **arms and legs** were bitten *all* over, for heaven’s sake!’ (RmR, CC 069)

(125) *okká...ikiə...təm, iló-pumpá tokə...*

okká ikii = əə [tə-m iló-pumpáa tokə
 SCNJ dog=TOP DST.UP-ACC bee-balloon DST.ABL.UP
nennâm aanəməm kaatə lá...
nən-nam áa-nam = əəm]_{NP} káa-tó-là(a) = ́
exit-NZR:RLS enter-NZR:RLS=ACC see-PFV-NF=NFI1
 ‘And the dog, watching the **coming and going** (of the bees) from the beehive...’
 (TR, FS 036)

(126) *koogêe gə tə gəəjî-karbəkə.*

koogêe = gə təə [gəəjî karbák]_{NP} = əə
 NAME=GEN DST.UP [Geji.clan Karbak.clan=COP.IPFV
 ‘Koge’s (descendants) are the **Geyi and Karbak** (clans) up there.’ (NyR, MDS 081)

(127) *âllo-rôə nə caatêr dagèe bə...*

allò-roə = nə càa-tár-dàk-ée = bó
tomorrow-day.after.tomorrow=IRR.TMP.PUNC ascend-TO.END-COS-
 IPFV.DISJ=SBRD
 ‘So that they can move up **tomorrow or the next day** [tomorrow we’ll properly do all the things that must be done].’ (IkR, HC 016)

As (124)-(127) show, there is no formal difference between conjunctive and disjunctive coordination of NP heads; disambiguation is contextual. For example, in (124)

‘Exhaustive’ derivation -*ɲám* reinforces a conjunctive reading to *alə-alák*.¹³⁵ By contrast, in (127), the event ‘move into (a house)’ must practically be understood to occur at one particular time only; hence, *allò-roə* is interpreted to mean ‘tomorrow *or* the next day (whichever it happens to be)’, rather than ‘tomorrow and the next day’.

In most cases, the two terms of an NP head-coordination constitute, or are prototypically representative of, a *natural class*. For example, *alə* ‘foot/leg’ and *alák* ‘hand/arm’ constitute a natural class ‘bodily extremities’ and *allò* ‘tomorrow’ and *roə* ‘day after tomorrow’ constitute the set of future dates which are closest to the present. As such, NP head-coordination very closely resembles *symmetrical two-term compound* formation (§5.3.1.4.1), with the latter almost certainly deriving historically from the former. However, there are important differences: while in a true NP head-coordination, both terms have distinct reference, a true symmetrical two-term compound need not refer to either of the individuals mentioned. For example, *hottúm-horə* ‘wild animals’ (lit., ‘bear-boar’) can refer to any particular set of wild animals, whether or not the set actually includes a bear or boar. Thus, while they may be formally identical, true NP head-coordinations are syntactically *compositional* and preserve the individual denotational and referential values of their constituents, while symmetrical two-term compounds are instead *lexicalized*, and have a single overall denotation which may not obviously relate to the independent denotations of their constituent terms.

Of course, in practice the distinction is a matter of degree, as it is in any language. In English, the phrase *comings and goings* may be used to refer to a situation in which some entities are in fact engaged in some temporally or analytically separable acts of *coming* and *going* which a speaker may wish to refer to independently. Or, it may be used to refer to some more general concept of multidirectional motion. Similarly, Galo *donám-tšinám* ‘eating-imbibing’ may be used on a particular occasion to refer individually to acts of, or to things used in, eating and imbibing respectively. Or, it may be used in a collective sense to refer to a more general concept of ‘sustenance’ or ‘upkeep’. The extent to which the analytical or the collective uses are each possible hinges on degree or extent of *lexicalization*. Some more fully lexicalized collocations such as *hilòo-məròo* ‘these days’ are so commonly used as two-term compounds with a conventionalized overall

¹³⁵ The function of Exhaustive suffix -*ɲám* ‘EXH’ (§11.2.5.10) is to indicate that ‘all’ or ‘every one’ of the set of entities referenced by the S or (in this example) O arguments fully participated in/were affected by the event.

coordination of modifying nominals is formally identical to NP head-coordination (§6.2.3); however, more research should be conducted in this area (128).

(128) *mîkə...donám-tínám môkə lo...*

[[bî-kə]_{GENP} [dó-nam tí-nam]_{MNOM} [mò-kò]_{NOM} = lo]_{NP}
 3.SG-GEN eat-NZR:RLS imbibe-NZR:RLS make-NZR:LOC/OBL=LOC
 ‘in his kitchen...’ (lit., ≡ ‘in his **food and drink** making-place’) (TR, FA 076)

6.2.4.2. Coordination of enumerative expressions

NP-internal coordination of enumerative expressions (classifiers and numerals) is frequent in Galo discourse. Formally, it resembles NP head-coordination and consists of an unmarked juxtaposition of numerals, classifiers, or both. In (129) and (130), numerals and Enumerative classifier expressions are coordinated within headless NPs respectively. In (131), a syntactically compositional classifier expression involving entirely Indic loanwords (but preserving the syntactic form of the native Galo construction) follows the head noun.

(129) *ogò...îzi mên-tə bá kocaarí əkə...*

ogò izì mên-tó-bá(a) kocaari əkə
 TMP.RLS now say-PFV-PFV.DRCT TRIBE.NAME ANAP.PL
əpi-aumgó...hóg caalà.
 [[Ø]_{NOM} [əpi-aúm]_{ENUM} = go]_{NP} hogò càa-là(a)
 two-three=IND SPRX.LOC ascend-NF
 ‘At that time...you know those Kacharis I just told you about...**two or three** of them came up here.’ (NyR, MDS 023)

(130) *ŋó dèn akenə lôŋi loúm go*

ŋó dèn akèn = əə [Ø] [lò-ŋì] [lò-úm] = go]_{NP}
 1.SG ICMP one=TOP day CLF:DAY-two CLF:DAY-three=IND
rəbbooló bohó éí má!
 rá-boolo bohó=éí=máa
 exist-COND afraid-HEMP-NEG
 ‘Me, on the other hand, if I stayed on my own (in the jungle) for **two or three days** I wouldn’t be scared a bit!’ (AO, CC 199)

- (131) *pîp' duî tərè, tîn tərè, jôog*
 [[pîpə]_{NOM} [[dui tərè] [tîn tərè]]_{ENUM} [jòo]_{QNOM} = go]_{NP}
 egg two(<Ind) flat(<Ind) three(<Ind) flat(<Ind) and/or.such=IND
laalâa nà...
 làa-laanà
 take-IPTV.SOFT
 ‘You ought to get around **two flats or three flats** (i.e., containers) of eggs.’ (IR, HC 004)

For discussion of coordination within the numeral constituent as a feature of complex numeral construction, see §8.2.1.

6.2.4.3. Coordination of genitive phrases

Coordination of genitive phrases resembles NP-coordination (§6.2.5) in making use of the conjunctive particle *laa* (132).

- (132) *bozîr gəlâ bohar gə ləgâa bə ŋó sâa morə*
 [[bozîr gə = laa bohar = gə]_{GENP} [ləgâa]_{NOM} = bə]_{NP} ŋó hàa mò-rə
 NAME GEN=NCNJ NAME=GEN reason=DAT 1.SG tea make-IRR
 ‘I’ll make tea for Bozir and Bohar.’ (lit., ‘for **Bozir’s and Bohar’s** benefit’) (KZ, 9:37)

6.2.4.4. Coordination of relative clauses

Coordination within the relative clause follows the standard Galo patterns of adjectival and verbal predicate-coordination as discussed in §16.3, with medial (coordinated) predicates marked with a qualifying non-final marking suffix (most often, *-là(a)* ‘NF’ and/or *-gərə* ‘ACNC’) and the final predicate in the coordinated chain alone taking nominalizing/relativizing morphology (133)-(135).

- (133) *ahôo là kaanêk nê jiiá ŋóm níktó*
 [[ahôo-là(a) káa-nèk-nà]_{RELC} [jiiá]_{NOM} = áa]_{NP} ŋó-m ník-tó
 long/tall-NF look-BAD-NZR:SUB person=DST.SLEV 1.SG-ACC punch-PFV
 ‘The **tall and ugly** man punched me.’ (KZ, 9:240)

- (134) *áəm...əŋɲí go..p̥tə ɡərə ahòo nàm*
 [aś-m [əŋɲí = go p̥t-tə-ɡərə ahòo-nà]_{RELC} [Ø]_{NOM} = əəm]_{NP}
 HDST.SLEV-ACC bit=IND CLF:EGG-big-ACNC long/tall-NZR:SUB=ACC
laakâa tó, ilìəm.
 làa-kâa-tó ilì = əəm
 take-TENT-IPTV.ODIR stone=ACC
 ‘Get (the thing) which is a bit **long and (yet) rotund**, the stone.’ (IR/IRW, MPO 054)
- (135) *ahòo tolàa japúu tolàa kaanêk tolàa aó kaamáa nò*
 [[ahòo-tó-là(a) japúu-tó-là(a) káa-nèk-tó-là(a) aó káa-máa-nà]_{RELC}
 long/tall-PFV-NF white-PFV-NF see-BAD-PFV-NF child have/exist-NEG-NZR:SUB
ɲíəgə ɲóm níktó.
 [ɲí]_{NOM} = əgə]_{NP} ɲó-m ník-tó
 person=APRX.IND 1.SG-ACC punch-PFV
 ‘The **tall, white, ugly** man **who has no children** punched me.’ (lit., ‘the man who is **tall, white, ugly and has no children...**’) (KZ, 9:240)

When two coordinated relative clause predicates are individually marked by a nominalizing/relativizing suffix, each must be independently referential. In some cases, as in (136), it is clear that we are now no longer dealing with NP-internal coordination, but rather with coordination of two distinct NPs; note in (136) that regular phonetic lengthening of the Subject nominalizer rhyme [naa] indicates the underlying presence of an NP-final Topic marker ə (cf. §14.2.1.3), hence of an NP-boundary. In other cases, it is difficult to tell whether we are dealing with one NP or two. In (137), my consultants were quite clear that the expressions *ahòo-nà* ‘long/tall-NZR:SUB’ and *káa-nèk-nà* ‘look-BAD-NZR:SUB’ must refer to two distinct individuals; however, in absence of a phrase-final referential marker following the first relative clause as in (136), the ‘Same level’ distal demonstrative marker *áa* ‘DST.SLEV’ in (137) has scope over *both* relative clauses – suggesting that this may represent a distinct (but statistically infrequent) noun phrase-internal relative clause coordination type.

(136) *ahôo naalà kaanêk nê pijjá*

[[ahòo-nà]_{RELC} [Ø]_{NOM} = əə]_{NP} = laa [[káa-nèk-nà]_{RELC} [ɲíi]_{NOM} = áa]_{NP}
 long/tall-NZR:SUB=TOP=NCNJ look-BAD-NZR:SUB person=DST.SLEV
ɲóm dəmtó.

ɲó-m dóm-tó

1.SG-ACC beat-PFV

‘The tall (man_i) and the ugly man_j beat me.’ (IR, B5:26)

(137) *ahôo nəlà kaanêk nê pijjá ɲóm*

[[ahòo-nà]_{RELC} = laa [káa-nèk-nà]_{RELC} ɲíi = áa]_{NP} ɲó-m
 long/tall-NZR:SUB=NCNJ look-BAD-NZR:SUB person=DST.SLEV 1.SG-ACC
dəmtó.

dóm-tó

beat-PFV

‘The tall (man) and the ugly man beat me.’ (IR, B5:26)

6.2.5. Simple NP coordination

6.2.5.1. Conjunctive

Conjunctive NP-coordination (‘x and y’) is obligatorily marked by nominal conjunction *laa* ‘NCNJ’, which is enclitic to the first of the two coordinated NPs. In (138), both of *tatík = go* ‘a frog’ and *ikîi = go* ‘a dog’ stand as O argument of the clause. Nominal conjunction *laa* seems almost certainly cognate to Non-final predicate suffix -*là(a)* ‘NF’; however, while the latter is grammatically a predicate suffix, that Nominal conjunction *laa* is a clitic is clearly shown by its position *after* the NP-final article *go* in (138).

(138) *âg omêəgə...tatíg golà...ikîi gò...ootó.*

[əgə omèə əgə]_A [[tatík go]_{NP} = laa [ikîi = go]_{NP}]_O [óo-tó]_{PRED}
 ANAP.IND kid ANAP.IND frog IND=NCNJ dog=IND tend-PFV
 ‘That there boy was raising a dog and a frog.’ (TR, FS 004)

Very rarely, nominal conjunction *laa* has been observed to follow *both* coordinated NPs (139). As of this writing, no semantic difference between such “double”

coordination-marking and the unmarked coordination structure exemplified in (138) has been determined.¹³⁶

(139) *ahôo nê əglâ*

[ahôo-nà əgè]_{NP} = **laa**
long/tall-NZR:SUB DST.IND=NCNJ

kaanêk nê əglâ ɲóm niktó.

[káa-nèk-nà əgè]_{NP} = **laa** ɲó-m nĩk-tó
look-BAD-NZR.SUB DST.IND=NCNJ 1.SG-ACC punch-PFV
‘[the tall one] **and** [the ugly one] punched me’ (KZ, 9:240)

Figure 6.5 schematizes the structure of a conjunctive NP-coordination.

[[NP] *laa* [NP] (*laa*)]_{NP}

Figure 6.5 – Structure of a conjunctive NP-coordination

6.2.5.2. Disjunctive

Disjunctive NP-coordination (‘*x* or *y*’) structurally resembles disjunctive clause-coordination (§16.3.1.2), and is best-attested in *uncertain* and/or *interrogative* moods. In this construction, *both* disjunct noun phrases are usually marked by an epistemic particle appropriate to the degree of speaker uncertainty. In the appositive verbless clause of (140), the two NPs *jakâa = go* ‘black=IND’ ‘black one’ and *japúu = go* ‘white=IND’ ‘white one’ are each marked by Conjectural particle *bəree*; both stand as Verbless clause complement.

(140) *aəə jakâa gò bərə jəpúu gó bərə?*

aəə [jakâa = go]_{NP} bəree [japúu = go]_{NP} bəree
HDST.SLEV **black=IND** CJEC **white=IND** CJEC

‘Over there, (is it) **a black one** or **a white one** (I can’t make it out)?’ (MN, 22:155)

In predicative clause argument positions, disjunctive NP-coordination is typically marked by disjunctive coordinator *máa* ‘DSJ’. *máa* ‘DSJ’ is homophonous with the Copula negator/Negative interjection *máa* ‘NEG’, and probably derives from the latter historically. However (as discussed in §16.3.1.2 also) it is important to note that the Negator as a

¹³⁶ It is possible that “double” coordination-marking represents “open” coordination, as though implying that still other qualifying referents might yet be mentioned. Unfortunately, data on this point appear mixed, and the possibility can at present be neither confirmed nor denied.

negative polarity operator *per se* does *not* occur following epistemic particles in modern Galo; hence on syntactic grounds it is clear that the Disjunctive coordinator and the Negator are synchronically distinct (141).

(141) *b̃h̃ ɲojjém cóm má jôowəm còm əpâk kò?*

b̃h̃ [ɲoí=əəm]_{NP} com máa [jòo=əəm]_{NP} com əpâk-kò=əə
 3.SG fish=ACC GUESDSJ what=ACC GUES reject-NZR:LOC/OBL=TOP
 ‘Was it **fish or what** that he threw away?’ (IR, 22:5)

Disjunctive NP-coordination in declarative moods is not well-attested, with most attested cases of semantic alternation in my corpus handled by NP-internal head-coordinations (see §6.2.3). The structure most often returned in elicitation involves a distinct coordinator *maarém*, which probably derives historically from the sequence *-máa-ró=əəm* ‘-NEG-IRR=ACC’; literally, ‘in the unreal/hypothetical negative’ or ‘if not that’.

(142) *pôol gòn alò, ɲó ləkên gó maarém ləɲi gó caarè.*

poolò gonà alò ɲó [ləkên=go]_{NP} maarém [ləɲi=go]_{NP} càa-ró
 month SSEQ DST.LOC.SLEV 1.SG once=IND DISJ twice=IND ascend-IRR
 ‘I’ll visit you **once or twice** next month.’ (MN, B2:31)

Disjunctive NP-coordination can thus be described in terms of two basic structural types – one involving sequential, non-coreferential NPs, in which each NP is marked by an epistemic particle, and the other in which a disjunctive coordinator marks the alternation – and a third type, defined as a hybrid of types 1-2 (Figure 6.6-Figure 6.8).

[NP][PCL] [NP][PCL]

Figure 6.6 – Disjunctive NP-coordination, Type 1

[NP] [DISJ] [NP]

Figure 6.7 – Disjunctive NP-coordination, Type 2

[NP][PCL] [DISJ] [NP][PCL]

Figure 6.8 – Disjunctive NP-coordination, Type 1-2 hybrid

6.2.6. “List” NP coordination

“Lists” of more than two NPs are bounded by intonational pauses, interspersed with one or more mentions of the sentential coordinator *okkəə* (§16.3.1.1; cf. also the sentence-initial mention in (144)), and, often, marked by Additive particle *cìn* (§13.2.2.2). In the following two examples from the same spoken text, the speaker in (143) coordinates three full NPs, each consisting of a single symmetrical two-term compound plus one or more determiners. In (144), three NPs are again coordinated; this time however, each is marked by Additive particle *cìn*. Again, intonational pauses mark the coordination, as does sentential coordinator *okkəə*, although in a different syntactic position.

- (143) *ədîna hīgì hottúm-horə...okkəə*,
 [ədî-nà hīgì hottúm-horə]_{NP} okkəə
 incredible-NZR:SUB HEST bear-boar SCNJ
hobée-pətaə...hôt-hoŋnò anín-maabə rətó.
 [hobée-pətaə = əə]_{NP} [hôtə-hoŋnò = əə]_{NP} anín-máa = bá rə-tó
 monkey-bird=TOP elephant-tiger=TOP plenty-NEG=AVZR live/exist-PFV
 ‘Tons of these wild animals were here, big and small, in countless numbers.’ (lit.,
 ‘big game, small game, and megafauna’) (NyR, MDS 014)
- (144) *okə, nəpalí rənnâa cìn...ohomiá rənnâa*
 okkəə [nəpalii rə-nà = əə cìn]_{NP} [ohomia rə-nà = əə
 SCNJ NAME live/exist-NZR:SUB ADD NAME live/exist-NZR:SUB=TOP
cìn...okkəə, mirí rənnâa cìn, bulù acínəm
 cìn]_{NP} okkəə [mirii rə-nà = əə cìn]_{NP} bulù acín = əəm
 ADD SCNJ NAME live/exist-NZR:SUB=TOP ADD 3.PL cooked.rice=ACC
dopâa tokú.
 dó-pâa-tó-kú
 eat-ATTN-PFV-CMPL
 ‘And the Nepali, the Assamese, and the Mising who were living here (thus also,
 as a result of our labour) got enough to eat.’ (NyR, MDS 070)

Figure 6.9 presents a rough schematic of a “list” NP-coordination. Note that the position of SCNJ is not fixed.

[NP (ADD)][NP (ADD)][SCNJ][NP (ADD)]

Figure 6.9 – Structure of a “list” NP-coordination

6.3. Apposition

Apposition is of two basic types:

- 1) “Afterthought” NPs (§6.3.1)
- 2) Referential qualifying expressions (§6.3.2)

6.3.1. “Afterthought” NPs

An “afterthought” NP is one which immediately, or closely, follows another, coreferential NP. The usual function of an afterthought NP is to provide some information which was not contained in the first NP, either because the speaker neglected to include it or because inclusion might lead to construction of an over-heavy or difficult-to-process constituent (145)-(146). Note that although “afterthought” NPs may also occur post-verbally – usually, though not obligatorily, set off by an intonational pause – such constructions are less frequent in my corpus than are the appositional types described in this section.

- (145) *abbî! ɲokkə̀m hogò gəlôo kunəmə́m*

abbî [ɲó-kə̀ = əəm]_i [hogò gá-lòo-kú-nam = əəm]_i

whoa! 1.SG-GEN=ACC SPRX.LOC carry/wear-DESC-CMPL-NZR:NSUB=ACC

orɲám...

ór-ɲám

distribute-EXH

‘Wah! I gave away every one of the fish I brought down.’ (lit., ‘**mine, those that I brought down...**’) (RmR, CC 113)

- (146) *əgə̀, buppî əgə̀...immên tàb innà,*

[əgə̀]_i [buppî = əgə̀]_i [ín-mèn-tà = bó ín-nà = əə]_i

ANAP.IND everyone=ANAP.IND walk-AS.PLAY-INCP-SBRD walk-NZR:SUB=TOP

ɲâɲnə əkkə̀ jú nà.

ɲàk-nà əkə̀ = əə juu na

be.lost-NZR:SUB ANAP.PL=COP.IPFV REP DECL

‘[**Those ones**]_i, [**that bunch**]_i, [**the hikers**]_i...were the ones who got lost, so it is said.’ (TR, FA 086-87)

6.3.2. Referential qualifying expressions

Referential qualifying expressions consist of one “primary” NP and one following, apposed “qualifying” NP (Figure 6.10). The *primary* NP is responsible for the primary semantic value of the expression, while the *qualifying* NP limits, extends, or in some more general way modifies its referential scope.

Figure 6.10 – Structure of a referential qualifying expression

Although both the primary and the qualifying NP are well-formed noun phrases with the potential for independent reference, in a referential qualifying expression *both* NPs work together within the *same* clausal argument position to project a combined overall referential value. In (147), *donám-tšinám* ‘food and drink’ and *nəgɨ̃* ‘variety’ are both marked by a noun phrase-final Topic marker – and are thus both clearly *noun phrases* rather than simply *nominals* – and each has the potential to stand as an independently-referential clause argument. However, in this referential qualifying expression *nəgɨ̃* ‘variety’ *qualifies the reference* of *donám-tšinám* ‘food and drink’ to indicate that ‘every kind’ of food and drink is under discussion. Together, both NPs constitute the S argument of *dóo-* ‘be there (INAN)’. In (148), *buppɨ̃* ‘everyone’ modifies *nunù* ‘2.PL’ to underscore a sense that all of the referenced entities, without exception, is equally affected as O argument of the predicate.

(147) *okó donám tšinám nəgɨ̃ doodù.*

okkáo [[**dó-nam** **tíi-nam = əə**] [**nəgɨ̃ = əə**]]_S [dóo-dùu]_{PRED}
 SCNJ eat-NZR:NSUB imbibe-NZR:NSUB=TOP variety=TOP EXIST.LOC.INAN-IPFV
 ‘And there was **every kind of food and drink.**’ (TR, FA 016)

(148) *nunnəm buppɨ̃m ajaá dù!*

[[**nunù-əəm**] [**buppɨ̃ = əəm**]]_O [ajaá-dùu]_{PRED}
2.PL-ACC **everyone=ACC** love-IPFV
 ‘I love **you all!**’ (OL, 9:15)

The qualifying NP of a referential qualifying expression is usually drawn from the available set of Galo *qualifying nouns* (§8.3). Other common uses of referential qualifier expressions include formation of *autonomous activity expressions* via the autonomous/reflexive noun *aɨ̃* ‘body; self’ (149) (cf. §7.2.1 and §11.2.5.9 for broader discussions of the basic constructions), as well as so-called *inclusory constructions*, which are formed via postposition of a non-singular (dual or plural) pronoun to a common nominal or proper name. The latter in particular may be a source construction for NP-internal demonstrative uses of pronouns; for further discussion on this point, see §7.1.5.2.

(149) *əɾəpə...aɦuqə kulí hiká.*

[[*əɾáp* = əə] [*aɦí* = əə]]_S [*kuli-hí-káa*]_{PRED}
door=TOP self=TOP open(<Asm)-REFL-PF
 ‘**The door...opened by itself.**’ (IR, FA 020)

(150) *ŋôk áb bulù censâe nà.*

[[[*ŋó-kə* *abó*] [*bulù*]]_A [*cèn-há*]_{PRED}]_{CC} = ee na
1.SG-GEN father 3.PL know-NZR:IRR=COP.PFV DECL
 ‘**My father and his bunch** would have known.’ (LN, MF 131)

6.3.3. Apposition, afterthoughts, extraction and intonation

Most of the examples presented in §6.3.1-§6.3.2 represent clear cases of NP apposition, in which both apposed NPs carry phrase-final enclitics and yet clearly refer to the same entity or group. However, the data may not always be so straightforwardly analysed. In particular, since the majority of NP constituents can themselves stand either as a nominal NP head or license a headless NP, it is sometimes difficult when encountering a particular sequence of candidate NP constituents or heads to determine whether we are dealing with one continuous NP, a sequence of two apposed NPs, or one NP followed by an extracted constituent (or perhaps an NP with a non-prototypical order). For example, in (146) above (§6.3.1), does the sequence *əgə...buppɦ əgə* ‘ANAP.IND...everyone ANAP.IND’ necessarily represent a case of NP apposition – one NP consisting only of a pronominal demonstrative followed by another NP consisting of a noun-demonstrative sequence – or might it be simply one NP, with a “bracketed” demonstrative and an internal intonational pause?

Although the above sections have attempted to lay out the set of possible structures encountered in the construction of Galo noun phrases, it should be emphasized that these structures sometimes overlap, and it may be undesirable or even impossible in some cases to forcibly reduce certain sequences to a case of NP-internal structuring, on the one hand, or to one of an NP sequence, on the other. In fact, it seems likely that the prevalence of NP-apposition in Galo and its important set of functions may itself have given rise to the particular set of NP structures that we find, including features such as demonstrative “bracketing” (which may have evolved from a prosodic tightening of “afterthought” NP apposition such as in (146)) and post-head nominal enumeration and qualification (which may have evolved from referential qualifying expressions such as the examples in §6.3.2). It will be instructive indeed to eventually learn whether Tani

languages with different possibilities for NP apposition and coordination than those reviewed here for Galo, do or do not have correspondingly differently-evolved internal noun phrase structures. This would seem to be a potentially fruitful area for continuing research.

7. Pro-forms, including demonstratives

The present chapter discusses pro-forms, including pronouns, pro-adverbials, and demonstratives. Many pro-forms have the ability to both stand alone as head of a noun phrase and to modify another noun phrase head. Others have the ability to stand as noun phrase head only, lacking modifier capacity, and a few others – generally, when serving in extended rather than basic functions – have the ability to stand as modifiers only, lacking the ability to stand as a phrasal head. These properties will be discussed in passing throughout the chapter.

All of the forms to be discussed herein have a common functional status in forming a *definitely referring expression* in terms of, or in relation to, a *shifting deictic centre* (usually, but not always, relatable to the speech situation). Many of the forms discussed below also share common structural properties; in most cases, they may be described in terms of relatively smaller sets of etymologically simplex (monosyllabic) formatives which have combined historically with etymological postpositions and/or suffixes to form synchronically non-compositional, usually disyllabic, forms; etymology and compositionality will also be treated below, where possible. Many of the demonstratives discussed below – usually, those which incorporate historical postpositions – play a key role in noun phrase relational marking. Such functions will be mentioned in passing below, but are treated more substantially in a language-general context in §14.

The remainder of the chapter discusses Personal (§7.1) and Reflexive (§7.2) pronouns, followed by Interrogative and Indefinite nouns and pronouns, which make use of the same basic set of forms (§7.3). This is followed by a large section on various types of Demonstrative (§7.4), and finally Pro-adverbials are discussed in §7.5.

7.1. Personal pronouns

Lare Galo personal pronouns encode the *person* and *number* of an *animate referent*. Persons are *first* (speaker), *second* (addressee) or *third* (person other than speaker or addressee, whether male or female). Formally unmarked pronouns encode *singular* number reference. Marked pronouns encode *dual* (two) or *plural* (more than two) number reference (Table 7.1).

| Number → Person ↓ | SG | DL | PL |
|----------------------|-----|------|------|
| 1 | ŋó | ŋuɲì | ɲunù |
| 2 | nó | nuɲì | nunù |
| 3 | bɪ̃ | buɲì | bulù |

Table 7.1 – Lare Galo personal pronouns

Pugo Galo personal pronouns express the same set of distinctions, however the phonological values of the third person set vary slightly (Table 7.2).

| Number → Person ↓ | SG | DL | PL |
|----------------------|-----|------|------|
| 1 | ŋó | ŋuɲì | ɲunù |
| 2 | nó | nuɲì | nunù |
| 3 | mɪ̃ | muɲì | munù |

Table 7.2 – Pugo Galo personal pronouns

Comparing the set of Pugo and Lare Galo personal pronouns in Table 7.1-Table 7.2, we see that the principle difference is the irregular mutation of /b/ → /m/ in the third person set found in Pugo (with attendant progressive nasal harmonization of the plural formative in the third person plural form). In fact, it is also quite common to hear the third person in *mɪ̃* uttered by Lare speakers as well, even in the context of otherwise resolutely Lare speech; consider example (151) – spoken by a lifelong resident of *daarɪ̃* village, in the heartland of the Lare area – in which the conservative and highly characteristic Lare form of the Additive particle *cìn* (PG **cìn*; cf. Pugo *sìn*) is juxtaposed against the innovative third person singular pronoun form in *mɪ̃*. This is a typical example, which suggests the susceptibility of the pronoun set to change irregularly through areal diffusion – not only in Galo, but, probably, in other Tani languages as well. In this grammar, the third singular pronoun has been consistently identified as *bɪ̃*, reflecting the conservative Lare pronunciation, although *mɪ̃* pronunciations are preserved in the surface transcription line where attested. For further discussion, see §7.1.3.

- (151) *bupp̃ ǎǎcìn...m̃k abóg*
 bupp̃ ǎǎ = cìn b̃k-kə abó = gə
 all TOP=ADD 3.SG-GEN father=GEN
zinəməm kaadək eekú bə.
 zí-nam = əəm káa-dək-ée-kú = bə
 give-NZR:RLS=ACC look-COS-IPFV.DISJ-CMPL=SBRD
 ‘(In order) that everybody might see what her father gave (her).’ (MK, TT 157)

First and second person singular pronouns *ŋó* and *nó* are among the very few words in Galo with an underlyingly monomoraic structure. This fact is particularly striking in view of their seeming history as bimoraic forms (see §7.1.3), as well as their paradigmatic opposition to a clearly bimoraic form in third person singular *b̃k*. In prosodic contexts which demand a bimoraic phonological word structure, *ŋó* and *nó* exhibit regular rhyme lengthening (§4.1.3.5). Under C(V)-suffixation, *ŋó* and *nó* are opposed to *b̃k* in regularly recruiting the suffix-initial consonant to satisfy bimoraicity requirements in a stressed prosodic context – thus confirming their status as underlyingly monomoraic forms (§4.1.4.6). These facts are summarized in Table 7.3.

| Context → Form ↓ | ` ____ = cìn ‘ADD’ | ` ____ - kə = əə ‘GEN=TOP’ |
|---------------------|--------------------|----------------------------|
| <i>ŋó</i> ‘1.SG’ | ` <i>ŋoo.cìn</i> | ` <i>ŋok.kə</i> |
| <i>nó</i> ‘2.SG’ | ` <i>noo.cìn</i> | ` <i>nok.kə</i> |
| <i>b̃k</i> ‘3.SG’ | ` <i>b̃k.cìn</i> | ` <i>b̃k.kə</i> |

Table 7.3 – Illustration of the underlying forms of Galo personal pronouns in terms of their behaviour in different prosodic environments

7.1.1. Animacy

Lare Galo personal pronouns prototypically refer to humans; however, they may also refer to higher animals even in non-personified contexts. In such cases, the referred-to animal will usually be under construal as relatively highly animate, as when a specific individual features prominently in a narrative; example (152) is taken from a text concerning the hunting of a particular deer.

(152) *əgə...cərlêe bə, ɲunù...mîŋkə là, biəm...laato.*

əgə cərlêe = bə ɲunù mín-kə-là(a) **bi-əəm** làa-tó
 HEST wild.deer=AVZR 1.PL chase-TO.DEATH-NF **3.SG-ACC** take-PFV
 ‘So...we chased (him) to death alive,¹³⁷ and...(we) got **him**.’ (NyR, MDS 099)

The use of personal pronouns in reference to higher animals may sometimes extend to highly generic contexts, such as (153) in which the speaker is using the third person pronoun to refer to the mithun *qua* species, rather than to an individual.¹³⁸

(153) *rîká talâ cîn, biəm*

rîi-káa-tà-la(a)cîn **bi-əəm**
 tie.up.animal-TENT-INCP-NF:ACNC **3.SG-ACC**
rîitû cîn lamaaró.
 rîi-tùu=cîn=là(a)-máa-ró
 tie.up.animal-STOP/DOWN=ADD=ABIL-NEG-IRR
 ‘Even if we were to try to tie **it** up, we wouldn’t so much as be able to do it (speaking of mithuns in general, rather than a particular individual).’ (LN, MH 032)

Inanimate referents are only very rarely coded by personal pronouns, being more usually coded by one of a wide variety of demonstratives in pronominal function (§7.4). (154) is a rare example of personal pronoun use with an inanimate referent, in this case referring to a basket containing a *rîlii-boŋó* – a complex, constructed ritual object used in the highly significant *moopín* festival. Although my understanding of this object’s significance is nowhere near sufficient to declare anything with certainty, my sense is that it is viewed as a vessel for a particular type of spirit. As such, it may be that personal pronoun use in this example related to a construal of underlying animacy.

¹³⁷ The sense of *cərlêe* ‘wild deer’, which functions as an adjective in this example, is here closer to ‘still living/resisting death, of a deer’. The speaker’s goal is here to show that his group managed to chase a robust wild stag to death, which would be considered quite a feat of hunting prowess.

¹³⁸ It is perhaps worth noting here that this is one of several linguistic means through which higher animals may traditionally have been viewed in terms of a near-human status. For example, the practice of naming domestic and even semi-domesticated animals (such as mithuns) remains widespread, and structurally resembles the practice of naming humans. Some particularly revered animals, such as tigers, are even referred-to using respectful kin terms (such as ‘elder brother’), often thought of as a means of warding off potential attacks by them, as when hunting in the jungle. Although it would seem premature to draw any serious conclusions regarding potential effects of the traditional Galo cultural perspective on animals *vis à vis* the evolution of Galo grammar on the sole basis of these data, the topic most certainly would merit further study.

(154) *gə́áa gə́llà, allíib bíəm acíi rə́i.*

gə́-áa-gə́rə́-là(a) allíi = bə́ bíi-əəm á-cíi-rə́ = (ə)í
 carry/wear-TO.PRX-ACNC-NF well=AVZR 3.SG-ACC keep-CAREFULLY-IRR=ETAG
 ‘After bringing it back (home), they’ll keep it carefully.’ (LN, MF 092)

7.1.2. Clusivity

Although marking of “clusivity” (i.e., an inclusive/exclusive distinction) appears to be widespread in the pronominal systems of Tibeto-Burman languages (LaPolla 2005), and has been attested in other Tibeto-Burman languages of North-East India (Coupe 2007:§4.3.1) clusivity is *not* a marked feature of Galo pronouns.¹³⁹ Instead, clusivity *functions* are developed periphrastically through pronominal participation in “inclusory constructions”, a subtype of referential qualifying expression in Galo. These constructions are discussed in the broader context of noun phrase apposition, in §6.3.2 (see also §7.1.5.2 below).

7.1.3. History and compositionality

7.1.3.1. Singular forms

Galo first and second person singular pronouns *ŋó* and *nó* clearly reflect PTs **ŋoo* and **noo* (Sun 1993:116-117),¹⁴⁰ and ultimately PTB **ŋa(y)* and **na(ŋ)* respectively (Matisoff 2003:604-605);¹⁴¹ Cognate forms are well-attested throughout Tani.

The origin of third person singular pronoun *bíi* (< PG **bíi*) is uncertain, although the preponderance of available data support its reconstruction to PT in some form close to **bíi* or **ba-íi*.¹⁴² Generally speaking, putative proto-initial **b-* would be retained by lowland Tani languages such as Lare Galo and Pagro Mising, as well as in extreme

¹³⁹ LaPolla’s (2005) claim that an inclusive/exclusive distinction is found in Tani pronouns is not supported by any data presented or cited in that paper, nor would it seem to be supported by any published data of which I am aware.

¹⁴⁰ PTs **-oo* > PG **-o* is a regular sound change; see §2.4.3.4.3.

¹⁴¹ PTB **-a* > PTs **-o(o)* is a well-attested though not exhaustively regular sound change; cf. PTB **ja* ‘night’ (Matisoff 2003: 660) > PTs **joo* ‘night’ (Lare *ajò*).

¹⁴² The [a] vocalism is supported by Loodu Karko *baí* ‘3.SG’ and *manu* ‘3.PL’ (author’s field notes), which is echoed in Meithei *má* ‘3.SG’ (Chelliah 1997: 78). It is possible that the *i* formative would reflect the PTs Reflexive formative **i*, with **bíi* then reflecting vowel harmonization-cum-monosyllabification; viz.: **ba* → **ba-i* → **bíi*.

northern Tani languages such as Tagin (Das Gupta 1983:7)¹⁴³. A large number of midland Tani languages, including Pugo Galo, as well as Nishi (Tayeng 1990a:7), Pailibo (Badu 1994:10) Bokar (Megu 1990:10), and Apatani (Abraham 1985:27) appear to have undergone an initial consonant mutation **b* → *m*, which seems to be an irregular change in the majority of languages which exhibit it. A small number of languages, such as the highly lexically aberrant north-eastern Tani language Milang, appear to have palatalized the initial in sympathy with a fronted high vowel *zi* (Tayeng 1976:ii), if that form is indeed cognate. Neighbouring, related languages also exhibit forms which may be cognate, such as Miju Mishmi (Kaman) *wi* (Boro 1978:7), Sulung *we* (Tayeng 1990b:6) and Bugun (Khowa) *o-wei* (Dondrup 1990:8), however the correspondences and directionalities of change (as well as overall cognacy) are yet to be properly worked-out.

Despite the statistical predominance in Tani of the *m*- initial in third person singular forms, we can demonstrate the historical precedence of **b*- quite clearly through analysis of the dual and plural forms (§7.1.3.2).

7.1.3.2. Dual and plural forms

Of the Galo plural and dual forms, the plural forms are almost certainly historically prior. The PTp pronominal plural formative is **lu(u/ŋ)*² (cf. Bokar *ŋolu* ‘1.PL’ (Megu 1990:10) and Apatani *mólu* ‘3.PL’ (Abraham 1985:28)); due to inadequacy of extant description in this area, it is not currently possible to state the proto-length, nor whether the rhyme would have been open or closed by a nasal.¹⁴⁴

¹⁴³ Some Tagin dialects in fact retain **b*- only in the dual and plural forms *bupi* and *bənu*, a demonstrative-derived form *əə* (see below §7.4) appears to have been extended for use as a 3rd person singular pronoun in these dialects. However, in Daporijo Tagin *b#* appears to be retained, a fact which Das Gupta (possibly erroneously) supposes to be innovative and “owing to the influence of the Adi dialects” (Das Gupta 1983: 7).

¹⁴⁴ We can note the existence of two semantically similar formatives in Lare Galo *lúu*- ‘group; enclosure’ (cf. Lare *doolúu* ‘village’ and *luut#* ‘crowd’) and *lùu*- ‘grove’ (cf. Lare *paglùu* ‘banana grove’ and *əlùu* ‘bamboo grove’). The first of these has a reconstruction in PTs **luŋ* (with the perhaps too narrow PTs gloss ‘place’). It is possible that one of these forms is cognate with the PTp pronominal plural formative, however further research must be conducted before a correspondence can be put forth with any confidence.

Ignoring the plural formative rhyme, we can provisionally posit something of the nature of PTP **ɲo'-lu²*, **no'-lu²* and **ba²-lu²* respectively.¹⁴⁵ From here, the initial syllable nuclei undergo regressive vowel harmony *o/a* → *u*, and the final syllable onsets undergo progressive nasal harmony *l* → *n* in first and second persons only in Lare, and further to third in Pugo. Dual forms would be derived subsequently via compounding of reanalysed non-singular combining forms *ɲu-*, *nu-* and *bu-* with a reflex of PTs **ɲi* ‘two’. Table 7.4 and Table 7.5 illustrate the diachronic derivation of non-singular forms for Lare and Pugo, respectively.

| | 1.PL | 2.PL | 3.PL | 1.DL | 2.DL | 3.DL |
|----------------|---------------|---------------|---------------|---------------|---------------|---------------|
| PL Suffixation | <i>*ɲo-lu</i> | <i>*no-lu</i> | <i>*ba-lu</i> | -- | -- | -- |
| V Harmony | <i>*ɲu-lu</i> | <i>*nu-lu</i> | <i>*bu-lu</i> | -- | -- | -- |
| DL Suffixation | -- | -- | -- | <i>*ɲu-ɲi</i> | <i>*nu-ɲi</i> | <i>*bu-ɲi</i> |
| NAS Harmony | <i>*ɲu-nu</i> | <i>*nu-nu</i> | -- | -- | -- | -- |
| Modern Forms | <i>ɲunù</i> | <i>nunù</i> | <i>bulù</i> | <i>ɲunì</i> | <i>nunì</i> | <i>buyì</i> |

Table 7.4 – Evolution of Lare Galo non-singular pronouns

| | 1.PL | 2.PL | 3.PL | 1.DL | 2.DL | 3.DL |
|------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| PL Suffixation | <i>*ɲo-lu</i> | <i>*no-lu</i> | <i>*ba-lu</i> | -- | -- | -- |
| V Harmony | <i>*ɲu-lu</i> | <i>*nu-lu</i> | <i>*bu-lu</i> | -- | -- | -- |
| DL Suffixation | -- | -- | -- | <i>*ɲu-ɲi</i> | <i>*nu-ɲi</i> | <i>*bu-ɲi</i> |
| Initial Mutation | -- | -- | <i>*mu-lu</i> | -- | -- | <i>*mu-ɲi</i> |
| NAS Harmony | <i>*ɲu-nu</i> | <i>*nu-nu</i> | <i>*mu-nu</i> | -- | -- | -- |
| Modern forms | <i>ɲunù</i> | <i>nunù</i> | <i>munù</i> | <i>ɲunì</i> | <i>nunì</i> | <i>muyì</i> |

Table 7.5 – Evolution of Pugo Galo non-singular pronouns

It should be clear that **b-* → *m* must be the historical innovation, rather than the reverse, because, within the pronominal paradigm, a diachronically prior change **b-* → *m-* is the only way of explaining the *bulù* ↔ *munù* correspondence; while we can derive **l-* → *n-* via the nasal harmony rule which affected all other plural pronouns, we have no comparable means of deriving ***n-* → *l-*. Finally, we can note that not all Tani languages

¹⁴⁵ Assuming PTs **ɲoo* ‘1.SG’, **noo* ‘2.SG’ and PTP **baɪ* ‘3.SG’, why not posit **ɲoolu* **noolu* and **balu* respectively? It is possible that the simplex forms as reconstructed by Sun (1993b) in fact reflect a *lengthening* at the level of the phonological word, which would accord well with the Bimoraic constraint as we have seen it operate at various levels of Galo historical phonology (§4.1.3.5). Future comparative investigation will be brought to bear on this topic.

underwent the nasal harmony change despite having mutated their third person initials; cf. Bokar *malu* (Megu 1990:10).

7.1.4. Basic functions

The primary function of a Galo personal pronoun is, as it is in any natural language, *referential maintenance*; namely, it occurs as the concise “standalone” head of a noun phrase with shifting reference to the speaker, to an addressee, or to a third, attended-to entity in the world of the discourse (155).

(155) *bɿ̃ ɲók azêṇə maabə*

bɿ̃ ɲók-kə azêṇ = əə maabə

3.SG 1.SG-GENfriend=COP.IPFV isn't.it

‘She (*the individual to whom I believe your attention is currently drawn, and whom I believe that you will believe that my attention is also plausibly drawn-to*) is my friend, as anyone can plainly see.’ (IR, B8:35)

Personal pronoun use seems high in Galo relative to certain other Tibeto-Burman languages of the Greater Himalaya,¹⁴⁶ a fact which may be at least partly (but is probably not exhaustively) explained by the relative absence in Galo of true verbal argument cross-referencing morphology.¹⁴⁷ Although it is not yet possible to cite figures establishing the frequency of personal pronoun use in Galo as compared to other area languages, an initial count of pronoun use in eighteen Galo texts of varying genre totalling 21,156 morphemes (including lexical roots, suffixes, and functional words) from my corpus showed that personal pronouns alone (singular, dual and plural, all persons) received 525 mentions; if pronominal uses of demonstratives were also included, the figure would be far higher. This figure puts personal pronoun use at a higher level of frequency than any other single type of noun phrase constituent, with the sole exception of Topic marker *əə* (which figures at 1,214 mentions). Thus, it would seem fairly clear that pronoun use forms an important, because frequently relied-upon, aspect of referential maintenance in Galo discourse.

The set of examples (156)-(167) – taken as a continuous series of clauses from a Galo folktale – will give a sense of the use of third person pronoun *bɿ̃* in maintaining the

¹⁴⁶ For example, Watters (2002: §9) writes that in Kham, overt pronoun use is emphatic or serves primarily to mark referential discontinuity. In Galo, however, emphasis or discontinuous reference is overtly marked by noun phrase particles (§13.2.2).

¹⁴⁷ Even conjunct-disjunct marking and other person-sensitive marking types are but thinly-exploited in Galo (§12.4.2.1, §12.5).

topicality and referential continuity of the protagonist *toopó gonó* in this story.

(156) *toopó-gón biəm...miəm*

toopó-gonó **bi**-əəm **bi**-əəm
NAME 3.SG-ACC 3.SG-ACC

namó-nangó là əmlâi.

namóə-nám-gó-là(a) óm-là(a) = (ə)î
daughter.in.law-take.in.daughter.in.law-COMT-NF say-NF=ETAG
'Toopo Gona, **she** was...so it was that **she** was taken in as a daughter-in-law, right?'

(157) *miəm namó-nangó nammó,*

bi-əəm namóə-nám-gó-nam = əə
3.SG-ACC daughter.in.law-take.in.daughter.in.law-COMT-NZR:RLS=TOP
'**She** having been taken in as a daughter-in-law,'

(158) *bi, həkə...nangó là...napám-acín dolâi?*

bi həkə nám-gó-là(a) naapám-acín dó-là(a) = (ə)î
3.SG HEST take.in.daughter.in.law-COMT-NF bridal.rice eat-NF=ETAG
'**she**...you know, did all the various things required (of her), ate the bridal rice and so on, right?'¹⁴⁸

(159) *napám-acín...dodâglo...biəm nè.*

naapám-acín dó-dāk = lo **bi**-əəm = nè
bridal.rice eat-COS=LOC 3.SG-ACC=NAGT
'While eating the bridal rice, (something happened) to **her**...'

(160) *həkə ilî kajîñə ilî lò...bədá goló...biəm...*

həkə ilî kajîñ-nà ilî = lo bədáa go = lo **bi**-əəm
SPRX.SIML stone huge-NZR:SUB stone=LOC road IND=LOC 3.SG-ACC

taajôo gollò î.

taajôo go = lo = əə (ə)î
top IND=LOC=COP.IPFV ETAG
'On this really huge sort of stone on a road, (something happened) to **her**...on top of one (of the stones), see:' <Narrator backtracks now to illustrate the steps leading up to the happening>

¹⁴⁸ In traditional Galo culture, women must undergo a large number of ceremonies and other activities in the course of becoming daughter-in-law to another family, upon her marriage. The sense of *nam*- 'take in daughter-in-law' here is thus 'conduct her through the becoming-a-daughter-in-law activities', all but one of which activities the narrator omits in the interest of brevity.

- (161) *appê, doolú jiié mêngə tó, ân-pamə*
 appê = əə doolú jii = əə mèn-gə-tó anə-paməə
 all=TOP village person=TOP say-COMT-PFV mother-daughter.in.law
mentò,
 mèn-tó
 say-PFV
 ‘Everyone, all of the villagers said, the woman said,’
- (162) *ác-abê mentò, acc’ə cîn mentòî,*
 ací-abê = əə mèn-tó ací = əə cîn mèn-tó = (ə)î
 elder.brother-elder=TOP say=PFV elder.brother=TOP ADD say-PFV=ETAG
 ‘the men said, (her) elder brothers also said,’
- (163) *“hogo dolâa zù” əmróm...*
 hogò dó-là(a) = zù óm-ré = əəm
 SPRX.LOC eat-IPTV.SBEN=HORT.INCL tell-IRR=ACC.TSUB
 “‘let’s eat here” (and) when they said that...’
- (164) *bê mentò “má. hóg domáa ré jaapám-acinóm” î!*
 bê mèn-tó máa hogò dó-máa-ré jaapám-acin = əəm (ə)î
 3.SG say-PFV NEG SPRX.LOC eat-NEG-IRR bridal.rice=ACC ETAG
 ‘she said, “No. (I) won’t eat the bridal rice here”, right?’
- (165) *okkə...akú...ləkêŋ godá mentò...*
 okkə ako ləkên go = da mèn-tó hogò
 SCNJ again(<Asm) once IND=CNTR say-PFV SPRX.LOC
“hóg dolâa zù”
 dó-là(a) = zù
 eat-IPTV.SDIR=HORT.INCL
 ‘So, once again (they) said “let’s eat here.”’
- (166) *əmnəmə, ôgcîn bê domáa tó.*
 óm-nam = əə ogò = cîn bê dó-máa-tó
 tell-NZR:RLS=TOP ANAP.TMP=ADD 3.SG eat-NEG-PFV
 ‘That having been said, then again she didn’t (agree to) eat.’
- (167) *tamáa toî, toopó-gón bì.*
 tá-máa-tó (ə)î toopó-goné bì
 listen-NEG-PFV ETAG NAME 3.SG
 ‘(She) didn’t listen, eh, **that** Toopo Gona. [So, she was subsequently swallowed up by the stone which she had herself chosen as a place on which to eat the bridal rice.]’ (LN, TG 022-028)

7.1.5. Extended functions

Although the primary and overwhelmingly most frequent function of Galo personal pronouns is to “stand alone” as a noun phrase head, as discussed in §7.1.4 (see also §6.1.3), it is also possible for Galo personal pronouns to *modify* another (head) nominal, with varying semantic and pragmatic effects.

7.1.5.1. Demonstrative use

In what would seem to be a typologically unusual use, personal pronouns in Galo are also available as *demonstrative modifiers* to an animate nominal (proper name or common nominal, most often *jíí* ‘person’).¹⁴⁹ The basic function of demonstrative modification via personal pronouns is of an *emphatic* or *focusing* nature, in the sense of highlighting the salience, relevance, or importance of a particular referent to a prevailing discourse theme (168).

(168) *jòo ləgàabə? b̥hí jí biəm ɲó cən-mà.*

jòo ləgàa = bə **b̥hí** jí **b̥hí-əəm** ɲó cən-máa
what reason=DAT **3.SG person** **3.SG-ACC** 1.SG know-NEG
‘Why (should I speak to him)? **That there guy** isn’t known to me.’ (MN, OLC2:45)

As (168) also shows, demonstrative use of a personal pronoun extends to the ability to “bracket” a common nominal noun phrase head, a key characteristic of Galo demonstratives (§7.4). Bracketing is not, however, possible with proper names, which only accept post-head modification (cf. §7.1.4, ex. (156) and (167)).¹⁵⁰

Demonstrative use of personal pronouns is most common in the third person; first and second person uses are also accepted by my consultants, as *ɲó jí ɲó* ‘1.SG person 1.SG’ ‘this here guy, me (how wonderful I am)’; however, such uses have not occurred spontaneously in my corpus.

¹⁴⁹ While it may be typologically unusual in general, it is far from unusual in the context of Tani languages. In Mising, demonstrative use of third person pronouns is so widespread that it is in fact unusual to find proper name mentions which lack them (Barbora and Post forthcoming 2008).

¹⁵⁰ It is possible that the demonstrative use of personal pronouns derives historically from a “topicalization” construction of the nature of English *Mark(,) he’s not much of a saxophonist* or *That guy(,) he’s a double agent*. However it is clear from examples such as (167) (§7.1.4) – in which the noun phrase *toopó-gonə b̥hí* occurs as an *afterthought* – that a “topicalization” analysis is no longer possible in modern Galo.

7.1.5.2. Use in referential qualification

Personal pronouns may also be used in the context of *referential qualification*, a topic discussed in the broader context of noun phrase apposition in §6.3.2. Referential qualification of a “primary” common nominal or (more often) proper name by a postposed non-singular personal pronoun serves to *expand the reference* of a single participant/argument, to include *both* the primary nominal referent *and* the pronominal referent. In the case of qualification of a human referent, the effect is comparable to the *inclusory construction* described for Oceanic and Australian languages (Lichtenberk 2000; Singer 2001) (169).

(169) *purûu buɲì, pərəə buɲì, tâz-tarogə*

purûu **buɲì** pərəə **buɲì** tazì-tarò = gə
whitecrested.laughing.thrush **3.DL** bird.variety **3.DL** NAME-NAME=GEN
duunə.

duunə = əə

female.relative.to.be.married-off=COP.IPFV

‘The whitecrested laughing thrush and the *pere*, **(they two)** were Tazi and Taro’s sisters-to-be-married-off.’ (MK, TT 004)

In the case of qualification of a non-human referent, the effect is closer to the sense of English *and so on* (170).

(170) *ɲipāk acín-ooə bulù dokên mǎ.*

ɲipāk acín-oo = əə **bulù** dó-kèn-máa
non.hill.tribal cooked.rice-vegetable=TOP **3.PL** eat-GOOD/EASY-NEG
‘Non-hill-tribal food **and so on** is not tasty.’ (MN, T16:32)

7.2. Reflexive pronouns

7.2.1. Structure

In most if not all Galo dialects, reflexive pronouns are found in *first and second persons only* – not in third. This skewed distribution seems to be owing to the fact that Galo reflexive pronouns derive historically from a compound of singular pronouns *ɲó* and *nó* with reflexive formative *#-* (PTs **ɲ*) ‘body; self’ (followed in most dialects by irregular

nuclear harmonization, as **ŋo-ɦ* → *ŋɦ*¹⁵¹); under the circumstances, the third person singular pronoun *bɦ* and its reflexive counterpart *bɦɦ* (reflecting **ba-ɦ* → *bɦɦ*) seemingly became homophonous as *bɦɦ* ~ *bɦ* (Table 7.6; compare also Table 7.1).¹⁵²

| Persons → Language/dialect ↓ | 1 | 2 | 3 |
|---------------------------------|--------------|--------------|--------------|
| PT | <i>*ŋo-ɦ</i> | <i>*no-ɦ</i> | <i>*ba-ɦ</i> |
| Loodu Karko ¹⁵³ | <i>ŋoɦ</i> | <i>noɦ</i> | <i>baɦ</i> |
| Zirido Galo | <i>ŋɦ</i> | <i>ŋɦɦ</i> | <i>(bɦɦ)</i> |
| Lare Galo | <i>ŋəə</i> | <i>nəə</i> | <i>(bɦɦ)</i> |

Table 7.6 – Galo reflexive pronouns

Accordingly, reflexive expressions in the first and second person only optionally take a supporting qualifying noun *aɦɦ* ‘body; self’ (171)-(172); in the third person, the support of a qualifying noun is *required* in order for a reflexive sense to obtain (173).

(171) *ŋəək (aɦɦə) hobìn-hoó*

ŋəə-kə aɦɦ=gə hobìn-hoó
1.REFL-GEN self=GEN goat-cattle
 ‘our own livestock’

(172) *nəək (aɦɦə) hobìn-hoó*

nəə-kə aɦɦ=gə hobìn-hoó
2.REFL-GEN self=GEN goat-cattle
 ‘your own livestock’

(173) *bɦɦk (aɦɦə) hobìn-hoó*

bɦɦ-kə aɦɦ=gə hobìn-hoó
3.SG-GEN self=GEN goat-cattle
 ‘his or her (own) livestock’ (elicited phrases based on LN, GMW 079)

¹⁵¹ Lare forms reflect a semi-regular post-Proto-Galo change PG*-ɦ → -əə / N_̄; cf. Lare *məə*- ‘think’ ≠ Pugo *mɦ*- ‘think’ < PT **mɦ* (§2.4.4.7.2).

¹⁵² There also exists a possibility that the Galo third person singular pronoun *bɦɦ* in fact reflects a *generalization* of the reflexive form over the simplex paradigm (see §7.1.3.1).

¹⁵³ The forms cited in this section, from my field notes, are from a language which cannot at present be confidently classified as a dialect of Galo or of Bokar; until this is assessed, it will not be possible to determine whether the Proto-Galo forms exhibited the effects of vowel harmony (as in Zirido Galo) or not (as in Loodu Karko).

In contrast to personal pronouns, referent *number* is *not* a coded feature of Galo reflexive pronouns; in (174), a sentence spoken by one Galo to another with no non-native speakers present at the time of utterance, the referent of *ḡəə* ‘1.REFL’ can only be interpreted as ‘all Adi (Galo) people, including the speaker and his addressee’.

(174) *rîrâ menrâanam, ahâabə...ḡəəkə, adiə...*

rî-râa mèn-râa-nam ahâa = bə ḡəə-kə adii = əə
 do-ISOL say-ISOL-NZR:RLS cook(<Hin)=DAT **1.REFL**-GEN Adi.language=TOP
ahâa bə əmdó naanà.
 ahâa = bə óm-dó(o)-nà = əə = na
 cook(<Hin)=DAT be.said-STAT-NZR:SUB=COP.IPFV=DECL
 ‘(For) helping out with all the tasks, as a cook-servant...in **our own** Adi (language) we say “as an *ahaa*”, you see (whereas the non-tribals say *ahar*).’ (MK, TT 010)

Like personal pronouns, Galo reflexive pronouns take pronominal case suffixes (§6.1.3).

7.2.2. Functions

Reflexive pronouns obligatorily occur in O function in cases of pronominal A ↔ O coreferentiality (175).

(175) *nəəm mēnsi toké!*

nəə-m mèn-**hí**-tó = kée
2.REFL-ACC speak-**REFL**-IPTV.ODIR=HORT.POL
 ‘Say (that) **to yourself!**’ (IR, OL19:109)

However, the reverse condition does not hold; that is, while A ↔ O coreferentiality requires use of a reflexive form, use of a reflexive form does not necessarily indicate A ↔ O coreferentiality. This is particularly true when reflexive pronouns are used in S/A functions, in which they serve to indicate *independence*, *self-containedness*, *autonomy*, and/or *contrast with another referent*, a sense which can be further emphasized by subsequent inclusion of a reflexive qualifying noun *a#* ‘body; self’ (176). In (176), note also the absence of reflexive marking on the dependent clause predicates despite the occurrence of reflexive subject pronouns.

(176) *ŋəə, aɦuɔ́ ardə́ rəm, ŋəə buddí kaarəm (...)*

ŋəə aɦ = əə ardə́-rəm ŋəə buddi káa-rə́ = əəm

1.REFL self=TOP clever-CIRR **1.REFL** brains(<Ind) have/exist-IRR=ACC.TSUB
 ‘If **I myself** am clever, if **I myself** have brains [life is easy nowadays].’ (LN, GMW 072)

For further information on the syntax and predicate marking of reflexive constructions, see §11.2.5.9.

7.3. Interrogative and indefinite pronouns

The forms discussed in this section are all available for use as *interrogative pronouns*, standing for the questioned constituent of a content interrogative clause. Content interrogative clause formation is discussed from a general perspective in §9.5.1.2. Many of the forms discussed below are also available for use as *indefinite pronouns* in positive and negative polarities, with senses like ‘something’ and ‘nothing’. The interrogative or indefinite sense of a pronoun is in most cases determined by the syntax of the clause in which it appears, together with marking by various clausal particles and, sometimes, intonation. Very broadly speaking, interrogative force is most often obtained through interrogative pronominal use in a cleft/focus construction (§9.4), while indefinite sense is obtained through in-situ use of a pronoun in construction with an appropriate particle. However, there is much less regularity to the interrogative/indefinite alternation found in Galo than exists in many other Asian languages; in what follows, we will to some extent be required to take a case-by-case approach.

7.3.1. Pronoun of person *jə(ə)* ‘who’

7.3.1.1. Structure

Interrogative pronouns of person are based on the form *jə(ə)* ‘who’. Unlike other interrogative pronoun types, *jə(ə)* shares the basic distribution of personal pronouns in taking pronominal case suffixes such as Pronominal Genitive *-kə* (Table 7.7).

| Head | Suffix | Value | Gloss |
|--------------|----------|-----------|---------------|
| <i>jə(ə)</i> | -Ø | NOM | ‘who’ |
| | -m(nè) | ACC(NAGT) | ‘whom’ |
| | -(ə)p(ə) | BEN | ‘to/for whom’ |
| | -kə | GEN | ‘whose’ |

Table 7.7 – Interrogative/indefinite pronoun of person *jə(ə)* and its case suffixes

The underlying rhyme structure of *jə(ə)* is somewhat uncertain. As with other personal pronouns, when standing unsuffixed in the strong/stressed (initial) position of a phonological word, *jə(ə)* exhibits a long or lengthened rhyme, as in (177).

(177) *jəcìn duumà.*

jə(ə) = cìn dùu-máa

who=ADD stay-NEG

‘(They saw that) **no-one** was there.’ (TR, FA 012)

When suffixed in the genitive and followed by a long vowel-initial enclitic, the resulting construction behaves as though *jə(ə)* were underlyingly monomoraic. In (178), notice the medial gemination under copula enclisis, which is the regular outcome of Triggered foot-strengthening (§4.1.4.6; also compare Table 7.3).

(178) *əgə jəkkəə là?*

əgə *jə(ə)*-kə = əə laa

APRX.IND who-GEN=COP.IPFV CQ

‘**Whose** is that (thing which is in the addressee’s possession)?’ (TZ, 11:21)

However, in prosodically unmarked contexts (i.e., when there is no question of the Bimoraic constraint (§4.1.3.5) not being met, and when gemination conditions do not exist), most speakers accept either long or short forms of *jə(ə)* (179).

(179) *jək ləgaabə ~ jəək ləgaabə?*

jə(ə)-kə ləgàa = bə

who-GEN reason=DAT

‘For **whom**?’ (IIR, EM 26/02/2008)

If one were to speculate, it would seem that *jə̀(ə)* derives historically from an underlyingly monomoraic form *jə̀*, but that regular lengthening exhibited in stressed contexts such as in (177), and/or irregular lengthening due to emphasis, has become at least partially lexicalized. Although most of my consultants are unwilling to make a straightforward declaration as to the “correctness” of one or the other variant displayed in (179), it is possible that more detailed study of the use of *jə̀(ə)* in discourse will be able to discover a more patterned variation than I or my consultants have found to date.

7.3.1.2. Functions

jə̀(ə) occurs as noun phrase or genitive phrase head only (it has no capacity to modify another nominal). In-situ use in interrogative clauses is rare but attested, as in the rhetorical question in (180). More commonly, content questions in *jə̀(ə)* are expressed as an interrogative cleft/focus construction (181).

(180) *acínəm jə̀ə máa əmdəbá!*

acín = əm **jə̀(ə)** máa əm-dó(o) = b́
 cooked.rice=ACC **who** no say-STAT=SJNC
 ‘**Who** can say no to rice!’ (IR, OLB4:101)

(181) *jə̀ə bərə̀ duunà?*

jə̀(ə) bərə̀ dùu-nà = ə
who CJEC LOC.EXIS.ANIM-NZR:SUB=TOP
 ‘**Who** might be there?’ (TR, FA 010)

jə̀(ə) takes on indefinite sense in negative polarity clauses when occurring in-situ together with Additive particle *cín* (177). Indefinite use of *jə̀(ə)* in positive polarity clauses is very rare, seemingly due to the existence of the competing, dedicated indefinite pronoun of person *ɲí* (§7.3.2). Limited use of *jə̀(ə)* in an indefinite positive sense is found in construction with a Suppositional particle *báa*, as in (182); the sense of the overall construction is, roughly, that the identity of the mentioned referent is possible for the speaker to know, but that the speaker either does not know it because he is not interested in knowing it, or perhaps does know it but is not interested in disclosing it (see also §13.2.2.9).

(182) *jəək baí gaariigó cootû nammé jī.*

jə(ə)-kə báa = (ə)í gaaríi = go cóo-tùu-nam = əə jii
who-GEN SUPP=EMPH car(<Ind)=IND steal-CONT-NZR:RLS=COP.IPFV DISC
 ‘(He) seems to have stolen **so-and-so**’s car.’ (MN, T16:34)

7.3.2. Pronoun of person *jii* ‘someone/somebody’

Indefinite pronoun of person *jii* is employed in one of two contexts (which indeed may be two sides of the same conceptual coin). In the first context, the speaker believes it impossible to know the mentioned referent’s identity (183).

(183) *bɛ̃ jiiik namló insə kaadù.*

bɛ̃ **jii**-kə namə = lo ín-hà káa-dùu
 3.SG **someone**-GEN house=LOC go-NZR:IRR have/exist-IPFV
 ‘He had to go to **someone else**’s house (that’s why he had to leave early).’ (KN, OL23:79)

In the second type of context, the mentioned referent is construed (roughly speaking) as “any given person”. In (184), the identity of the individual whose stick was in fact broken is well-known to both speaker and addressee. However, the speaker is uttering the statement as a *general law*, in the sense that any time that any person’s stick is purposefully broken, an infraction will be determined to have been committed.

(184) *“nó inrú kendûu kù...karón nootú jiiik*

nó ín-rúu-kén-dùu-kú karon nó = tu **jii**-kə
 2.SG go-CERT-OBLG-IPFV-CMPL because(<Asm) 2.SG=FOC(<Asm) **someone**-GEN
hidaəm nuutîr zikáa kú.”
 hidaə = əəm nùu-tîr-zí-káa-kú
 stick=ACC bob.knees-BREAK.LONG-APPL:BEN-PF-CMPL
 “You have to go (with him, as a punishment)...because you broke **somebody**’s stick.” (NyPB, LAT 189)

Indefinite pronoun of person *jii* quite obviously derives – probably quite recently – from the lexical noun *jii* ‘person; human’, and in some uses it can remain perfectly ambiguous with its erstwhile nominal form (for example, *jii = go áa-dùu* ‘someone/person=IND come-IPFV’ ‘someone/a person is coming’). However, that *jii* in

fact functions as a pronoun in sentences like (183)-(184) is quite certain due to its taking pronominal suffixal case-marking (§6.1.3) – an impossibility for any lexical noun. In an example such as (184), if *ɲii* were to take a phrasal genitive enclitic *gə*, the sense would be of a lexical noun: *ɲii = gə hiidàa* ‘**person**=GEN stick’ ‘(that) **person**’s stick; the stick of **human(kind)**’.

7.3.3. Pronoun of quantity *jadɪ̃ ~ jadə̃* ‘how much/many’

7.3.3.1. Structure

The interrogative/indefinite pronoun of quantity in Galo is *jadɪ̃ ~ jadə̃* ‘how much/many’. Unlike interrogative/indefinite pronouns of person, *jadɪ̃ ~ jadə̃* takes phrasal (clitic) rather than pronominal (suffixal) relational markers, suggesting that it has the syntactic status of a *noun* rather than a *pronoun* per se (Table 7.8).

| Head | Enclitic | Value | Gloss |
|----------------------|-----------------|-----------|---|
| <i>jadɪ̃ ~ jadə̃</i> | Ø | Ø | ‘how much/many’ |
| | <i>go</i> | IND | ‘how much/many of it’ |
| | <i>bɔ̃</i> | DAT | ‘(to) what extent’ |
| | <i>əəm(nə̃)</i> | ACC(NAGT) | ‘when/(at) what time (future/unrealized)’ |
| | <i>ogò</i> | APRX.LOC | ‘when/(at) what time (past/realized)’ |
| | <i>lo</i> | LOC | ‘when/(at) what time (habitual/hypothetical)’ |

Table 7.8 – Marking of the interrogative/indefinite pronoun of quantity *jadɪ̃ ~ jadə̃*

jadɪ̃ ~ jadə̃ exhibits subdialectal [ɪ̃ ~ ə̃] variation, also found in several (other) forms exhibiting a reflex of PG short final **-ɪ̃*.¹⁵⁴ When preceding a consonant-initial enclitic, the final vowel *-ɪ̃/ə̃* is realized; this is where variation is occasionally audible, as in (185)-(186).

¹⁵⁴ Time nominalizer *-dɪ̃ ~ -dɔ̃* (§15.2) exhibits a similar variation, and may indeed be cognate to the final formative of *jadɪ̃ ~ jadə̃* (possibly with the proto-sense ‘what/how much time’). See §2.4.4.5 for description of Word-final weakening in a more general context.

(185) *hokkə̀ jadìgò má.*

hokə̀ = əə **jadì** = go máa
 SPRX.ABL=TOP **how.much/many**=IND NEG
 ‘It’s not very far from here.’ (GS, OLB4:71)

(186) *jadə̀bə̀ lá?*

jadì = bó làa
how.much/many=DAT CQ
 ‘How much (money) was it?’ (IR, OLB4:145)

When preceding a vowel-initial term, final *-ə̀* is almost invariably deleted (187)-(188).

(187) *jád aloogó duurə̀ dī ɲó cèn-máa.*

jadì alóo = go dùu-rá dī ɲó cèn-máa
how.much/many day=IND stay-IRR WOND 1.SG know-NEG
 ‘I don’t know how many days I’ll stay (there).’ (TZ, OL10:13)

(188) *nó jád ogò là hukkò?*

nó **jadì** ogò làa hú-kò = əə
 2.SG **how.much/many** ANAP.TMP CQ bathe-NZR:LOC/OBL=TOP
 ‘When was it that you bathed?’ (IR, B4:56)

When followed by a vowel-initial enclitic, *jadì ~ jadə̀* exhibits regular medial gemination following Triggered foot-strengthening (§4.1.4.6) (189).

(189) *jaddəm uur^okú cóm ɲó menlâa má.*

jadì = əəm úu-rá-kú com ɲó mèn-là(a)-máa
how.much/many=ACC awake-IRR-CMPL GUES 1.SG say-ABIL-NEG
 ‘I can’t say **what time** he’ll wake up (i.e., I don’t know).’ (lit., ‘**When** will he wake up, I can’t say) (KZ, 9:81)

As a general principle, *jadì ~ jadə̀* has been referenced in this grammar in the segmentally conservative form *jadì*, since it is possible to obtain [jadə̀] from *jadì* via regular word-final weakening processes (§4.1.3.6), but not vice-versa. However, it should be noted that this is only a notational shortcut; it would not seem to be currently possible to assign a single pan-Lare “underlying form”.

7.3.3.2. Functions

jadĩ has *interrogative* force when standing as head of a noun phrase in an interrogative main clause or cleft/focus construction (188)-(189). It may question spatial (185), numerical/mensural (186) or temporal (188) quantities, according to phrasal marking, syntactic position and predicate semantics. *jadĩ* also has the unusual ability to occur *noun phrase-internally*, in this function *preceding* a distinct phrasal head. Note that this ordering contrasts with the normal *post-head* position of enumerative/quantitative modifiers in Galo (§6.1.2.1; §8.2.1). For example, an appropriate response to (190) would be (191).

(190) *jâd aloogó duurè dĩ?*

[**jadĩ** alóo = go]_{NP} dùu-ré dĩ
how.much/many day=IND stay-IRR WOND
 ‘How many days will he stay, I wonder?’

(191) *aló lôopi gò duurè.*

[alóo **lôo-jĩ** = go]_{NP} dùu-ré
 day CLF:DAY-two=IND stay-IRR
 ‘He’ll stay for **twenty** days.’ (elicited sentences based on (187) (TZ, 10:13))

jadĩ has *indefinite* sense when occurring as focal NP-head in a *negative polarity clause*, with the overall sense ‘not much’ (185); positive indefinites ‘however much’ are obtained through rhetorical use of polar interrogatives, as in (192) and (193). Interestingly, in indefinite uses, the pronoun of quantity must head an NP which is *distinct* from that of the questioned nominal (if the latter is overt). Contrast (193) with (190).

(192) *jâdĩ gò ziré dĩ, əkgò doré!*

jadĩ = go zí-ré dĩ əkə = go dó-ré
how.much/many=IND give-IRR WOND ANAP.PL=IND eat-IRR
 ‘However much (corn) I’m given, that much I’ll eat!’ (IR, OLB3:142)

- (193) *jaddĩgo aṇnamó aaró dī,*
jaddĩ(i)=go anè-namóə áa-ró dii
how.much/many.EMPH=IND mother-daughter.in.law come-IRR WOND
âkgo tuubâm hiré.
 əkə = go tùu-bám-hí-ró
 ANAP.SEMB=IND prop-COLL-REFL-IRR
 ‘**However many** women come, that many (baskets) will be kept together.’ (LN,
 MF 078)

Two *emphatic variants* of *jadĩ*–*jadĩ* and *jaddĩ(i)*– seemingly occur in indefinite (non-interrogative) uses only, with senses like ‘however many’ ‘no matter *how* many’ or ‘none whatsoever’ (193). Very often, such expressions occur together with Locative enclitic *lo* (in temporal function) in a “Dismissive” construction with either of the Additive particles *cìn* or *kòm* (§13.2.2.2) (194)-(195).

- (194) *ɲunù...hìgùm bostúr hìgùm jadfi locín*
 ɲunù hìgè-m bostur hìgè-m **jadfi lo = cìn**
 1.PL SPRX.IND-ACC gizmo(<Asm) SPRX.IND-ACC **ever LOC=ADD**
əpâk maadú.
 əpàk-máa-dùu=́
 discard-NEG-IPFV=NFI1
 ‘We...**at no time** do we leave this here thing (rice beer).’ (LN, OPO 016)

- (195) *jaddɛ̃ lokòm cainís jiiɔ̃ rəmáa bó*
 jaddɛ̃ lo=kòm cainís jii = əə rə-máa = bó
 ever LOC=ADD Chinese(<Eng) person=TOP live/exist-NEG=SBRD
rímáa dù.
 rì-máa-dùu
 do-NEG-IPFV
 ‘Chinese people are and will always be there.’ (lit., ~ ‘**At all points** Chinese people do not do without existing.’) (MN, OLB2:66)

7.3.4. Pronoun of content *jòò* ‘what’ and its derivatives

7.3.4.1. Structure

Most interrogative pronouns other than those of person (§7.3.1) or quantity (§7.3.3) are built upon the form *jòò* ‘what’. In most cases, formation and the semantic values and syntactic functions of the resulting terms follow the regular principles of phrasal – not

pronominal – relational marking as discussed in §14.3; Table 7.9 is given here for ease of reference.

| Head | Enclitic | Value | Gloss |
|------------|-------------------|------------|-------------------------------|
| <i>jòo</i> | Ø | Ø | ‘what’ |
| | <i>əəm</i> | ACC | ‘what (OBJ)’ |
| | <i>go</i> | IND | ‘what thing’ |
| | <i>bə</i> | DAT | ‘how (for what reason)’ |
| | <i>lokə</i> | PERL | ‘how (by which route)’ |
| | <i>lokə</i> | VIA | ‘how (by what means)’ |
| | <i>lokə</i> | ABL | ‘where (from what place)’ |
| | <i>lokə</i> | PART | ‘which (one of a set)’ |
| | <i>lo</i> | LOC | ‘where (in/at/to what place)’ |
| | <i>gə</i> | GEN/VIA2 | ‘how (by what means)’ |
| | <i>ləgàa = bə</i> | reason=DAT | ‘why’ |

Table 7.9 – Uses of the general interrogative pronoun *jòo* ‘what’

7.3.4.2. Basic functions

jòo ‘what’ is (somewhat informally) used with interrogative force in absence of any additional marking, or with an appropriate following epistemic particle (196). A cleft/focus construction in *jòo* is also possible, and has relatively greater interrogative force (197).

(196) *jòo ríkà (lèə)?*

jòo rì-káa (lèə)
what happen-PF (CQ.CLAR)
 ‘**What** happened (I didn’t catch it)?’ (IR, FA 030)

(197) *boini, nó jòo rídù naalà?*

boini nó **jòo** rì-dùu-nà = əə = làa
 NAME 2.SG **what** do-IPFV-NZR:SUB=COP.IPFV=CQ
 ‘Boini, **what** are you up to?!’ (KN, OLB4:88)

In addition to standing as a core argument noun phrase head as in (196) and (197), interrogative *jòo* also has the ability to stand in a variety of non-core noun phrase functions, which will not be fully exemplified here in the interest of space (see Table 7.9).

In addition to standing as a noun phrase head, *jòo* has the ability to stand as a questioning modifier of a distinct noun phrase head. In this case, the sense is ‘what/which (type of) *N*’, in the sense of questioning the nature of a referent whose overall type is already known (198). Note that this is a different function from that of Partitive ‘which (member of a set)’; this sense also occurs as a syntactic modifier, marked in the Partitive sense of Ablative postposition *lokə̀* (see §14.3.6.2).

(198) *ə̀ə, jòo adə́ gó dudúu dī́ dumáa dī́.*

ə̀ə [jòo adó = go]_{NP} dú-dúu = dī́ dú-máa = dī́
 AFF **what** sound=IND make.sound-IPFV=WOND make.sound-NEG=WOND
 ‘You know, (he was oblivious as to) **what sort** of sound may or may not have been occurring.’ (IR, FA 082)

In negative polarity clauses, *jòo* has an indefinite sense in a “Dismissive” construction with Additive particle *cìn*, as in (199) (cf. §13.2.2.2).¹⁵⁵

(199) *ŋó jòo cìn momà!*

ŋó jòo = cìn mò-máa
 1.SG **what**=ADD make-NEG
 ‘I’m not doing **anything** (suspicious)!’

Indefinite senses in *go* ‘IND’ in a positive polarity clause with the sense ‘some(thing)’ are available when marked by Suppositional particle *báa* (cf. §13.2.2.9) (200). Finally, indefinite implications are also possible in rhetorical questions, and are perhaps more common (201).

(200) *kə̀b̌-kə̀bbə̀...ə̀ŋŋíí gó...jòogo baí́ izinè...*

kə̀b̌-kə̀bbə̀ = ə̀ə ə̀ŋŋíí = go jòo = go báa = (ə̀)í izì = nè
 other-other=TOP bit=IND **what**=IND SUPP=EMPH now=TMP.IRR.PUNC
adú gó dudée kuddâ lầm bohí dū.
 adó = go dú-dée-kú-dáa-là(a) = ə̀mlàa bohó-dùu = `_
 sound=IND make.sound-UCRT-CMPL-CNTR-NF=SBRD.REAS afraid-IPFV=FI
 ‘The others were...a bit...afraid that **some sort of thing** now could again make a sound.’ (IR, FA 073)

¹⁵⁵ Indefinite uses of *jòo* in negative polarity clauses without marking in Additive *cìn* (as *jòo momà!*, on the model of (199)) are also attested. However, such sentences are considered marginal and/or overly casual-sounding to some of my consultants.

(201) *ləjís ná! jòo rídàg lò jòo rídàg lò.*

ləjís = əə na **jòo** rì-dàk = lo **jòo** rì-dàk = lo
 similar=COP.IPFV DECL **what** happen-COS=LOC **what** happen-COS=LOC
 ‘**Whatever** happens, it’s all the same.’ (IkR, HC 009)

7.3.4.3. Extended functions

jòo ‘what’ has taken on a set of extended functions which, while clearly relatable to its basic function as an interrogative/indefinite pronoun, are not easily describable in terms of the same set of syntactic features or constructions.

In a use which may derive originally from an emphatic use of its indefinite sense in a negative polarity clause such as in (202), *jòo* is also now available as an interjection-like expression of *emphasized impossibility* (203). Possibly, the evolution of this function was assisted both by the ability of *jòo* to occur as a pre-head modifier, as in (202) (cf. (198)), as well as by its (prosodically regular, but often emphasized for increased salience) frequent occurrence with a rising-pitch tone contour – which lends itself naturally to emphatic extensions.

(202) *jòo àm acîrgo cìn...pətáa-kobuè dodêe nà*

jòo amò acîr = go cìn pətá-kobùu = əə dó-dée-nà = əə
any rice.paddy seed=IND ADD bird-rodent=TOP eat-POSB-NZR.SUB=COP.IPFV
kaakú má.
 káa-kú-máa
 have/exist-CMPL-NEG
 ‘No wild animal pests can get **so much as** a single grain of rice.’ (LN, GMW 078)

(203) *ŋó jòo...rìkên rìpâa má!*

ŋó **jòo** rì-kên rì-pâa-máa
 1.SG **what** do-EASILY.1 do-EASILY.2-NEG
 ‘I **just**...don’t know what to do!’ (ZR, OLC2:xx)

A second functional extension of *jòo*, quite different from the preceding, is that of a *universal pro-form* with the basic semantic value ‘etcetera; and all that sort of thing; and so forth and so on’. This sense seems to emerge out of the potential indefinite value of *jòo* in a positive polarity clause, but also seems to depend on being able to occur as the second member of an appositive construction as in (204).

- (204) *əɾəpə́m...agûm akkə...jəə bəre? niijə́ cóm*
 əɾáp = əəm agùm akə = əə jəə bəre níi = əə com
 door=ACC exterior DST.ABL.SLEV=TOP who CJE person=COP.IPFV GUES
jəowə com...cɛ́n cɛ́bə ká.
 jəo = əə com cɛ́-nə cɛ́-bó-káa
what=COP.IPFV GUES slap-MOVE.1 slap-MOVE.2-PF
 ‘Someone...who could it be? Is it a person **or what**?...knocked on the door.’ (IR, FA 034)

jəo may now be used in an appositive construction with this sense as a pro-form for any part of speech, including a verb stem (205).

- (205) *hottúm-horə...rɛ́ku nam rɛ́nəməm...dopák là...joolà...*
 hottúm-horə rɛ́-kú-nam rɛ́-nam = əəm dó-pák-là(a) **jəo**-là(a)
 bear-boar do-CMPL-NZR:RLS do-NZR:OBJ=ACC eat-RID-NF **and.so.on**-NF
 ‘All that we in the end produced was eaten up **and all** by wild animals.’ (NyR, MDS 069)

Use of *jəo* in appositive constructions such as (204) with *unmarked/nonreferential* noun phrases appears, ultimately, to have given rise to a *noun phrase internal* function; namely, to the qualifying noun *jəo* ‘and/or suchlike’, also discussed in §8.3. Although (206) is still potentially structurally ambiguous as an NP-sequence or an NP-internal sequence of head plus qualifying noun, the position of noun phrase Dative case enclitic *bə* following *jəo* but not the noun phrase head in (207) confirms that this is a case of phrase-internal modification.

- (206) *acín domə́ ləgáa bə...ɲùn hibòk jəo ɲɲí*
 acín dó-mə́ ləgáa = bə ɲunù [hibòk **jəo**]_{NP} ɲɲí = go
 cooked.rice eat-NZR:ACMP reason=DAT 1.PL dam **and/or.such** bit=IND
pələ...
 pé-là(a)
 divert.water-NF
 ‘In order to have something with our rice, we did a little dam-fishing **and so on...**’ (RmR, CC 020)

(207) *əd̪iːna, naahuəm hũuɲi joobə*
 əd̪iː-nà naahu = əəm [hũu-ɲi jòo = bə́]_{NP}
 incredible-NZR:SUB granary=ACC CLF:GRANARY-two **and/or.such**=DAT
molaî?
 mò-là(a) = (ə)î
 make-NF=ETAG
 ‘A huge amount (of paddy), making up **around** two granaries’ **worth**, right?’ (LN,
 GMW 047)

Figure 7.1 schematizes the development of the extended functions of *jòo* ‘what’ as they have been described thus far.

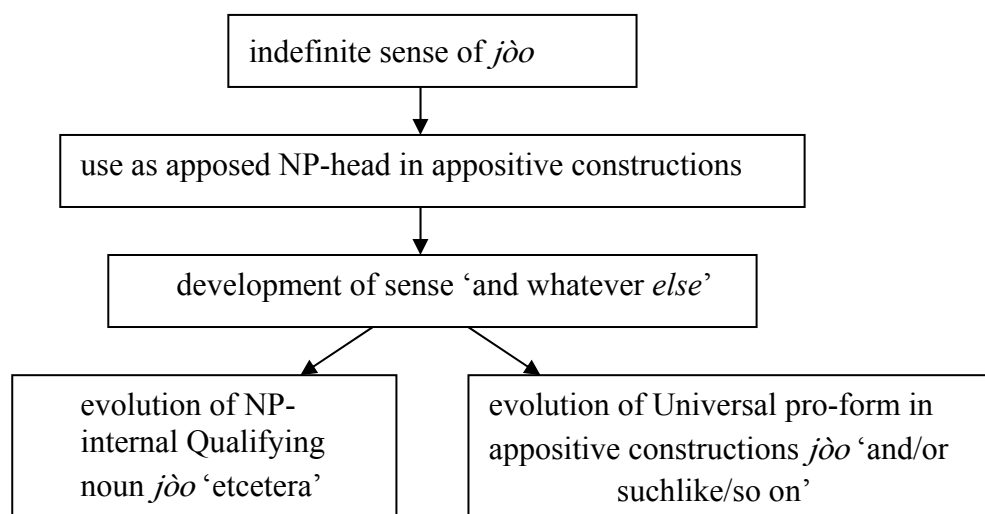


Figure 7.1 – Extended functions of *jòo* ‘what’

Finally, in an extended function seemingly unrelated to the above-described set of functions, *jòo* ‘what’ has probably quite recently developed a clause-final use as a marker of addressee-admonishment, used often in imperative clauses with an optional following particle *laa* ‘CQ’. According to my consultants, the understood sense is something like ‘what (is the problem here)’, ‘what (are you prevaricating over)’ or ‘what (ill do you think could possibly befall you)’. However, use of *jòo(laa)* in clause-final position has the prosodic feel of a clause-internal constituent, quite clearly falling within the same overall intonation contour, and may be developing into a syntactic particle in this function (208)-(209).

(208) *dotó jò!*

dó-tó = jòo

eat-IPTV.ODIR=**what**

‘**Go on** and eat it (no ill will befall you, as you seem to be supposing).’ (lit., ‘Eat it, **what** (do you think is going to happen)?’) (IR, OLB8:91)

(209) *bñcîn jò!*

bñ = cîn jòo

3.SG=ADD **what**

‘He also (did it), **I’m telling you!**’ (lit., ‘He also (did it), **what** (do you think, that I’m lying or something?)!’ (DR, OLC2:23)

7.3.5. Pronominal/pro-adjectival of quality *joojòo* ‘what sort’

Full reduplication of *jòo* ‘what’ results in a semi-compositional form *joojòo*, whose basic sense when standing as a noun phrase head in an interrogative clause is ‘what sort (of thing)’; often, the implication is distributive, as though the entity under question were plural, diffuse, or potentially various in nature (cf. also the general discussion of reduplication in §5.5); however, the distributive reading is not necessary (210).

(210) *jôojôəm dolâ rəká com?*

joojòo = əəm dó-là(a) rə-káa com

what.sort=ACC eat-NF live/exist-PF GUES

‘**What sort(s) of thing(s)** might they have eaten to survive?’ (TB, OAM 041)

While statistically rare, it is also possible for *joojòo* to stand as a *pro-adjectival*, with the corresponding sense ‘what sort (of quality)’. In (211), note that the first mention of *joojòo* stands as a pro-adjectival, as demonstrated by the fact of its taking subject nominalizer/attributive marker *-nà* for the purpose of modifying the O argument noun phrase head *karbar* ‘culture; activity’.¹⁵⁶ Note then that the second mention of *joojòo* stands itself as, in essence, the same O argument noun phrase head in a restatement of the earlier clause.

¹⁵⁶ Note that in Galo, unlike in many other Sino-Tibetan languages, nominal modification of another nominal does *not* employ attributive or other dependency-marking (§6.1.2.2.2).

(211) *nundèn...jaamé akên-akên...həmbə rənə gaddə...*

nunù = dèn jaamée akên-akên = əə həmbə rə-nà gadə = əə
 2.PL=ICMP boy each.one=TOP SPRX.SEMB exist-NZR:SUB group=TOP
jôojoonà...karbarəm...rìdù dî; jôojoəm

joojòo-nà karbar = əəm rì-dùu dî joojòo = əəm
what.sort-NZR:SUB activity(<Asm)=ACC do-IPFV WOND **what.sort**=ACC
rìdù, ḡûn cencî raakú má.

rì-dùu ḡunù cèn-cì-ráa-kú-máa
 do-IPFV 1.PL know-REACH.GOAL-ISOL-CMPL-NEG

‘As to you, all you youngsters, those who are living like this...**what sort of**...activities...are you up to; **whatever** (it is that) you’re doing, we don’t really understand it anymore.’ (NyR, MDS 074)

7.3.6. Pro-adverbial of manner *joombə* ‘how (in what way/manner)’

joombə ‘how’ appears to have the etymological composition *jòo* ‘what’ + *əəm* ‘ACC’ + *bə* ‘DAT/AVZR’. However, it is not obvious that *joombə* can be treated as clearly compositional along the lines of the forms in Table 7.9; this would require additional research. In particular, although some speakers insist that the “correct” form is *joombə* (the expected surface form given the above etymology), this longer form has never once been naturally-attested.¹⁵⁷

Syntactically, *joombə* heads a phrase with the status of an adverbial, and generally questions the manner in which an event is performed or in which a state obtains.

(212) *jôomb alə geeləpə dî?*

joombə alə-gée = lapə dî
how good-PFV.DISJ=PRD WOND
 ‘**How** could that be good?!’ (MN, 23:119)

(213) *nó jômb məədó?*

nó joombə məə-dó(o)
 2.SG **how** think-STAT
 ‘**What** do you think?’ (MN, FYG 014)

Pro-adverbial *joombə* is paradigmatically opposed to the set of non-interrogative/indefinite pro-adverbials discussed in §7.5.

¹⁵⁷ In addition, some speakers insist that the correct form is *jombə*, with a short nuclear vowel in the initial syllable. My own impression is that the short form is in fact more commonly used.

7.4. Demonstratives

Galo has an extremely rich system of demonstratives. In the subsections below, discussion is confined to an overview of their forms and functions. For discussion of the syntax of pronominally-headed noun phrases, see §6.1.3. For discussion of the syntax of demonstrative modification in the context of a common nominally-headed noun phrase, see §6.1.2.2.4.

7.4.1. Overview

There are six basic formal-functional types of Galo demonstrative (Table 7.10).

| | | | | |
|----|---------------------|------------|--|----------|
| 1) | Simplex | (Ø) | ‘this, that...’ | (§7.4.2) |
| 2) | Semblative/genitive | (SEMB/GEN) | ‘similar to this, that/of this, that...’ | (§7.4.3) |
| 3) | Individuative | (IND) | ‘this one, that one...’ | (§7.4.4) |
| 4) | Locative | (LOC) | ‘(at/to) here, (at/to) there...’ | (§7.4.4) |
| 5) | Ablative | (ABL) | ‘from here, from there...’ | (§7.4.6) |
| 6) | Adverbial | (PADV) | ‘in this manner, in that manner...’ | (§7.5) |

Table 7.10 – Basic formal-functional types of Galo demonstrative

Demonstratives of *Types 1-3* stand as or modify core arguments (S, A or O/E), taking pronominal Accusative case-marking when in O function. Those of *Types 4-5* stand as or modify oblique arguments, and cannot take any (additional) case marking. Forms from *Type 6* pattern as syntactic adverbials, and do not occur as demonstratives in the strict sense (i.e., they do not occur inside a noun phrase; see §6.1.2.2.4). However, they exhibit the same basic paradigmatic organization as demonstratives, and seemingly include demonstrative-cognate formatives; thus, they are described in the same overall context here.

Types 1-2 and 4-6 distinguish between *Proximate* (near the deictic centre) and *Distal* (distant from the deictic centre) dimensions of reference, while Type 3 consists only of Proximate subtypes. Within the Proximate (PRX) dimension, all of Types 1-6 distinguish between *Speaker-proximate* (SPRX; ‘near me’) and *Addressee-proximate* (APRX; ‘near you’) subtypes. Within the Distal (DST) dimension, Types 1-2 and 4-6 distinguish further between three topographical planes, (a) *Same-level* (SLEV; on the same or an unknown topographical/riverine level, or to the east, west or an unknown direction of the deictic centre or one’s home) (b) *Upward* (UP; upward, upriver, or to the north of

the deictic centre or of one's home) (c) *Downward* (DN; downward, downriver, or to the south of the deictic centre or of one's home), and also between three degrees of distance (x) *Distal* (DST; away) (y) *Hyper-distal* (HDST; far away) and (z) *Mega-distal* (MDST; very far away). Degree-of-distance subtypes (y) and (z) are structurally little more than phonologically iconic variants of subtype (x), and are in a sense marginal to the overall discussion. *Visibility* is a relevant parameter to distal demonstrative selection, but is not a defining feature of any demonstrative subcategories (see §7.4.1.4)

Figure 7.2 schematizes the basic outlines of the functional subclassification described above, while Table 7.11 presents a comprehensive tabulation of the attested forms. §7.4.1.1-§7.4.1.4 present more detailed discussions of the Proximate and Distal dimensions of reference respectively.

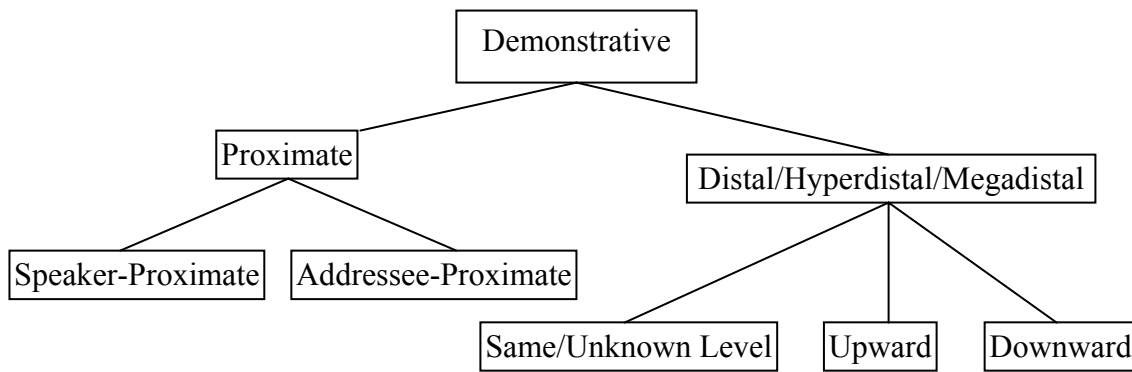


Figure 7.2 – Basic functional subclassification of demonstratives

| | | NOUN PHRASE | | | | | PADV |
|------|------|---------------|--------------|-------------|---------------|-----------------|---------------|
| | | CORE ARGUMENT | | | OBLIQUE | | |
| | | SIMP | SEMB/GEN | IND | LOC | ABL | |
| PRX | SPRX | <i>hì</i> | <i>həkə</i> | <i>hìgì</i> | <i>hogò</i> | <i>hokə</i> | <i>həmbə</i> |
| | APRX | <i>ǎə</i> | <i>əkə</i> | <i>əgə</i> | <i>ogò</i> | <i>okǎ</i> | <i>əmbə</i> |
| DST | SLEV | <i>áa</i> | <i>akə</i> | -- | <i>alò</i> | <i>a(lo)kə</i> | <i>ambə</i> |
| | UP | <i>tə</i> | <i>təkə</i> | -- | <i>tolò</i> | <i>to(lo)kə</i> | <i>təmbə</i> |
| | DN | <i>bə</i> | <i>bəkə</i> | -- | <i>bolò</i> | <i>bo(lo)kə</i> | <i>bəmbə</i> |
| HDST | SLEV | <i>aǎə</i> | <i>aǎəkə</i> | -- | <i>allôo</i> | <i>allôokə</i> | <i>aǎəmbə</i> |
| | UP | <i>tǎə</i> | <i>tǎəkə</i> | -- | <i>tollôo</i> | <i>bollôokə</i> | <i>tǎəmbə</i> |
| | DN | <i>bǎə</i> | <i>bǎəkə</i> | -- | <i>bollôo</i> | <i>tollôokə</i> | <i>bǎəmbə</i> |
| MDST | SLEV | <i>aîî</i> | <i>aîîkə</i> | -- | <i>allûu</i> | <i>allûukə</i> | <i>aîîmbə</i> |
| | UP | <i>tîî</i> | <i>tîîkə</i> | -- | <i>tollûu</i> | <i>bollûukə</i> | <i>tîîmbə</i> |
| | DN | <i>bîî</i> | <i>bîîkə</i> | -- | <i>bollûu</i> | <i>tollûukə</i> | <i>bîîmbə</i> |

Table 7.11 – Demonstrative types and subtypes

7.4.1.1. Proximate dimension 1: speaker vs. addressee-orientation

In the most basic, *spatial-deictic* sense, *Speaker-proximate* and *Addressee-proximate* demonstratives refer to entities or locations which are construed as being *nearer to* or in the possession of the *speaker* or *addressee* respectively. In the following exchange, the three demonstratives in **bold** refer to the same object, which is located relatively close to speaker IRw. Speaker IR refers to this object using Addressee-proximate demonstratives, while speaker IRw uses Speaker-proximate demonstratives (214)-(215).

(214) IR: *ə́m ogò kozzúu gə...gaarí-saká garɛ́b*

ə́m-m ogò kozzúu = gə gaarí-sakaa garɛ́ = bó
 APRX-ACC TMP.SEQ awhile=GEN vehicle(<Asm) wheel(<Asm) resemble=AVZR
doodób motəkè. má, ə́gə́m nè.
 dóo-dó(o) = bó mò-tó = kée máa ə́gə́-m né
 lie.down-STAT=SBRD make-IPTV.ODIR=HORT.POL NEG APRX.IND-ACC ADM
 ‘IR: **That**, then, (the one) from just before, make it lie like a car wheel. <IRw
selects incorrect object> No no, **that one**.’ (IR, MPO 023-024)

(215) IRw: *hígì m naí?*

hígì-m na = (ə)î
 SPRX.IND-ACC DECL=ETAG
 ‘IRw: **This one**, right?’ (IRw, MPO 025)

7.4.1.2. Proximate dimension 2: discourse endophora and topicality

A second and probably derivative use of non-locative Proximate demonstratives¹⁵⁸ is in marking discourse *endophora* (anaphora and cataphora) and *topicality*. In some cases, the Speaker/Addressee-orientation discussed in §7.4.1.1 extends to this use; for example, an Addressee-proximate form is invariably used to refer to the contents of an interlocutor’s speech, while a Speaker-proximate form would be used to refer to the contents of the speaker’s speech. However, such cases can probably be subsumed under the following, more general, set of distinctions (disregarding diachronic priority).

Generally speaking, *anaphora* are coded using *Addressee-proximate* demonstrative forms. In the exchange in (216)-(217), speaker IR uses the Addressee-proximate forms in **bold** to ask a question about an entity (in this case a writing system)

¹⁵⁸ I.e., Types 1-3 and 6 from Table 7.11.

which had been previously mentioned by speaker MK (216). Speaker MK replies to the question using the same form (i.e., he does not switch to a Speaker-proximate form) (217).

(216) *IR: nó jôomb məədó, əgə...doobəə booló...*

nó joombə məə-dó(o) əgə dóo-bəə-boolo
2.SG how think-STAT ANAP.IND LOC.EXIS.INAN-DUR-COND
alə həə bərə...mə...əmbəí...

alə-há = ée bəree máa əmbə = (ə)í
good-NZR:IRR=COP.PFV CJEC NEG ANAP.PADV=HEMP
məráa..ennám kaamaabə rinəmə

məráa éK-nam káa-máa = bó rì-nam = əə
HEST write-NZR:RLS have/exist-NEG=SBRD do-NZR:RLS=TOP
aldəŋna bərəi?

alə-dək-nà = əə bəre = (ə)ì
good-COS-NZR:SUB=COP.IPFV CJEC=ETAG
'What do you think; if **it** had remained...do you reckon it would have been good...or...in that way...umm...do you reckon it's better to be without writing?' (IR, LW 065)

(217) *MK: əgə...doobəə booló...jipàk gə rəmbə...ŋunù,*

əgə dóo-bəə-boolo jipàk = gə rì-əmbə ŋunù
ANAP.IND LOC.EXIS.INAN-DUR-COND non.hill.tribal=GEN do-AVZR 1.PL
cəntə ŋurlà.

cən-tà-ŋùr-là(a)
know-INCP-RECP-NF
'If **it** had remained...as the non-tribals are (lit., in that (previously discussed) way of the non-tribals' doing), we also would have learned/become aware.' (MK, LW 068)

Current discourse-topics and *cataphora* are handled by *Speaker-proximate* forms. In (218), the speaker refers to the current discourse topic using Speaker-proximate forms; note here the "bracketing" use of the demonstrative, which serves to heighten the attention-worthiness of the marked topic. Note also the anaphoric use of Addressee-proximate semblative demonstrative *əkə* (see §7.4.3.2).

(218) *âk garîbâ (...) hîgî “ahâ”...agóm hîgî,*

əkə garî = bə **hîgî** ahàa agóm **hîgî**
 ANAP.SEMB resemble=AVZR CATA.IND cook(<Hin) speech CATA.IND
bôk aamáa dûunə go bəreî.

bokə áa-máa-dùu-nà = go bəre = (ə)î

DST.ABL.DN come-NEG-IPFV-NZR:SUB=IND CJEC=ETAG

‘In that same way...I wonder whether **this here** word “aha” might not be coming from (the plains languages) down there.’ (IR, TT 023)

In (219), the attention-soliciting preliminary to the first line of a folktale *it’s like this*: is simultaneously a cataphoric reference to the entire contents of the tale.

(219) *həkkəî! korûm ogò...korûm ogò...*

həkkə = əə = (ə)î korûm ogò korûm ogò
 CATA.SEMB=COP.IPFV=ETAG ancients ANAP.TMP ancients ANAP.TMP
accə ʔnigò kaatóî.

ací = əə ʔnì = go káa-tó = (ə)î

elder.brother=TOP two=IND have/exist-PFV=ATAG

‘It’s **like this**: in ancient times...in ancient times...there were two brothers, see.’ (LN, TG 006)

7.4.1.3. Proximate dimension 3: temporal reference

Temporal reference is less robustly encoded by Galo demonstratives, at least in any paradigmatic sense. That is, while *Addressee-proximate* locative demonstratives are used ubiquitously in reference to past/realized times (“then; at that time”) (as *ogò* (219)) and points of temporal succession/subsequence, whether realized or not (“then; next”) (see §7.4.5), *Speaker-proximate* demonstratives are not generally employed in time reference.

7.4.1.4. Distal dimension: geo-topographical orientation

Distal demonstratives in Galo encode a *three-way geo-topographical relationship* between the marked referent and a shifting spatial reference point (usually, the place of speaking) (Figure 7.2). In the case of entities or locations which are potentially *visible from* or *immediate to* the deictic centre, the values encoded are of *elevation/topography*, viz. *upward*, *downward* and *on the same level* (as the deictic centre) (220)-(222).¹⁵⁹

¹⁵⁹ A comparable and at least partially cognate topographically-oriented system has been described for the Kiranti languages of the Nepal Himalaya by Ebert (1999), who also describes this system as “as far (she)

(220) *ŋók tòk ezîgo laazî takè!*

ŋó-kà tokà ezà = go làa-zí-tàa = kée
 1.SG-GEN DST.ABL.UP clothing=IND take-BEN-IPTV.MOT=HORT.POL
 ‘Go get my clothes **from up there** (on the shelf which we can both see)!’ (LN, TG 002)

(221) *okká, bə əə...patúu kainə bə...ləpàa*

okkáə bə əə pá-túu kaí-nà = bə ləpàa
 SCNJ DST.DNbamboo chop-NZR:HALF.LENGTH big-NZR:SUB=DST.DN middle
bolò...arúu bəl tîlîgl ató.
 bolò arúu bolò tí-lîk-là(a) á-tó
 DST.LOC.DN hole DST.LOC.DN put-INTO-NF keep-IPTV.ODIR
 ‘And **that** bamboo **down there** (nearby to where we are sitting)...the big cut-off (one)...put (the rope) into the middle of (the bamboo’s) hole **down there**.’ (IRw, MPO 103)

(222) *“jôolo” əmnəmá, “aó (...) isì...mərəáa, abúu...luujír gə...*

jòo = lo əm-nam = əə aó isì mərəáa abúu luujír = gə
 what=LOC say-NZR:RLS=TOP HDST.SLEV waterHEST river riverbed.edge=GEN
əttám odòo rûuko ahì...jublâa
 əttám odòo-rûu-kò áa = hì jùp-là(a)
 cliff.sloping far-CERT-NZR:LOC DST.SLEV=PTOP sleep-NF
doodée naalà.”
 dóo-dée-nà = əə laa
 LOC.EXIS.ANIM.LYING-PROS-NZR:SUB=COP.IPFV ASSR
 ‘(Paako Tai) having asked him “where”, (Abo Tani replied) “she’ll be there...umm...sleeping **over** on the high point of this cliff along the riverbank **there**, you’ll see.”’ (MK, TT 069)

If the marked referent is *not potentially visible*, but may be construed in terms of its location on a river along which or near which the deictic centre is also located, the same set of terms encodes *upriver*, *downriver* and *across-river* (223).

know(s), unique not only in Tibeto-Burman, but also in the world’s languages.” In fact, topographically-oriented deixis is found in almost all Tani languages (possibly, Apatani lacks such a system, inasmuch as no mention is found in the relatively extensive presentation of Abraham (1985)), and similar categories (as well as seemingly cognate forms) are found widely in Tibeto-Burman and probably reconstruct to PTB or a near descendant language. Details will be found in Post (2008).

(223) *hòk ihî-abú rûu hòkè hiká-hijá abú hòk*

hòkè isî-abúu rûu hòkè hikáa-hijáaábúu hòkè
 SPRX.LOC.ABL water-river CERT SPRX.LOC.ABL NAME river SPRX.LOC.ABL
iibôo lò...bê jôolo bittár eebó dî?
 ìi-boolo **bè** joolò bíK-tár-ée-bá(a) dîi
 descend-COND **DST.DN** where flow-TO.LIMIT-DISJ.IPFV-PFV.DRCT WOND
 “If we actually use this river, this Hika-Hija River to escape...where (**down there**)
 might it end?” (TB, OAM 257-258)

If the marked referent is *neither* potentially visible *nor* on the path of a nearby river (practically speaking, when it is separated from the deictic centre by at least one mountain range) the same set of terms encodes the compass points *north*, *south* and *east/west*. Selection in this case is, however, not straightforward. Initially, the speaker must assess the position of the deictic centre – say, the place of speaking – relative to his home or home village. If the speaker is *at* his home village, the referent is marked according to its compass position relative to the place of speaking. For example, (224) was spoken by a resident of *dîpô* village who was staying in *dîpô* village at the time of speaking. *dîpô* village is located in the Assam-bordering foothills at an elevation of about 100 metres, and is considerably lower in elevation than Itanagar, the capital of Arunachal Pradesh, at about 440 metres. However, Itanagar, at 27.1° N, is further south than *dîpô*, lying at approximately 27.7° N; hence, the speaker uses a notionally “downward” locative demonstrative.

(224) *itanagár bolò jômbə ŋó iiré nâ?*

itanagar **bolò** joombə ŋó ìi-ré-nà = əə
 PLACE **DST.LOC.DN** how 1.SG descend-IRR-NZR:SUB=COP.IPFV
 ‘How am I to go (**south**) to Itanagar (having neither car nor money)?’ (IR,
 OLT16:34)

If the speaker is *not* at his home village, then it becomes a question of whether the marked referent is located in his/her/its home village or not. If it is, then selection is relative to the place of speaking. If it is *not*, then selection is relative to the speaker’s home village. For example, a resident of *aalóo* (Along) town would, if speaking from Itanagar, refer to *dîpô* (or an entity construed as located within *dîpô*’s limits) using Downward/Southward demonstratives; this is because *aalóo* – the speaker’s home – is located at 28.17 ° N, and this – not the location where the speaker happens to be – is construed as his deictic centre.

Finally, in case the relative location of the referent-to-be-marked is *unknown* to the speaker, or is presumed by the speaker to be unknown to the addressee (for example, if the referent is or is located in a place or country whose name is known, but whose location relative to the deictic centre is unknown), *same level* demonstratives are used as a sort of “default”. For example, the following sentence is almost always uttered when I am introduced to a Galo for the first time (225).

(225) *bɛ̃ ostelia akkə̃.*

bɛ̃ ostelia akkə̃ = ə̃ə̃
 3.SG Australia ABL.SLEV=COP.IPFV
 ‘He’s **from** Australia.’ (Passim)

Although a speaker of (225) may know very well him- or herself that Australia is basically to the south of the Galo area, the riding assumption is that this fact is not generally within the collective knowledge of Galo people; the implication is thus *not* that Australia is “on the same level” as the place of speaking, but rather that Australia’s precise location is either unknowable or is, for most purposes, a matter of little importance.

Table 7.12 summarizes the selection procedure.

| | | |
|--|-----|-------------------------------------|
| Step 1) Is referent location knowable? | Yes | → Go to Step 2 |
| | No | → Use Same-Level set |
| Step 2) Is referent potentially visible? | Yes | → Construe in terms of elevation |
| | No | → Go to Step 3 |
| Step 3) Is referent located along a river? | Yes | → Construe in terms of river course |
| | No | → Go to Step 4 |
| Step 4) Is speaker at home village? | Yes | → Construe as N/S/E-W of P.O.S. |
| | No | → Go to Step 5 |
| Step 5) Is referent located at speaker’s home village? | Yes | → Construe as N/S/E-W of P.O.S. |
| | No | → Go to Step 6 |
| Step 6) Construe as N/S/E-W of home village | | |

Table 7.12 – Principles for selection of Galo distal demonstratives (P.O.S. = Place Of Speaking)

7.4.2. Simplex demonstratives

7.4.2.1. Structure

Simplex demonstratives encode Speaker- and Addressee-Proximate values (§7.4.1.1), as well as Upward, Downward, and Same-Level Distal, Hyperdistal and Megadistal values (§7.4.1.4) (Table 7.13).

| PRX | | DST | | | HDST | | | MDST | | |
|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|-----------|-----------|-----------|
| SPRX | APRX | SLEV | UP | DN | SLEV | UP | DN | SLEV | UP | DN |
| <i>hì</i> | <i>éə</i> | <i>áa</i> | <i>tə</i> | <i>bə</i> | <i>aəə</i> | <i>təə</i> | <i>bəə</i> | <i>aĩ</i> | <i>tĩ</i> | <i>bĩ</i> |

Table 7.13 – Simplex demonstratives

All Proximate and Distal simplex demonstratives appear to be etymologically non-compositional. Hyperdistal and Megadistal forms may be described as prosodic variants of the simplex Distal forms, and are also probably etymologically noncompositional. All simplex demonstratives take pronominal (suffixal) case-marking (§6.1.3).

7.4.2.2. Basic functions

The principle function of a simplex demonstrative is to mark a *referential non-oblique noun phrase* for *spatial-deictic* and *discourse-pragmatic* values, as discussed in §7.4.1. In (226), simplex distal demonstrative (upward) *tə* marks the CS argument of a copula clause as spatially upward of the deictic centre. In (227), simplex speaker-proximate demonstrative *hì* marks the O argument of a final clause as a Proximal topic.¹⁶⁰

(226) *mootûm tə rəkênə, maazí dú!*

mootûm **tə** rə-kên = əə maazí-dùu
jungle **DST.UP** live/exist-AZR:GOOD/EASY=COP.IPFV very.much-IPFV
‘The jungle (**up there**) is really nice to stay in!’ (RmR, CC 118)

(227) *əkə ləgà hìm opò hìm hodaí...*

əkə ləgàa **hì-m** opò **hì-m** hodaí =_̣
ANAP.SEMB reason **SPRX-ACC** liquor **SPRX-ACC** every.day(<Ind)=EMPH
 $\eta\eta\acute{\iota}go$ *namló...abəədū*.
 $\eta\eta\acute{\iota}i$ = go namó = lo á-bəə_̣ = dùu
bit=IND house=LOC keep-CTIN=EMPH=IPFV
‘For this reason we *continuously* keep a little of **this here** rice beer in the house at all times.’ (LN, OPO 018)

¹⁶⁰ At the time of speaking, the rice beer in question was in fact spatially downward of both the speaker and her interlocutor, suggesting that use of the speaker-proximate demonstrative was discourse-importance-oriented rather than spatially-oriented. It must of course be admitted, however, that in many cases these uses overlap (for example, a referent which is near to the speaker may also be important, and vice versa), and it is not always possible to differentiate in a particular use between these ostensibly different types of function.

7.4.2.3. Extended functions

Capitalizing on its discourse-pragmatic value as a marker of Proximal topics (which, that is, may also be construed as *spatially* proximate, or else are *unspecified* for spatial deixis (§7.4.1.2, ex. (218); cf. also (227))), Speaker-proximate simplex demonstrative *hì* has also developed the extended functionality of marking a *spatially non-proximal* referent as a *Proximal topic*.

In the sequence in (228)-(229), which represents a continuous stretch of text from the same speaker, note in (228) that the noun phrase referent “our place” – marked by the Individuative speaker-proximate demonstrative *hìgì* – may be simultaneously understood as spatially speaker-proximate and topically prominent. In (229) however, a new, spatially non-speaker-proximal discourse topic is established. A salient contrast in spatial location motivates the speaker to shift to a distal demonstrative, which, unlike proximate demonstratives, has no capacity to mark a proximal topic. Therefore, the noun phrase is *simultaneously* marked in *hì* – which is now no longer interpretable as a spatial-deictic demonstrative.

(228) *ɲə̀ək móok hìg kudá...amdâa rikkém...əə,*

ɲə̀ək-kə mookó **hìgì** kú = da amdâa-ríkó = əəm əə
 1.REFL-GEN place **SPRX.IND** CMPL=CNTR primary.crop.field-field=ACC AFF
îsi rikkém holú ragmá dû. əə, tə adî peelə...
 isì-ríkó = əəm holúu rák-máa-dùu əə tə adî peeləə
 water-field=ACC fence plait.large-NEG-IPFV AFF DST.UP Adi.macro-tribe side
 ‘Our place **here** on the other hand...in our rice fields...yeah, we don’t fence in our wet fields. Mm, (but) there in that Adi place...’ (LN, MH 049)

(229) *moodî peelə təhì, ɲɲí go rikkém rìpələ,*

moodii peeləə tə = **hì** ɲɲí = go ríkó = əəm rì-pə-là(a)
 mountain side DST.UP=**PTOP** bit=IND field=ACC do-ATTN-NF
holú ragdó ì.
 holúu rák-dó(o) = (ə)ì
 fence plait.large-STAT=ETAG
 ‘Up in that mountain area **here**, cultivating relatively few fields, they fence them in, see.’ (LN, MH 050)

Although dedicated use of this “Proximal topic-marking” function of *hì* on non-spatially-speaker-proximal noun phrases is very rare by comparison with use of the

general Topic-marker *əə*, it would seem that they have basically the same purely discourse-oriented functionality and overall categorical status within the noun phrase (i.e., they are both “articles” rather than demonstratives per se). Note that, unlike an ostensibly “demonstrative” use of *hì* as in (227), *hì* in (229) *cannot* be “bracketed” around the noun phrase – a key syntactic test for demonstrative status (§6.1.2.2.4). Note also that *hì* in Proximal topic-marking function remains noun phrase-internal, as shown by its continuing to host phrasal case-marking (230) – a key distinction from the post-phrasal category of Particles (§13.1).

(230) *baasár təhìm aaloə kaí jâadu.*

[baasár tə = **hì**-m]_{NP} aaloə = əə kaí-jâa-dùu

PLACE DST.UP=**PTOP**-ACC PLACE=TOP big-COMP-IPFV

‘Along is bigger than **this here** Baasar up there.’ (lit., ≡ ‘As for this here Baasar up there, Along is bigger than (it).’ (IR, B4:42)

7.4.3. Semblative/genitive demonstratives

7.4.3.1. Structure

Semblative/Genitive demonstratives exhibit the same basic set of proximate and distal values as Simplex demonstratives (Table 7.14).

| PRX | | DST | | | HDST | | | MDST | | |
|-------------|------------|------------|-------------|-------------|--------------|--------------|--------------|-------------|-------------|-------------|
| SPRX | APRX | SLEV | UP | DN | SLEV | UP | DN | SLEV | UP | DN |
| <i>həkə</i> | <i>əkə</i> | <i>akə</i> | <i>təkə</i> | <i>bəkə</i> | <i>aəəkə</i> | <i>təəkə</i> | <i>bəəkə</i> | <i>aïkə</i> | <i>tïkə</i> | <i>bïkə</i> |

Table 7.14 – Semblative/genitive demonstratives

The structure and distribution of Semblative/Genitive demonstratives suggest a diachronic origin in Simplex distal demonstrative suffixation by Genitive pronominal suffix *-kə*, as *tə-kə* ‘DST.UP-GEN’. Like Genitive-marked pronouns but unlike most other demonstratives, Semblative demonstratives take phrasal enclitics, but do not take (further) pronominal case suffixes when occurring as the sole constituent of an argument noun phrase; this would seemingly suggest an origin as a headless noun phrase as *təkə* = *go* ‘DST.SEMB.UP=IND’, possibly reflecting *tə-kə Ø go* ‘DST.UP-GEN (NOM) IND’. Description of Semblative/Genitive demonstratives as an independent paradigm basically hinges on the seeming lexicalization of (unpredictable) progressive vowel harmony *i* → *ə* in the

Speaker-proximate form, on some possible evidence of semantic/functional specialization in Semblative functions, and on the inability to re-introduce a putatively ellipsed nominal “head” in all functions.

Below and elsewhere in this grammar, Semblative/Genitive demonstratives are glossed ‘SEMB’ when in Semblative functions and ‘GEN’ when in Genitive functions.

7.4.3.2. Basic functions

Genitive demonstratives stand as or mark a noun phrase-internal genitive phrase for deixis, usually in *possessive* functions (231).

(231) “*apí mumsì, ân-abó tâək akinəm*

apí mumsì = áa [[anə-abó **tâəkə**]_{GENP} akìn = əəm]_{NP}
 sister.elder NAME=VOC mother-father **HDST.GEN.UP** leaf.packet=ACC
gəllée kubó ká.”

gá-lèe-kú-bá(a) ká
 carry-SSEQ-CMPL-PFV.DRCT INFO

“‘O Elder Sister Mumsi, I have brought the meal packet **from** your parents **up there**.” (lit., ‘your parents **up there**’s...’) (NyPB, LAT 297)

Semblative demonstratives stand as or mark a referring noun phrase as an *exemplar of a kind or sort*, generally for use as a standard of comparison. Semblative demonstratives thus, in a sense, are *bi-referential*, in that they simultaneously refer to *one* entity (say, the “primary referent”) which is construed as the entity actually participating in the event/state denoted by the clause predicate, as well as *another* entity (say, the “secondary referent”) which is construed as the standard against which the primary referent’s identity may be fixed. For example, in (232), the S argument noun phrase refers to a chicken of a particular type which the predicate asserts to exist in a particular place. The S argument reference is fixed, however, in terms of a *different* individual (exemplar of the type) which is actually located spatially upwards of the deictic centre at the time of speaking. Similarly, in (233), the speaker identifies a type of tree which he asserts to be beautiful in terms of an actual exemplar of that type which was located upwards of him and his interlocutor at the time of speaking,

(232) *təkgò rədù.*

[**təkə** = go]_S [rə-dùu]_{PRED}

DST.SEMB.UP=IND live/exist-IPFV

‘There’s one of **that-kind-(of chicken)-up-there** (living) there.’ (lit., ≅ ‘A (chicken) which is of the kind which is represented by the individual located upwards of us is living (in that place).’ (IR, OLB5:140)

(233) *tək hìnə mâi kaakêndu.*

təkə hìnə = əə maazí = bó káa-kèn-dùu.

DST.SEMB.UP tree/plant=TOP very.much=AVZR look-GOOD/EASY-IPFV

‘**That kind of** tree (an individual of which is) **up there** is really beautiful.’ (MN, OLB2:70)

Functionally speaking, it is worth noting that in both cases, use of a Semblative demonstrative obviates the need for a type-denoting lexeme which may or may not be accessible. For example, in both (232) and (233), the speakers were referring to “exotic” species for which Galo names do not exist.

Proximate semblative demonstratives also have discourse-endophoric uses; in (235), the Addressee-proximate Semblative demonstrative *əkə* refers anaphorically to the immediately preceding clause contents (234) (cf. also (219)).

(234) *donəməm rirâ-menrâanam bulù ahàr*

dó-nam = əəm rî-ráa mèn-ráa-nà = əəm bulù ahar

eat-NZR:NSUB=ACC do-ISOL say-ISOL-NZR:SUB=ACC 3.PL food/chef(<Hin)

əmdù.

ə́m-dùu

call-IPFV

‘They call the person who prepares the food for someone “ahar”.’

(235) *ək garîbè (...) hīgì “ahâ”...agóm hīgì,*

əkə garî = bó hīgì ahàa agóm hīgì

ANAP.SEMB resemble=AVZR CATA.IND cook(<Hin) speech CATA.IND

bôk aamáa dûunə go bəreì.

bokə áa-máa-dùu-nà = go bəre = (ə)ì

DST.ABL.DN come-NEG-IPFV-NZR:SUB=IND CJEC=ETAG

‘Like **that/in that** same way [lit., ‘resembling **that sort of thing/the sort which that thing is of**’]...I wonder whether this here word “aha” might not be coming from (the plains languages) down there.’ (IR, TT 023)

7.4.3.3. Extended functions

7.4.3.3.1. “Hesitation” use of *həkə*

Capitalizing on its potential for cataphoric discourse-functional use with the basic sense ‘of the sort/type of this (following) thing’ (§7.4.1.2), *həkə* has become one of the three most frequent native Galo hesitation particles or words, akin to English *sorta*. Like the dedicated, semantically empty hesitation particle/word *mərāa* ‘HEST’ (§13.7.6), *həkə* in its hesitation use is able to stand as a pro-form for any type of lexical head. In (236), note the use of *həkə* as a “pro-predicate-head” – an impossibility for any other demonstrative, Semblative or otherwise – as well as its alternation with *mərāa* ‘HEST’ in the same function. In (237), note that *həkə* in hesitating use repeats the genitive phrase constituent in a hesitating function, and that the genitive reflex is phrasal enclitic *gə*; this would suggest that *həkə* is here functioning as a syntactic common nominal rather than pronoun.

(236) *aláglók...həkə rəkú...mərāa rəkúî, (...)*

alák = lokə **həkə**-rə-kú mərāa-rə-kú = (ə)î
hand/arm=INST **HEST**-IRR-CMPL **HEST**-IRR-CMPL=ETAG
rəmâp doobə momîg rəkù.

rəmâp-dó(o) = bə mō-mîk-rə-kú
soft-STAT=SBRD make-MINUTE.S/O-IRR-CMPL
‘(And after that,) **you know what**’ll happen...here’s what will happen:...they’ll pulverize it by hand until it’s soft/powdery.’ (LN, OPO 031)

(237) *moopîn hîgtù...maazí bə...ηəək...həkə gə,*

moopîn hîgt = tu maazí = bə ηəə-kə **həkə** = gə
festival.harvest P.TOP.IND=FOC(<Asm) very.much=AVZR 1.REFL-GEN **HEST**=GEN
allnàî?

alə-nà = əə = (ə)î
good-NZR:SUB=COP.IPFV=ETAG
‘This here Moopin is really...is our very own, sort of...treasured thing.’ (LN, WGD 068)

7.4.3.3.2. “Plural indefinite” use of *əkə*

Despite its probably secondary origin, the most frequent function of Addressee-proximate Semblative demonstrative *əkə* is as a marker of *plurality to indefinite or newly-established* (animate or inanimate) referents in a discourse, akin to English *some*. It is paradigmatically opposed in this function to Individuator *go* (see §14.2.1.2). *əkə* in this function cannot occur pronominally, but instead must modify another noun phrase head. In addition, it cannot precede the head; however, it can co-occur with another, different, pre-head demonstrative. These facts together suggests that *əkə* in “plural indefinite” function has or is developing the basic status of a plural indefinite *article* (§6.1.2.2.7).

(238) *kaapâ gərəmǎ...akén gônna mendú...*

káa-pàa-gərǎ = əəm = əə akèn go = na = əə mèn-dùu = ʔ
look-ATTN-ACNC=ACC.TSUB=TOP one IND=SLCT=TOPsay-IPFV=NFI I
aló á níêk duudó bên.

aló áa ní = **əkə** dùu-dó(o) ben
DST.LOC.SLEV DST.SLEV person=IDEF.PL stay-STAT EVID
‘After seeing it, one of them said, “There seem to be **some** people over there.”’ (IR, FA 014)

7.4.4. Individuative demonstratives

7.4.4.1. Structure

Individuative demonstratives are found in *speaker-proximate* and *addressee-proximate* forms *higǎ* and *əgǎ* only. Distal individuative demonstratives are not found in Lare Galo.¹⁶¹ Etymologically, Individuative demonstratives appear to derive from combinations of simplex proximate demonstratives with Individuator *go*, followed by lexicalization of Regressive vowel harmony (a very rare and irregular change in Galo which has produced what may be the only extant short *-i* rhyme in the language): **hi-go* > **hi-gi* > *hi-gǎ* and **ə-go* > *ə-gǎ*.

The form of the Speaker-proximate Individuative demonstrative is subject to some variation among speakers, with the form *higù* ~ *higǎ* occasionally attested among older speakers (cf. §7.3.3.2, ex. (194)). It is possible that this represents a more conservative

¹⁶¹ Distal individuative demonstratives appear to exist in Pugo Galo, as in the attested Pugo sentence *təgǎ tǎə = na* ‘DST.UP.IND DST.UP=DECL’ ‘it’s that one up there’; however, the distribution of such forms in Pugo Galo has not been extensively researched as of this writing, and such expressions are not accepted by Lare speakers. I can currently offer no hypothesis concerning the lack of such forms in Lare.

pronunciation which has been idiosyncratically retained, however this would require further research.

Individuative demonstratives take pronominal case suffixes.

7.4.4.2. Basic functions

Individuative demonstratives share the standard non-oblique demonstrative functions of *spatial-deictic* (239) and *discourse-endophoric* (240) reference described in above sections, with the addition of Individuative functionality (described in more detail in §14.2.1.2). Due perhaps to their originally more precise flavour (i.e., *this one dog* as opposed to *this dog*), their frequency in most uses vastly exceeds that of simplex demonstratives.

(239) *əgə jəkkə là?*

əgə jə(ə)-kə = əə làa

APRX.IND who-GEN=COP.IPFV CQ

‘Whose is **that** (**thing which is in the addressee’s possession**)?’ (TZ, 11:21)

(240) *nappá gomtəlà...rìnə hīgì...əgə hōopenə.*

nappáa góm-tə-là(a) rì-nà **hīgì** **əgə** hōopèn = əə

mouth CLF:VOC-big-NF do-NZR:SUB **PTOP.IND** **ANAP.IND** chameleon=COP.IPFV

‘**This** one whose mouth is big and...**that**’s a chameleon.’ (MK, TT 231)

7.4.4.3. Extended functions

Deriving seemingly from its discourse-endophoric use, Addressee-proximate individuative demonstrative *əgə* also functions as a *clause-linker* in the structuring of narrative discourse, akin to English *then*, *next* or *so*. Similar in this use to Addressee-proximate locative demonstrative *ogò* (§7.4.5), it differs chiefly in that while *ogò* appears to reference a point of *temporal* transition, *əgə* appears to reference a point of *episodic* transition. In some uses, anaphoric reference to the preceding episode at a point of transition is ostensibly discernible, as in (241), while in others *əgə* seems to function non-referentially, simply for the purpose of introducing a new episode or event (242).

(241) *okkǎ...əgə...mərað...ôk taajô lò...əgə...*

okkǎə əgə məráa = əə okə taajòo lo əgə
SCNJ ANAP.EPIS HEST=TOP ANAP.ABL top LOC ANAP.EPIS
ogò...mərá duukù...rigâa aalâa kù.

ogò məráa-dùu-kú rigâa áa-là(a)-kú
ANAP.LOC/TMP HEST-IPFV-CMPL conclusion come-NF-CMPL

‘And so **with that**...on top of that...**then**...it was like this...the last point of the activities arrived.’ (MK, TT 268)

(242) *ám əəkû...əg patúu kumâ.*

ám-nam əə = kú əgə pá-túu-kú-máa = `
be.said-NZR:RLS TOP=CMPL ANAP.EPIS chop-DIVIDE.S/O-CMPL-NEG=FI
‘Having said thus, then he wouldn’t cut it anymore.’ (TB, OAM 080)

In some uses, *əgə* takes on the character of a hesitation particle best translated by English *umm...*; in (243), note that *əgə* cannot by any means be viewed as anaphorically referential, since it lacks the Accusative marking carried by all other noun phrases in the list.

(243) *lâamə tokuám naaná-rokóm...hottúm-horé...jóo*

lâa-mò-tó-kú = əəm naaná-rokóm hottúm-horé jòo
take-APPL:SSUB-PFV-CMPL=ACC.TSUB every.kind(<Asm) bear-boar and/or.such
ruəm...əgə...abâ narùəm, hoín-holá ruəm...

rùu = əəm əgə abâa narùu = əəm hoín-holáə rùu = əəm
SUPR=ACC HEST type everything=ACC civet-large.wildcat.var SUPR=ACC
pírík-taakú ruəm...əgə...laalâ.

pírík-taakú rùu = əəm əgə lâa-là(a)
khaleej.pheasant-bird.variety SUPR=ACC HEST take-NF
‘After taking them, every kind of wild animal and all that sort of thing...**these**...He got every kind of animal, even wildcats, even...**umm**...jungle birds.’ (MK, TT 115)

7.4.5. Locative demonstratives

7.4.5.1. Structure

Locative demonstratives encode Proximate and Distal deixis (including Hyperdistal and Megadistal) (Table 7.15).

| PRX | | DST | | | HDST | | | MDST | | |
|-------------|------------|------------|-------------|-------------|-------------|--------------|--------------|-------------|--------------|--------------|
| SPRX | APRX | SLEV | UP | DN | SLEV | UP | DN | SLEV | UP | DN |
| <i>hogò</i> | <i>ogò</i> | <i>aló</i> | <i>tolò</i> | <i>bolò</i> | <i>allô</i> | <i>tollô</i> | <i>bollô</i> | <i>allû</i> | <i>tollû</i> | <i>bollû</i> |

Table 7.15 – Locative demonstratives

The structure and etymology of locative demonstratives is puzzling. It is clear that proto-initial formatives derive from Simplex demonstratives, and also that final formatives of the Distal series reflect Locative postposition *lo* (§14.3.5). However, final formatives of the Proximate set are clearly unrelated. The most straightforward candidate proto-formative would be Individuator *go*, however it would seem difficult to explain how this same formative could have given rise both to phonological forms and functions here which strongly differ from those of the Individuative demonstrative set (§7.4.4). This topic would require further Tani-internal comparative investigation.

The Hyperdistal and Megadistal series of Locative demonstratives are in essence expressive variants on the Distal set, although they differ in their actual phonetic values from the corresponding, also expressive forms in the Simplex set (§7.4.2.1).

Locative demonstratives may be used both pronominally and as demonstrative modifiers to a noun phrase, in both cases obligatorily realizing an oblique (usually Locative) noun phrase; locative demonstratives can *never* realize core argument noun phrases, whatever the semantic value of the noun phrase head. Although it is clear that Locative demonstratives overlap both functionally and, to a degree, structurally with the Locative postposition *lo*, that they maintain a basically demonstrative rather than postpositional value is established by their ability to “bracket” a noun phrase (244) – a cardinal syntactic feature of demonstratives and an impossibility for all postpositions in Galo (§6.1.2.2.4).

(244) *ál nám aló ɲó aakáa rɔ́.*

[**aló** námó **aló**]_{NP} ɲó áa-káa-rɔ́
DST.LOC.SLEV house DST.LOC.SLEV 1.SG come-TENT-IRR
‘I’ll go check **that** house **over there**.’ (IR/MN, B5:90)

7.4.5.2. Basic functions

The basic function of a Locative demonstrative is to indicate the spatial orientation of a Locative noun phrase with respect to a shifting deictic centre, following

the principles of proximate and distal location set out in §7.4.1.1 and §7.4.1.4, as well as the principles of locative noun phrase relational marking discussed in §14.3.5 (245).

(245) *əgə...məənəmá...cainá arâ tòl eepi.*

əgə mǎə-nam = əə caina aràa **tòlò** ee = nii
ANAP.EPIS think-NZR:RLS=TOP China(<Eng)inside **DST.LOC.UP** COP.PF=DEDC
‘So..if you think about it...it must have been **up in** China.’ (TB, OAM 125)

7.4.5.3. Extended functions

Alone among Locative demonstratives, Addressee-proximate form *ogò* has developed *temporal* functionality, with a secondary extension into *discourse-endophoric* use.

As a marker of temporal noun phrases, *ogò* generally marks *realis* temporal referents; in (246), marking in *ogò* enables interpretation of the noun *korùm* ‘ancients; ancestors’ (< PG **kò*- ‘old’ + **rúm*- ‘family’) as a noun phrase with the sense ‘the (past) time of the ancestors; ancient times’.

(246) *korùm ogò...accá apigò kaatói.*

korùm **ogò** ací = əə apì = go káa-tó = (ə)î
ancients **TMP.RLS** elder.brother=TOP two=IND have/exist-PFV=ETAG
‘**In** ancient times...there were two brothers, see.’ (LN, TG 006)

In a semantically unusual use, *ogò* in *temporal function only* can mark a final predicate in a non-perfective aspect, with the basic Realis value ‘time when [PRED]’; note in (247) that marking in *ogò* casts a Realis *temporal* frame, even as the *event itself* is cast as Irrealis (not-yet-realized).¹⁶² Note also that the basic demonstrative character of *ogò* in bracketing its head is retained in this function, despite the non-prototypicality of an inflected predicate in noun phrase head position.

¹⁶² That is to say: the time referred-to is that at which an event was just about to happen; the time occurred, but the event did not.

- (247) *gogdûuku dadà. ôg gogró ogò...pûpugo dablênto.*
 gók-dùu-kú dada [ogò gók-rá ogò]_{OBL} pupè=go dâp-lèn-tó
 call-IPFV-CMPL RCUR TMP call-IRR TMP owl=IND cruise-OUT-PFV
 ‘Just as he was to finish calling, an owl flew out.’ (TR, FS 047)

Bracketing uses of *ogò* as in (247) have a different functional value from postposed-only uses as in (246). While postposed-only uses of *ogò* require no discourse antecedent (as in (246), which occurs as the first line of a narrative), in a bracketed use of *ogò* the initial mention is interpreted to refer anaphorically to the time of an antecedent event in the discourse. This sense is also reflected in the “standalone” use in (248), a use which naturally gives rise to a temporal transitional sense akin to English *then; next; after that*, as in (249).

- (248) *əmnəmə, ôgcin bì domaató.*
 əm-nam=əə ogò=cìn bì dó-máa-tó
 tell-NZR:RLS=TOP TMP.RLS=ADD 3.SG eat-NEG-PFV
 ‘That having been said, then again she didn’t (agree to) eat.’ (LN, TG 027)

- (249) *tatíkó dookú mâ; kegé kunnà*
 tatík=əə dóo-kú-máa=̀ kéK-ée-kú-nà=əə
 frog=TOP LOC.ANIM.PERM-CMPL-NEG=FI flee-AWAY-CMPL-NZR:SUB=COP.IPFV
ɲì. ogò, ikí əəlà omê əgè, aɲɲè madûuku.
 ɲii ogò ikii əə=làa omèe əgè aɲi=əə má-dùu-kú
 DEDC TMP.RLS dog TOP=NCNJ boy ANAP.IND two=TOP search.for-IPFV-CMPL
 ‘The frog was not there anymore; it seems he had run away. Then, the dog and the boy, they two went to search (for him).’ (MN, FS 007)

7.4.6. Ablative demonstratives

7.4.6.1. Structure

Ablative demonstratives encode Proximate and Distal deixis (including Hyperdistal and Megadistal) (Table 7.15).

| PRX | | DST | | | HDST | | | MDST | | |
|-------------|------------|---------------|----------------|----------------|---------------|----------------|----------------|---------------|----------------|----------------|
| SPRX | APRX | SLEV | UP | DN | SLEV | UP | DN | SLEV | UP | DN |
| <i>hokə</i> | <i>okə</i> | <i>a(ɔ)kə</i> | <i>to(ɔ)kə</i> | <i>bo(ɔ)kə</i> | <i>allôkə</i> | <i>tollôkə</i> | <i>bollôkə</i> | <i>allûkə</i> | <i>tollûkə</i> | <i>bollûkə</i> |

Table 7.16 – Ablative demonstratives

Compositionally, it appears that Ablative demonstratives are historically derived from Locative demonstratives (§7.4.5), with the post-vowel-harmony initial formative in *-o-* possibly reanalysed as a Locative formative.¹⁶³ Although the Distal set optionally carries a medial *lo* formative, suggesting compositionality in e.g. *bolò-kə* ‘DST.LOC.DN-GEN/ABL’, that this is (synchronically, at least) not a viable overall analysis is shown both by the more frequent tendency for the Distal set to occur *without* the medial formative (as e.g. *bokə*) and by the ungrammaticality of Proximate **hogokə/*holokə* and **ogokə/*olokə*. It may be possible to analyse the Distal set *only* as compositional, while treating the other forms as simplex, although there would seem to be no semantic consequences one way or the other.¹⁶⁴

Ablative demonstratives are used both pronominally and as demonstrative modifiers to a noun phrase, always realizing an oblique (non-core-argument) noun phrase.

7.4.6.2. Basic functions

The basic function of an Ablative demonstrative is to mark the *spatial orientation* of an Ablative noun phrase referent (usually, a source location) with respect to a shifting deictic centre, as described in §7.4.1.1-7.4.1.3 and §14.3.6.

(250) *hòk íntə booló, parə pə; ák íntə booló,*

hokə ín-tà-boolo pá-rə pə **akə** ín-tà-boolo
 SPRX.ABL go-INCP-COND chop-IRR UCRT DST.SLEV.ABL go-INCP-COND
parə pə paadamə.

pá-rə pə paadám = əə
 chop-IRR UCRT Paadam.tribe=TOP

‘‘If we go by this way, they may get us; if we go by that way, they may get us, the Paadam.’’ (TB, OAM 256)

Proximate ablative demonstratives also have *temporal* and *discourse-endophoric* functionality, usually marking a proximal (*hokə*) or anaphorically referred-to (*okə*) *point from which* a following event is construed to temporally, thematically, or in some cases

¹⁶³ For a similar case of seeming post-sound-change reanalysis of a formative value, consider the composition of the Dual pronoun set (§7.1.3).

¹⁶⁴ It is also conceivable that the forms in medial *lo* represent influence from neighboring Eastern Tani languages such as Minyong, Paadam and Mising, in which the forms corresponding to Galo *tokə, bokə*...are generally of the form *tolokə, bolokə*...

causally proceed. The latter type of expression accounts for by far the largest number of Ablative demonstrative mentions in my corpus, occurring in fixed and semi-conventionalized expressions such as *oké taajòo lo* ‘ANAP.ABL top LOC’ ‘on top of (in addition to) that’ (cf. §7.4.4.3, ex. (241)) (251).

(251) *âʔ kooríḡ âo əəkú, ɲûnu rínâ-ribà.*

atò koorí = gə àò əə = kú ɲunù rínáa ribáa
grandfather NAME=GEN child COP.IPFV=CMPL 1.PL Rína.clan Ríba.clan

ókʰ mîlên dookú naanà.

ókʰ mîl-lèn-dó(o)-kú-nà = əə = na

ANAP.ABL multiply-OUT-STAT-CMPL-NZR:SUB=COP.IPFV=DECL

‘Grandfather Koori’s son’s now were our (progenitors) Rina and Riba.

(Our lineage/clan/population) has come down **from that point.**’ (TB, OAM 327-328)

7.4.6.3. Extended functions

Deriving closely from the anaphorically-referring ablative functionality discussed in §7.4.6.2, Addressee-proximate ablative demonstrative *oké* has fused with Topic marker *əə* and developed into an *additive sentence/phrase conjunction* with the basic form *okkəə* (also realized *oké ~ ók ~ ʰkə*) and the basic semantic value ‘and so; and also; and in addition to that’. The following passage illustrates the functional contrast between *oké* in ablative function and *okkəə* functioning as a conjunction (252).

(252) *oké...omeə...ók bîkə...gacâako, əttám*

okkəə omèe = əə **ók** bîi-kə gá-càa-kò əttám
SCNJ kid=TOP ANAP.ABL 3.SG-GENscale-ASCEND-NZR:LOC cliff.sloping

okkəəkú, olô kakú, boló nəmî...alûm

ók = əə = kú ò-lòo-káa-kú bolò nəmî alûm
ANAP.ABL=TOP=CMPL fall-DESCEND-PF-CMPL DST.LOC.DN grass cluster

bolò, ók ikî əəcín ók omîŋ gəkà.

bolò **okkəə** ikîi əə = cin **ók** ò-mín-gá-káa

DST.LOC.DN SCNJ dog TOP=ADD ANAP.ABL fall-JOIN-COMT-PF

‘**So then**, the boy...**from** the place where he had climbed up, fell down, down amidst the grass down there, **and** the dog also fell **from** there with him.’ (TR, FS 061-062)

7.5. Pro-adverbials

7.5.1.1. Structure

The forms discussed in this section have the internal structural characteristics of demonstratives (§7.4), in that they express the same set of Proximate and Distal deictic distinctions and are almost certainly based upon the same set of initial formatives (Table 7.17).

| PRX | | DST | | | HDST | | | MDST | | |
|--------------|-------------|-------------|--------------|--------------|--------------|--------------|--------------|---------------|---------------|---------------|
| SPRX | APRX | SLEV | UP | DN | SLEV | UP | DN | SLEV | UP | DN |
| <i>həmbə</i> | <i>əmbə</i> | <i>ambə</i> | <i>təmbə</i> | <i>bəmbə</i> | <i>aəmbə</i> | <i>təmbə</i> | <i>bəmbə</i> | <i>aɦimbə</i> | <i>tɦimbə</i> | <i>bɦimbə</i> |

Table 7.17 – Pro-adverbials

However, although they share demonstrative structural characteristics, the syntactic status and behaviour of pro-adverbials differs markedly from that of demonstratives; while demonstratives mark and, more distinctively, “bracket” a noun phrase, pro-adverbials are not immediate modifiers of any constituent, but rather depend upon – and may be structurally discontinuous from, and do not ever “bracket” – the predicate head of a clause (253).

- (253) *ɲún həmbə, ɲizíə zɦlêəl, ɲikəmó*
 ɲunù **həmbə** ɲizí = əə zɦ-lêə-là(a) ɲikám = əə
 1.PL **SPRX.PADV** old.man=TOP become.old.man-GRAD-NF old.woman=TOP
kamlêə duukù.
 kám-lêə-dùu-kú
 become.old.woman-GRAD-IPFV-CMPL
 ‘**In this way**, our men and women are gradually growing old.’ (NyR, MDS 054)

The compositionality/etymology of pro-adverbials is not fully understood. Although initial formatives are clearly relatable to Simplex demonstratives (§7.4.2), and the final formative is in each case clearly relatable to Adverbializing/Dative enclitic *bə* (§14.3.3, §16.5), the provenance of the *-əm-* medial component is unknown.¹⁶⁵

Pro-adverbials have an interrogative pronominal counterpart *joombə* (§7.3.6).

¹⁶⁵ It is conceivable that *-əm-* may be relatable to the verb root *əm-* ‘say; tell’ (§16.7). However, although such an etymology would be functionally plausible, it would seem dubious on structural grounds, since – at least in modern Galo – bare verb roots can never be adverbialized (§16.5.1). Another possibility is that it represents a reflex of Accusative marker *əəm*.

7.5.1.2. Basic functions

The basic function of a pro-adverbial is to express the *manner* of a predicate *in terms of* some manner or quality exhibited by a referent which is located by the pro-adverbial with respect to a shifting deictic center (roughly, *in this/that way; in the way of that thing up there*; etc.). The referent located by a pro-adverbial may be discourse-endophoric, as in (254), in which the anaphoric referent is in fact a core argument of the predicate modified by pro-adverbial *bəmbə*. Or, it may be situated with respect to the speech situation, as in (255), in which the referent of the Speaker-proximate pro-adverbial *həmbə* is the speaker's own physical actions at the time of speaking.

(254) *astralijá bəmbə kairém, bupphē minərəlém paarūu rə!*

astralijá **bəmbə** kaí-rəm bupphē minərəl = əəm pàa-rūu-rə
PLACE DST.DN.PADV big-CIRR all mineral(<Eng)=ACC get-DEF-IRR
'If Australia **down there** is **so** big, certainly you'll find all manner of mineral!'
(IR, C1:25)

(255) *həmbə kaadúu boolò...taləə tók*

həmbə káa-dúu-boolo taləə tokə
SPRX.PADV look-UP/NORTH-COND sky DST.ABL.UP
pətaə...oməm loodù.
pətaə = TOP ò-məm-lòo-dùu
bird=TOP fall-CASUALLY-DESCEND-IPFV
'When he would look up **like this** <*speaker looks upward at the ceiling*>...birds
would just fall out of the sky.' (TB, OAM 032)

7.5.1.3. Extended functions

The most commonly-occurring pro-adverbial of all is certainly *əmbə*, whose capacity for anaphoric reference ('in that way; in the manner of the thing/situation just mentioned') lends it extended value in the context of episodic continuity in discourse – most often, in combination with a semantically light verb *rə* 'do', in an intransitive sense 'happen'. Sometimes, the implication is causal; other times, it is simply transitional, similar to English (*so*) *anyway* (256).

(256) “*pâtə rənnà*,” əmdûu kú.

pá-tà-ró-nà = əə óm-dùu-kú
chop-INCP-IRR-NZR:SUB=COP.IPFV tell-IPFV-CMPL
əə rəə... “ǵūnu keddēek kaamá.”
əmbè rì-nam = əə ɲunù kéK-dée-kò káa-máa
ANAP.PADV happen-NZR:RLS=TOP 1.PL flee-PROS-NZR:LOC/OBL have/exist-NEG
“‘They’ll kill us,” he said. **So then,** (he told the other guy)...”we’ve nowhere to run.”“ (TB, OAM 281-282)

In most cases, there is little difficulty in continuing to treat such forms as morphosyntactically compositional, however there are some indications that grammaticalization as unitary grammaticalized discourse-connectives (or, possibly, clause-linkers) may be taking hold. Phrases like *əmbə rɪnamə* are often heavily reduced, as in (256), and at least some of my consultants have reported an impression that *əmbə rɪnamə* in episodic-linking function is obligatorily spoken “without tone” (i.e., in absence of any lexically-projected tonal contour; cf. §4.1.4.2). At the same time, it is clear that a form like *əmbə rɪnamə* remains *potentially* compositional, since forms such as *əmbə rɪ-kú-nam = əə* ‘ANAP.PADV happen-CMPL-NZR:RLS=TOP’ – in which a Completive suffix *-kú* is inserted into the predicate stem – are also attested. Future research may well be brought to bear on this issue.

Finally, in a structurally very unusual usage, *əmbə* appears to have developed functionality as an anaphoric *manner adverbializing suffix* to a predicate root (257) (cf. also §7.4.1.2, ex. (217)).

(257) *hoɲɲô cìn kanôorəm pərsîn kogəmbə*

hojò = əə cìn kanòo-rá = əəm p̩sìn kók-əmbə
 leopard=TOP ADD hungry-IRR=ACC.TSUBred.jungle.fowl crow-AVZR.ANAP
kogdù. homén əəcìn kanòorəm taakú
 kók-dùu homén əə = cìn kanòo-rá = əəm taakúu
 crow-IPFV tiger TOP=ADD hungry-IRR=ACC.TSUBbird.variety
mènəmbə mēndù.
 mèn-əmbə mèn-dùu
 speak-IPFV speak-AVZR.ANAP
 ‘If a wildcat is hungry, he’ll crow **like** a hen. If a tiger is hungry, he’ll speak **like** a dove.’ (Galo proverb of the Wolf in Sheep’s Clothing, MN, B2:107)

8. Post-head modifying nominals: Relator nouns, numerals, classifiers and qualifying nouns

This chapter discusses a set of terms which are in essence types of nominal, or which are historically derived from nominals, but which have a functional rather than purely semantic value as postposed modifiers of a lexical head noun. §8.1 discusses relator nouns. In §8.2, we discuss enumerators, including numerals, classifiers, and classifier expressions. §8.3 discusses qualifying nouns.

8.1. Relator nouns

8.1.1. Theoretical-typological preliminary

Relator nouns must first be distinguished from *relational nouns*. “Relational noun” is the traditional label for any noun which does not denote a type of *entity* – but rather denotes a type of *relation between* entities. Examples of relational nouns in this sense include terms like *brother*, *partner*, and so on (de Bruin and Scha 1988). The term “relational noun” is sometimes *extended* to include nouns which may *either* denote a (usually spatial) relationship between one entity and another *or* some location on or aspect of a given entity; for example, *front* in *the book is in **front** of the table* (relational meaning) or *the **front** of the car* (locational meaning); this extended usage of the term “relational noun” is particularly common in the Mesoamerican linguistic area (Grinevald 2006 and references therein).

“Relator noun”, in the sense developed primarily with reference to Asian language grammars by Starosta (1985) and DeLancey (1997), among others, refers to a *functional subclass of noun* (or a class of function words which are historically derived from nouns, and which continue to resemble nouns in significant respects) which stand in a modifying syntactic relation to a distinct, lexical head noun. Most often, relator nouns encode spatial or locational concepts, but they may also denote types of temporal or conceptual relations (which may or may not be relatable to spatial concepts). In practice, then, there is a degree of overlap between what are described as “relational nouns” for some languages (i.e., in the “extended” sense described above) and “relator nouns” for Asian languages. In principle, however, the term “relator noun” is designed to describe a functional category which is neither reducible to lexical nounhood (for which the label “relational noun” would be appropriate) nor to adposition-hood (in which case the label “noun”

would no longer be appropriate). This is the sense in which the term “relator noun” is used here.

For several Tibeto-Burman languages, it has been possible to identify stages in the development of relational (lexical) nouns into relator (functional) nouns, either within a given language, across different stages of a language’s history, or among related languages of a given branch. The development has been argued in terms of presence or absence of relational marking (usually, genitive marking) on the semantic head noun, as in Classical Tibetan *khyim-gyi nang-du* ‘house-GEN inside-LOC’ ‘inside the house’ versus Modern Lhasa Tibetan *zim = chung(*-gi) nang-la* ‘in the bedroom’ (DeLancey 1997:59). This development may be schematized as in Figure 8.1.

$$[[N\text{-GEN}]_{\text{MOD}} [N]_{\text{HEAD}}]_{\text{NP}} \rightarrow [[N]_{\text{HEAD}} [RN]_{\text{MOD}}]_{\text{NP}}$$

Figure 8.1 – Development of post-head relator nouns from genitive-head constructions

As DeLancey (1997) shows, such a schematization necessarily oversimplifies the matter; genitive-marking is often optional at what we may presume to be intermediate stages of the process. The extent of grammaticalization of a relator noun must accordingly be viewed in terms of a gradient cline.

8.1.2. Overview of relator noun forms and functions

Table 8.1 lists the relator nouns attested in Galo to date. The terms themselves are listed in the second column. The third column gives a lexical sense, which is the sense of the term when it functions as an NP head. The fourth column gives a functional value, which is the sense of the term when it modifies a separate lexical head. The first column gives a semantic subclassification of relator nouns; as shown, the overwhelming majority are spatial in nature; only one relator noun *kookʰi* ‘back’ has both spatial (‘back/end (of)’) and temporal (‘after’) uses, and only one relator noun handles abstract (non-spatio-temporal) concepts.

| Type | Term | As N | As RN |
|----------|---------------|----------------------------|-------------------------|
| Spatial | <i>aràa</i> | ‘interior’ | ‘in(side)’ |
| | <i>agùm</i> | ‘exterior’ | ‘out(side)’ |
| | <i>taajòo</i> | ‘top’ | ‘top’ |
| | <i>compík</i> | ‘space underneath’ | ‘under(neath)’ |
| | <i>tuudúm</i> | ‘space toward top’ | ‘upside’ ¹⁶⁶ |
| | <i>tuukòo</i> | ‘space toward bottom’ | ‘downside’ |
| | <i>aagóo</i> | ‘setting sun’ | ‘to west’ |
| | <i>caagòo</i> | ‘rising sun’ | ‘to east’ |
| | <i>aabóo</i> | ‘front’ | ‘front’ |
| | <i>kookîi</i> | ‘back; end’ ¹⁶⁷ | ‘back; end’ |
| Temporal | | | ‘after’ |
| Abstract | <i>lågàa</i> | ‘reason; purpose; benefit’ | ‘for; (in order) to’ |

Table 8.1 – Relator nouns with lexical and functional values

Examples (258)-(261) illustrate the lexical and functional values of *kookîi* ‘back; end; after’ (258)-(259) and *taajòo* ‘(space at) top’ (260)-(261); note that the syntactic status and marking of the resulting noun phrases are identical, whether the relator noun stands as head or postposed modifier of a distinct head.

(258) *ɲîŋó gə kookîi lò*

[[ɲîŋ-ŋó = gə]_{GENP} [kookîi]_{N = lo}]_{NP}

CLF:YEAR-five=GEN **back** =LOC

‘at **the end** of five years’ (lit., ‘at five years’ **end**) (KZ, 9:115)

(259) *ɲîŋó kookîi lò*

[[ɲîŋ-ŋó]_N [kookîi]_{RN = lo}]_{NP}

CLF:YEAR-five **back**=LOC

‘**after** five years’ (KZ, 9:117)

¹⁶⁶ The intended sense is not easily translated, and refers to a position upward of the vertical middle of an entity, but not necessarily at the vertical extremity or ‘top’.

¹⁶⁷ *kookîi* cannot be used to denote ‘dorsum’, or the anatomical ‘back’ of a human or animal body, for which the separate term *naŋkó* exists. Interestingly, the two terms are not straightforwardly related, despite the occurrence of a common [ko] sequence (and the seemingly obvious semantic correspondence): the first reflects PG *kòo- ‘back; base; below’, the second reflects PG *kú-, with an uncertain semantic value.

(260) *namǵ taajôo lò*

[[namǵ = gə]_{GENP} [taajðo]_{N = lo}]_{NP}

house=GEN **top**=LOC

‘on **the top** of the house (somewhere along the apex of the roof)’ (lit., ‘at the house’s top’)

(261) *nám taajôo lò*

[[namǵ]_N [taajðo]_{RN = lo}]_{NP}

house **top**=LOC

‘on **top of** the house (anywhere on the roof)’

8.1.3. Lexical uses of relator nouns

As noted in §8.1, when a relator noun functions lexically as in (258) and (260), its denotational value is linked or related to some other entity. This “other entity” is encoded by the genitive phrase heads in (258) and (260), and the relation is signalled by the genitive marker *gə*. However, although their denotations are related, the *referential values* of the two terms are distinct. This may be difficult to see in cases such as (258) and (260), in which the terms are partially coreferential, but is perhaps clearer in an example like (262). In this example, *kookʔi* ‘back’ refers to a space *behind* a wheel-shaped piece of bamboo. *kookʔi* is thus coreferential with the preceding NP-head *peeləə* ‘side’, and is not at all coreferential with the modifying genitive phrase head *pəgóo* ‘wheel’.

(262) *ma, nêək..peelə. pəgóo gə kookʔi*

máa [[nêə-kə]_{GENP} [peeləə]_N]_{NP} [[pəgóo = gə]_{GENP} [kookʔi]_N]_{NP}

NEG 2.REFL-GEN side wheel=GEN **back**

‘No, [put it toward] your...side. (**The area**) **behind** the circle.’ (IR/IRW, MPO 073)

The difference between a construction in which a lexically-functioning relator noun is partially coreferential to a related term and one in which it isn’t seems largely to do with the semantics of the related term. For example, if a related entity is construed as having a ‘back’ or ‘end’, then this position *on* or *within* the entity will stand as the reference of *kookʔi*. If an entity (such as a wheel, as in (5)) is *not* construed as having a ‘back’ or ‘end’, then the sense of *kookʔi* will be ‘space/area behind’. In the first case, the two terms are partially coreferential. In the second case, they are not.

8.1.4. Functional uses of relator nouns

When genitive marking is absent, a relator noun such as *kookɛ̃* ‘back’ cannot be interpreted as having a referential value which is distinct from a related noun; in fact, it has no referential value at all, but instead stands as a postposed *modifier* of a distinct NP head.¹⁶⁸ In (263), *kookɛ̃* ‘back’ establishes a relation of succession among two nominals in a list. In (264), *taajòò* ‘top’ and *aràa* ‘inside’ encode positional information on three locative NPs.

(263) “*nêi*” *kookɛ̃* *bé*, *jôowə* *aarə* *kú* *dí*?

[*nə̃i*]_N [*kookɛ̃*]_{RN} = *bé*]_{NP} *jòo* = *əə* *áa-rə*-*kú* *dí*
 brother’s.last.wife **back**=DAT what=TOP come-IRR-CMPL WOND
 ‘I wonder what would come **after** *nei* (in the sequence of terms for the wives of one’s brothers)?’ (KZ, OL9:19)

(264) *ók* *taajòò* *lò...əə*, *amé-taalí* *arâa* *lò...*

[*okə̃*]_N [*taajòò*]_{RN} = *lo*]_{NP} *əə* [*amée-taalí*]_N [*arâa*]_{RN} = *lo*]_{NP}
 ANAP.ABL **top**=LOC AFF brass.platter.bridal-plate(<Ind) **inside**=LOC
acín əmnè...jaapám-aciném *dodə* *kubə*,
acín əəm = *nè* *jaapám-acín* = *əəm* *dó-dó(o)-kú* = *bə*
 cooked.rice ACC=NAGT bridal.rice-cooked.rice=ACC eat-STAT-CMPL=SBRD
əmlà ilɛ̃ kajɛ̃na taajòolo...
əm-là(a) [*ilɛ̃*]_N [*kajɛ̃-nà*]_{RELC} [*taajòò*]_{RN} = *lo*]_{NP}
 say-NF stone huge-NZR:SUB **top**=LOC
 ‘(They decided) in the end to eat the bridal rice **in** a brass platter **on top** of it, on **top** of the big rock.’ (LN, TG 030)

Although it is clear that the functional content of relator nouns in examples like (263)-(264) is relatable to their erstwhile lexical semantics, it is also clear that when postposed to a lexical head noun a relator noun does not itself function as a lexical head. Consider the scope of the relative clause in (264). As discussed in §15.3.1.3, a headed Galo relative clause may occur either pre-head (= externally-headed) or post-head (= internally-headed), with little if any functional difference. Thus, either *ilɛ̃* ‘stone’ or *taajòò* ‘top’ could be modified by a postposed or preposed *kajɛ̃i-nà*, respectively.

¹⁶⁸ It is common in the literature to refer to relator nouns with postposed modifying functions as *postpositions*. This would seem to be in essence a responsible use of the term, which might be defined as “a postposed modifier with a relational function”. However, the term “postposition” is used in a more restricted sense in this grammar, to indicate a closed set of highly grammaticalized NP operators which are both positionally and etymologically quite distinct from relator nouns (see §6.1.2.1 and §6.1.2.2.8).

However, we can see from the semantic interpretation of (264) that *kajî-nà* has leftward scope *only*, which is to say that it has scope over the head of the phrase, and not over the relator noun. Contrast (264) with (265) which is an elicited sentence on the same model.

(265) *ilîgə kajîna taajôolo*

[[ilî = gə]_{GENP} [kajî-nà]_{RELC} [taajôo]_{N = lo}]_{NP}
 stone=GEN huge-NZR:SUB **top**=LOC
 ‘on the huge **top** of the stone [assumes several ‘tops’ of varying size]’

In (265), the erstwhile lexical head *ilî* ‘stone’ is now marked as a modifier of *taajôo*, which therefore stands as the head of the phrase; *kajî-nà* thus has *rightward* scope over the phrasal head.

For discussion of relator noun *logàa* in the context of clause-linking, see §16.3.1.5.

8.2. Enumerators: numerals and classifiers

Numerals and classifiers are closely interrelated in Galo, and could be said to together constitute a superordinate category “enumerator”. They are each in essence subtypes of noun with similar structures, are both functionally linked to the individuation and multiplication of referents, and, when occurring together within a single NP, tend to form a tight, compound-like grammatical and phonological unit. Furthermore, they are among the very few classes of morpheme in Galo with fully functional free (word) and bound (root) forms (cf. §2.3), the latter of which may be productively combined to form one-word Classifier expressions (§8.2.2.4), which function to simultaneously classify and enumerate individuals.

In the following subsections, numerals are first discussed in §8.2.1, followed by a discussion of classifiers in §8.2.2. §8.2.2.4 discusses formation and use of classifier expressions.

8.2.1. Numerals

Numerals are basically a subclass of noun in Galo (see also §5.2.2.11). On the basis of both structural and distributional criteria, terms ‘one’ through ‘six’ and ‘ten’ can be identified as *core numerals*, with numerals ‘seven’ through ‘nine’ viewed as

peripheral numerals. Together these form the set of *basic numerals*. The remainder are *derived numerals* (Figure 8.2).¹⁶⁹

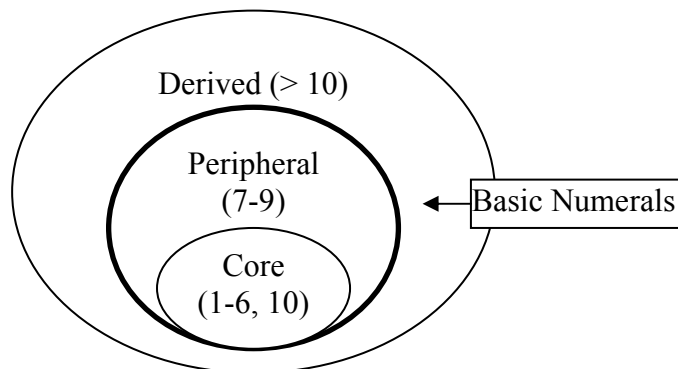


Figure 8.2 – Schematization of numeral subclasses

Core numerals ‘one’ through ‘six’, and ‘ten’ are structurally alike in having *a*-prefixed free forms, signaling their status as “basic” nouns (§5.3.1.1.1), as well as bound (root) forms which are compounded to classifier roots to form enumerative classifier expressions (§8.2.2.4) (Table 8.2).

| Gloss | Free | Root | Etymology |
|---------|----------------------------|-------------|-----------------------------|
| ‘one’ | <i>akèn</i> | <i>kèn-</i> | * <i>a-</i> + * <i>kon</i> |
| ‘two’ | <i>ajì</i> | <i>jì-</i> | * <i>a-</i> + * <i>ji</i> |
| ‘three’ | <i>aúm</i> | <i>úm-</i> | * <i>a-</i> + * <i>hum</i> |
| ‘four’ | <i>appíi</i> | <i>píi-</i> | * <i>a-</i> + * <i>pri</i> |
| ‘five’ | <i>aṇṇó</i> | <i>ṇó-</i> | * <i>a-</i> + * <i>ṇo</i> |
| ‘six’ | <i>akkó</i> | <i>kó-</i> | * <i>a-</i> + * <i>krə</i> |
| ‘ten’ | <i>irġġ</i> ¹⁷⁰ | <i>rġġ-</i> | * <i>a-</i> + * <i>rjġġ</i> |

Table 8.2 – Core numerals ‘one’ through ‘six’ and ‘ten’¹⁷¹

Peripheral numerals ‘seven’ through ‘nine’ seem to reflect historically complex forms, although their constituencies and proto-forms are in two cases difficult to reconstruct, and may represent pre-Proto Tani compositions (Table 8.3; see Sun (1993:186, 213) for related discussion).¹⁷²

¹⁶⁹ Note that I use the terms “core”, “peripheral” and “basic” in a Galo-internal sense here, without regard to the more general senses in which terms like “peripheral numeral” are sometimes used. Description of the Galo numeral system in broader typological terms remains a topic for further study.

¹⁷⁰ The **a-* prefix in ‘ten’ has undergone irregular root nuclear harmony; see §2.4.3.1.

¹⁷¹ Note that ‘four’, ‘five’ and ‘six’ exhibit Irregular medial gemination; see §2.4.4.8.2.

¹⁷² In addition to this basic set, some consultants have offered a form *azàr* ‘thousand’, which probably reflects reanalysis of Assamese *hezar* ‘thousand’ as a complex term *he-* + *zàr-*, followed by prefixation in *a-*. Whether this is so or not, the form is not remembered by most speakers, and has not yet been attested in natural speech, in which English and Hindi higher numerals overwhelmingly predominate.

| Gloss | Term | Etymology |
|---------|---------------|---|
| ‘seven’ | <i>kanə</i> | * <i>kV-nit</i> ² |
| ‘eight’ | <i>piinə</i> | * <i>pri</i> ‘four’ + * <i>ji</i> ‘two’ |
| ‘nine’ | <i>keŋŋàa</i> | * <i>kV-(n)aŋ</i> |

Table 8.3 – Peripheral numerals

Derived numerals which are multiples of ten, ‘twenty’ through ‘sixty’ and ‘one hundred’ are formed as enumerative classifier expressions, in which the initial formative is the Quantitative mensural classifier *cám-* ‘CLF:TENS’ (§8.2.2.3) and the final formative is one of the numeral roots ‘one’ through ‘six’ or ‘ten’ (Table 8.4). Multiples of ten ‘seventy’ through ‘ninety’ are formed as two-term compounds, in which the first term is the free form of ‘CLF:TENS’ classifier *acám* and the second term is the numeral (Table 8.5).

| Gloss | Term | Composition |
|-----------|---------------|---|
| ‘twenty’ | <i>camŋi</i> | <i>cám-</i> ‘CLF:TENS’ + <i>ŋi-</i> ‘two’ |
| ‘thirty’ | <i>camúm</i> | <i>cám-</i> ‘CLF:TENS’ + <i>úm-</i> ‘three’ |
| ‘forty’ | <i>campíi</i> | <i>cám-</i> ‘CLF:TENS’ + <i>píi-</i> ‘four’ |
| ‘fifty’ | <i>camŋó</i> | <i>cám-</i> ‘CLF:TENS’ + <i>ŋó-</i> ‘five’ |
| ‘sixty’ | <i>camkə</i> | <i>cám-</i> ‘CLF:TENS’ + <i>kə-</i> ‘six’ |
| ‘hundred’ | <i>camrɛ</i> | <i>cám-</i> ‘CLF:TENS’ + <i>rɛ-</i> ‘ten’ |

Table 8.4 – Multiples of ten ‘twenty’ through ‘sixty’ and ‘hundred’

| Gloss | Term | Composition |
|-----------|--------------------|---|
| ‘seventy’ | <i>acám kanə</i> | <i>acám</i> ‘CLF:TENS’ + <i>kanə</i> ‘seven’ |
| ‘eighty’ | <i>acám piinə</i> | <i>acám</i> ‘CLF:TENS’ + <i>piinə</i> ‘eight’ |
| ‘ninety’ | <i>acám keŋŋàa</i> | <i>acám</i> ‘CLF:TENS’ + <i>keŋŋàa</i> ‘nine’ |

Table 8.5 – Multiples of ten ‘seventy’ through ‘ninety’

Multiples of one hundred are similarly formed as two-term compounds, but with *camrɛ* ‘hundred’ standing as the initial term, and any of the numerals ‘one’ through ‘nine’ standing as the final, as *camrɛ aúm* ‘three hundred’ or *camrɛ kanə* ‘seven hundred.’

Derived numerals which are not multiples of ten or one hundred are formed via a coordinate construction [NUM1 NUMCNJ NUM2], in which the first numeral represents the base (tens or hundreds) and the second numeral represents the digit.¹⁷³ The numeral

¹⁷³ In essence, unmarked apposition in numerals represents *multiplication*, while coordination marked by *golaa* represents *addition*. No structures clearly representing subtraction or division have yet been attested.

conjunction *golaa* ‘NUMCNJ’ almost certainly reflects a fusion of the article *go* ‘IND’ with the nominal/NP-conjunction *laa* ‘NCNJ’, and to an extent their functional values are clearly retained by the composite term. However, since *golaa* may be used in cases where *go* may not – such as when the enumerated NP is also definite – it seems preferable to view *golaa* ‘NUMCNJ’ as a unitary form in terms of modern Galo grammar. In (266)-(267), note that use of *go* ‘IND’ together with Accusative marking in a definite O NP is ungrammatical (cf. §14.2.1.2).

(266) *ŋók hobîṇəm gamnə ikîi dorrîi golà*

ŋók-kə hobîṇ = əəm gàm-nà ikîi dór-rîi golaa
1.SG-GEN goat=ACC bite-NZR:SUB dog CLF:HIGH.ANIMAL-ten NUMCNJ
dorkênəm ŋó aptò.

dór-kèn = əəm ŋó àp-tó
CLF:HIGH.ANIMAL-one=ACC 1.SG shoot-PFV
‘I shot **the eleven dogs** that bit my goat.’ (MN, B2:6)

(267) **ŋók hobîṇəm gamnə ikîi dorrîi gom ~ goəm*

ŋók-kə hobîṇ = əəm gàm-nà ikîi dór-rîi go = əəm
1.SG-GEN goat=ACC bite-NZR:SUB dog CLF:HIGH.ANIMAL-ten IND=ACC
ŋó aptò.

ŋó àp-tó
1.SG shoot-PFV

(268)-(269) illustrate the use of a core numeral base *irîi* ‘ten’ plus a core and a peripheral digit respectively. (270)-(271) illustrate the use of a base-derived numeral with simple and base-derived digits respectively. Note also that the process of construction applies recursively (272).

(268) *irîi golàa akèn*

irîi golaa akèn
ten NUMCNJ one
BASE CNJ DIGIT
‘eleven’

(269) *íríí golàa kanò*

íríí golaa kanò
ten NUMCNJ seven
BASE CNJ **DIGIT**
‘seventeen’ (lit. ‘ten and seven’)

(270) *camúm golàa aúm*

cám-úm golaa aúm
CLF:TENS-three NUMCNJ three
‘thirty-three’ (lit. ‘thirty and three’)

(271) *camríí golàa camúm*

cám-ríí golaa cá-m-úm
CLF:TENS-ten NUMCNJ CLF:TENS-three
‘one hundred and thirty’

(272) *camríí golàa camúm golàa aúm*

cám-ríí golaa cá-m-úm golaa aúm
CLF:TENS-ten NUMCNJ CLF:TENS-three NUMCNJ three
‘one hundred and thirty-three’ (lit. ‘one hundred and thirty and three’)

For convenience of reference, an abbreviated summary chart is presented in Table 8.6.

| Level | Gloss | Term/phrase |
|----------------------------|-----------------------------|--|
| Core digits | ‘one’ | <i>akèn</i> |
| | ‘ten’ | <i>íríí</i> |
| Peripheral digits | ‘seven’ | <i>kanò</i> |
| | ‘eight’ | <i>piinò</i> |
| Core set numerals | ‘forty’ | <i>campíí</i> |
| | ‘sixty’ | <i>camkó</i> |
| Peripheral set numerals | ‘seventy’ | <i>acám kanò</i> |
| | ‘eighty’ | <i>acám piinò</i> |
| Numerals 11-19 | ‘fourteen’ | <i>íríí golaa appíí</i> |
| | ‘seventeen’ | <i>íríí golaa kanò</i> |
| Non-multiples of ten > 20 | ‘twenty-two’ | <i>campíí golaa apíí</i> |
| | ‘twenty-seven’ | <i>campíí golaa kanò</i> |
| | ‘eighty-nine’ | <i>acám piinò golaa kenjáa</i> |
| Multiples of 100 | ‘three hundred’ | <i>camríí aúm</i> |
| | ‘seven hundred’ | <i>camríí kanò</i> |
| Non-multiples of 100 > 100 | ‘one hundred fifteen’ | <i>camríí golaa íríí golaa aṇṇó</i> |
| | ‘three hundred sixty-seven’ | <i>camríí aúm golaa camkó golaa kanò</i> |

Table 8.6 – Abbreviated summary of numeral formations in Galo

8.2.1.1. Discussion on the use of classifiers in numeral formation in Galo

Although Quantity mensural classifier *acám/cám-* ‘CLF:TENS’ represents by far the most frequently-used and thus “unmarked” base, it is not the only one. Another Quantity mensural classifier which is sometimes used as a base in higher numeral formation is *hú-* ‘CLF:FOURS’, as in *hú-úm* ‘CLF:FOURS-three’ ‘twelve’, *ahú kanò* ‘CLF:FOURS seven’ ‘twenty-eight’ or even *hú-íríí golaa hú-píí* ‘CLF:FOURS-ten NUMCNJ CLF:FOURS-two’ ‘forty-eight’. *ahú/hú-* ‘CLF:FOURS’ probably cannot be described as fully equivalent to *acám/cám-* ‘CLF:TENS’ in numeral formations – in addition to the difference in relative frequency, *acám/cám-* ‘CLF:TENS’ is not redundant with any basic numerals, whereas *ahú/hú-* ‘CLF:FOURS’ is redundant with basic numerals *appíí* ‘four’ and *piinò* ‘eight’. However, its use is certainly fully productive.¹⁷⁴

¹⁷⁴ Other nearby Tibeto-Burman languages which seemingly include at least semi-productive “four” bases include Boro and Deuri (Mazaudon forthcoming 2008).

Numbers ‘four’ and ‘ten’ recur consistently in Galo, as do their multiples. For example, *atík* ‘bushel of leaves’ and *arò* ‘bundle of sticks’ prototypically denote standards of 40 items, which may again be subdivided into groups of *acám* or *ahú*. Quite late into my research, I was able to eventually determine that the underlying structure of the system relates to a traditional counting system of considerable complexity, called *kootír*. *kootír* (< *kóo*- ‘handle; wedge’ + *tír*- ‘break (VT)’) literally refers to a *counting stick*, which was traditionally used as a mnemonic when counting or tracking quantities, as when preparing large sets of materials such as bamboo poles and fan palm leaves for house construction. By manipulating the stick, operations of simple multiplication, addition and subtraction could also be performed, usually by assigning a particular base to the stick itself and making breaks at various points to represent base multiples and digits (subtraction is performed by then removing the corresponding stick sections). By convention, bases assigned to the stick were *four* and *ten*, and traditional measures for groupings of entities (into bushels and bundles) were standardized on the same lines.

Ultimately, however, it would appear that both the *kootír* counting system – nowadays, unfortunately quite obsolescent, having been sacrificed in favour of cheap and ubiquitous digital calculators – and the language of bases and digits derives from an even more basic, human hand-based counting system which, happily, remains in everyday use. The tens base quite obviously derives from the ten fingers of the hand, while the fours base seemingly derives from a Galo convention of counting the three knuckles of each finger, plus the fingertip. Thus, two full fingers gives ‘eight’ (cf. also the etymology for ‘eight’ in Table 8.3), three gives ‘twelve’, and a full two hands – including every knuckle and tip point – yields the numeral ‘forty’: the traditional standard for bushels and bundles.

It is perhaps interesting, given the relative complexity of the Galo counting system, that there seems to be no sign of a *vigesimal* past, particularly in view of the prevalence of vigesimal systems in Tibeto-Burman (Mazaudon forthcoming). As the database on Arunachali Tibeto-Burman counting systems grows, we may of course find signs of such systems, and also learn more about whether the Galo system finds cognate or areally shared systems in Tani and elsewhere. Unfortunately, however, the usual caveats must also be made: many if not most younger Galo, being educated and conducting business transactions in Indo-European languages such as Hindi and English, overwhelmingly prefer Indo-European higher numerals to the perhaps more difficult-to-process native forms, even when speaking among other Galo. In practice, then, use of native Galo numerals is effectively restricted to the basic numerals 1-10. A few concerned Galo have

made attempts to simplify the native Galo system to render it more accessible and practical in everyday use, but such efforts have as yet failed to bear fruit. Under the circumstances, it would be surprising indeed if the system as it is described here turns out to survive for more than one or two more generations.

8.2.2. Classifiers

Galo classifiers may be broadly divided into two types: *sortal* and *mensural*.¹⁷⁵ The distinction is primarily semantic, but has certain distributional correlates (such as the inability of certain mensural classifiers to form adjectival classifier expressions).

Sortal classifiers denote a semantic type, and are used to refer to individuals which exemplify that type (schematically, *one **animal** of pig*). *Mensural* classifiers denote an entity which is employed in, which is an abstract standard of, or which is the result of the grouping, division or measurement of some other entity or entities (*a **bunch** of roses*). Mensural classifiers may in turn be subdivided into three semantic subtypes: *quantitative*, *collective* and *divisive*. *Quantitative* mensural classifiers are used to denote numeric standards of measurement (*a **bushel** of wheat*). *Collective* mensural classifiers are used to denote groupings or measures of individuals in terms of some non-numeric standard (*a **swarm** of bees*). *Divisive* mensural classifiers are used to denote a substance or mass in terms of a division or partition thereof (*a **piece** of pie*) (Figure 8.3).

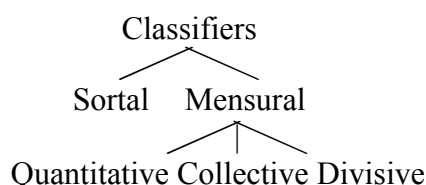


Figure 8.3 – Types of classifiers

8.2.2.1. Overview of classifier forms and functions

Almost all Galo classifiers have both *bound* and *free* forms. Bound forms are monosyllabic roots; free forms consist of the classifier root plus a prefix *a-* (Table 8.7).

¹⁷⁵ In the South-East Asian tradition, sortal classifiers are often called simply “classifiers”, while mensural classifiers are called “measure words”. Sortal and mensural classifiers have also been called “individuating” and “quantitative” classifiers respectively. For cross-linguistic descriptions of these types, see Lyons (1977: 463) and Aikhenvald (2000: 114).

| Sortal | | | Mensural | | |
|-------------|-------------|------------|-------------|-------------|------------|
| Bound | Free | Classifies | Bound | Free | Classifies |
| <i>dáa-</i> | <i>adáa</i> | sticks | <i>góp-</i> | <i>agóp</i> | handspans |
| <i>bór-</i> | <i>abór</i> | sheets | <i>zék-</i> | <i>azék</i> | slices |

Table 8.7 – Bound and free forms of some sortal and mensural classifiers

Bound forms of Galo classifiers enter productively into construction with numeral and monosyllabic adjectival roots to form enumerative and adjectival *classifier expressions* (273)-(274). Enumerative and adjectival classifier expressions are used to enumerate or quantify (273) or to adjectivally modify (274) head nominals respectively.

(273) *hiidâa daapi*

[[hiidâa]_{NOM} [dâa-jî]_{ENUM}]_{NP}
 stick CLF:STICK-two
 ‘two sticks’ (enumerative classifier expression)

(274) *hiidâa daapi*

[[hiidâa]_{NOM} [dâa-jî]_{RELC}]_{NP}
 stick CLF:STICK-small
 ‘small stick’ (adjectival classifier expression)

Free forms of classifiers are employed when no numeral root is available with which to form an enumerative classifier expression, as with peripheral basic (275) or derived numerals ‘twenty’ and above (276) (cf. §8.2.1).

(275) *hiidâa adâa kânə gò*

[[hiidâa]_{NOM} [adâa]_{CLF} [kânə]_{NUM} = go]_{NP}
 stick CLF:STICK seven=IND
 ‘seven sticks’

(276) *hiidâa adâa câm̃pi golà akên gò*

[[hiidâa]_{NOM} [adâa]_{CLF} [[câm-jî]_{ENUM} golaa [akên]_{ENUM} = go]_{NP}
 stick CLF:STICK CLF:TENS-two NUMCNJ one=IND
 ‘twenty-one sticks’

Free forms of sortal classifiers are also used to individuate indefinite referents (277). The sense of the resulting expression is very similar to the sense of an enumerative classifier expression with a value of ‘one’ (278). If there is a functional contrast between them, it would seem to be that free forms of classifiers are better suited to indefinite reference to individuals, while classifier expressions with a value of ‘one’ are better

suited to enumeration. However, the two types of expression may in most cases be used interchangeably, and no context has yet been discovered in which it is possible to use one type of expression but not the other.

(277) *hɪɪdâa adâa gó*

hɪɪdâa *adâa* = go

stick CLF:STICK=IND

‘a stick; a single stick’

(278) *hɪɪdâa daakên gò*

hɪɪdâa *dâa-kên* = go

stick CLF:STICK-one=IND

‘one stick’

Free classifiers and classifier expressions may follow an overt nominal NP head, as in (273)-(278), or they may be used alone, i.e. without an overt preceding NP head. Often, as in (279)-(280), a noun phrase containing a classifier or classifier expression but no nominal NP head refers anaphorically to a nominally-headed NP mentioned earlier in a discourse.

(279) *hɪɪdâa dâapigò/...kózzúu ogò...adâa gó jûm*

hɪɪdâa *dâa-jî* = go *kózzúu* = ogò *adâa* = go *jûm*

stick CLF:STICK-two=IND while.ago=ANAP.LOC CLF:STICK=IND DLMT

turtó.

túr-tó

support.from.below-PFV

‘Two sticks (were propped against the door)/...a minute ago, only one stick had been propped against (the door).’ (TR, FA 038)

(280) *aló golló...kobùu dorúm gó...*

alóo go = lo = ₁ kobùu dór-úm = go

day IND=LOC=NF11 rodent CLF:HIGH.ANIMAL-three=IND

immên tabè, oodôo bə immên tabè ín/... inlên tó. (...<8 lines>...)

ín-mên-tà = bə oodôo = bə ín-mên-tà = bə ín-lên-tó

walk-AS.PLAY-INCP=SBRD far=AVZR walk-AS.PLAY-INCP-SBRD go-OUT-PFV

əə, namə ló aalík doolà...dorumə...

əə namə = lo áa-lík-dó(o)-là(a) dór-úm = əə

AFF house=LOC come-APPL.INTO-STAT-NF CLF:HIGH.ANIMAL-three-TOP

əráb nè cín cǎbó là...

əráp = nè cǎ-nó cǎ-bó-là(a)

door=NAGT slap-MOVE.1 slap-MOVE.2-NF

‘One day, **three mice** went out to go for a walk...far away out to go for a walk...
<8 lines>. They came up to the house and **the three of them** knocked on the door
and...’ (TR, FA 002-009)

In the South-East Asian tradition, classifiers – particularly in “standalone” uses – are sometimes treated as the NP head, with nouns treated as inherently non-referential labels for concepts only (Hundius and Kölver 1983). This is not the view taken in this work. As shown in §8.2.2.2 (also cf. §14.2.1), it is perfectly possible in Galo to use nouns referentially in absence of a classifier; on the other hand, classifier referentiality can only be understood properly in terms of its association with a distinct nominal head (since classifier selection is semantically contingent). For these and other reasons, the view taken in this work is that “standalone” uses of classifiers represent instances of *headless* NPs; (281)-(282) illustrate this analysis for the relevant constructions in (279)-(280). For further examples and discussion in the broader context of noun phrase syntax, see §6.1.2.

(281) *hǎdâa dâapi gò (...) adâago nûm*

[[hǎdâa]_i]_{NOM} [dâa-nǎ]_{CLF} = go]_{NP} [[Ø]_i]_{NOM} [adâa]_{CLF} = go nûm]_{NP}

stick CLF:STICK-two=IND

CLF:STICK=IND DLMT

(282) *kobúu dorúm gó (...) durumə*

[[kobùu]_i]_{NOM} [dór-úm]_{CLF} = go]_{NP} [[Ø]_i]_{NOM} [dór-úm]_{CLF} = əə]_{NP}

rodent CLF:HIGH.ANIMAL-three=IND

CLF:HIGH.ANIMAL-three=TOP

Another analytical problem concerns the categorical status of *a*-prefixed classifier roots: are they basic classifiers, or are they in some sense actually nouns? The data are often mixed. For example, terms such *adâa* ‘CLF:STICK’ in (21) necessarily denote an individual, and cannot be used with the general sense ‘stick’. Furthermore, they depend

on an antecedent, coreferential nominal (in this case *hɪdàa* ‘stick’) to properly refer; thus, while it is possible to say ‘please give me a *hɪdàa*’, it is not possible to say ‘please give me an *adàa*’ – an *adàa* of what? Accordingly, such forms are more straightforwardly analysable as classifiers than as common nouns. However, other *a*-prefixed classifier roots function perfectly well as common nouns. For example, in (283), *arúm* ‘evening’ (with classifier root cognate *rúm*- ‘CLF:NIGHTS’, as in *rúm-nì* ‘two nights’) is used to denote a dimension of time, abstractly conceived; in this use it is best analysed as a *time noun* rather than a classifier (cf. §5.2.2.16.2).

(283) *arumóm aadólà, ɣunûk nammóm, əî?*

[**arúm**]_{NOM} = əəm]_{NP} áa-dó(o)-là(a) ɣunù-kə namó = əəm (ə)î
evening=ACC come-STAT-NF 1.PL-GEN house=ACC ATAG
mojâk zidùu tù
 mò-ják-zí-dùu = tu
 make-DESTROY.O-BEN-IPFV=FOC(<Asm)
 ‘(The elephant) comes at **night** and destroys our house.’ (RmR, CC 175)

Ultimately, it seems likely that *a*-prefixation of nominal roots may have historically been functionality aligned with individuation and/or classification (as is also discussed in §5.3.1.1.1), but that some but not all such forms later took on the more general status of common nouns. At the same time, it seems likely that use of nominal roots as classifiers may have originally been widespread, leaving much nominal root-classifier root homophony in place; for example, *arúm rúm-nì* ‘evening CLF:NIGHTS-two’ ‘two nights’.¹⁷⁶ However, there are limits to these associations in modern Galo; it is not possible to freely derive classifier roots from common nouns: **akèk kèk-nì* ‘kidney ?CLF:KIDNEY-two’ is unacceptable; instead, *pɛ-nì* ‘CLF:EGG-two’ is used.

Ultimately, it would appear that the more or less classifier-like or common noun-like status of the many *a*-prefixed forms in the Galo lexicon, as well as the ability for various nominal roots to stand as classifier roots, must be approached on a case-by-case basis, and

¹⁷⁶ Note here both the Galo-internal resemblance of such constructions to root-pivotal constructions (§5.3.1.4.2.2), and the more general resemblance to the “repeater constructions” commonly found in Mainland South-East Asian languages, as in Thai *khon sǎŋ khon* ‘person two CLF:PERSON’ ‘two people’ (Hundius and Kölver 1983; Post 2007).

listed as conventionalized features of the Galo lexicon (see also §2.3 for related discussion from a more general diachronic perspective).

8.2.2.2. Sortal classifiers

Sortal classifiers are used to denote an abstract semantic type *in terms of* an individual exemplar of that type; roughly, *ahóo* ‘(example of a) long thing’. In (284), *ahóo* ‘CLF:LONG/THIN’ classifies ‘cigarette’. In (285), *adór* ‘CLF:HIGH.ANIMAL’ classifies ‘dog’.

- (284) *sigarét ahóo gó*
sigaret **ahóo** = go
cigarette(<Eng) CLF:LONG/THIN=IND
‘a/one cigarette’

- (285) *ikîi adór gó*
ikîi **adór** = go
dog CLF:HIGH.ANIMAL=IND
‘a/one dog’

Unlike in many South-East Asian languages, Galo sortal classifiers are *not* required for definite or indefinite reference to individuals. For example, *ikîi = go* ‘dog=IND’ ‘a dog’ is perfectly possible, and has the same capacity for indefinite reference as the expression in (285) (cf. §14.2.1). The principle effect of sortal classifier use in indefinite reference is thus one of *heightening* or *profiling* the individuality of the referent. It is also possible to profile *different semantic features* of a referent by varying the choice of sortal classifier (286)-(287). It is even possible to change the overall denotation (288)-(289).¹⁷⁷

- (286) *hîinè adáa gó*
hîinè **adáa** = go
tree CLF:STICK=IND
‘a tree (**generic focus**)’ (TR, 6:133)

¹⁷⁷ These are of course cross-linguistically typical uses of sortal classifiers, as discussed in Aikhenvald (2000:320-334, and several references therein).

(287) *hĩnə apóo gó*
 hĩnə **apóo** = go
 tree CLF:TRUNK=IND
 ‘a tree (**trunk focus**)’ (TR, 6:133)

(288) *kopák apáa gó*
 kopák **apáa** = go
 banana CLF:BATON=IND
 ‘a banana **fruit**’ (MN, 19:136)

(289) *kopák arĩ gò*
 kopák **arĩ** = go
 banana CLF:STAFF=IND
 ‘a banana **tree**’ (MN, 19:136)

Sortal classifier use in simple indefinite or definite reference is thus optional in Galo, and is in essence semantically rather than grammatically controlled. However, when enumerating individuals sortal classifiers are in principle obligatory (290)-(291).

(290) *ikĩi adór kânə gò*
 ikĩi **adór** **kanə** = go
 dog CLF:HIGH.ANIMAL **seven**=IND
 ‘seven dogs’

(291) **ikĩi kânə gò*
 ikĩi **kanə** = go
 dog **seven**=IND

The set of sortal classifiers attested to date is listed in Table 8.8-Table 8.9. The first and second columns list free forms and their glosses. Where a particular classifier free form also occurs as a semantically relatable lexeme, this gloss is also given, together with the part of speech. Where only a lexical meaning is given, this indicates that the free form is used only as a noun, not as a classifier.¹⁷⁸ The third column lists the bound forms of classifiers, and is followed by a rough characterization of the semantic field in which terms which they classify are found, as well as a small number of examples. The terms

¹⁷⁸ Note that this is *not* the same as a “self-classifying” function, since the noun is *not* repeated in classification. That is, one says *naahùu = go* ‘granary=IND’ ‘a granary’ not **/?naahùu naahùu = go* (unlike in Thai).

are organized for purpose of presentation according to five semantic dimensions: *physical property*, *specific objects*, *life*, *abstract dimensionality*, and *time*.¹⁷⁹

| Field | Free | Gloss | Bound | Classifies |
|----------------|---------------|---|-------------|---|
| Phys. Prop. | <i>ahóo</i> | ‘CLF:LONG/THIN’ | <i>hóo-</i> | long, thin, potentially flexible things (cigarettes, lengths of rope) |
| | <i>apóo</i> | ‘CLF:TRUNK’ | <i>póo-</i> | things with length <i>and</i> rotundity (fat torsos/stomachs, fat fingers) |
| | <i>adáa</i> | ‘CLF:STICK’ | <i>dáa-</i> | rigidly sticklike things (branches, twigs) |
| | <i>arîi</i> | ‘CLF:STAFF’ | <i>rîi-</i> | staffs; upright things (trees, stands of trees) |
| | <i>apáa</i> | ‘CLF:BATON’ | <i>páa-</i> | oblong things with some thickness (bananas, eggplants, packs of cigarettes) |
| | <i>abúu</i> | ‘CLF:PIPE; river (N)’ | <i>búu-</i> | pipes (hollow poles (especially bamboo); rivers) |
| | <i>abór</i> | ‘CLF:SHEET’ | <i>bór-</i> | sheets; spread-out things (papers, pillows) |
| | <i>atàm</i> | ‘CLF:FLAT.SIDE; flat (ADJ)’ | <i>tàm-</i> | flat-sided objects (walls, doors, floors) |
| | <i>acîr</i> | ‘CLF:GRAIN’ | <i>cîr-</i> | small, grainlike things (pebbles, grains of rice, peas, insects, drops of water) |
| | <i>apê</i> | ‘CLF:EGG; round (ADJ)’ | <i>pî-</i> | round or egglike things, or things that lay eggs ¹⁸⁰ (eggs, apples, balls, birds) |
| | <i>abúk</i> | ‘CLF:POD’ | <i>búk-</i> | Pods; bulging sections of a whole (pods of a jackfruit, sections of orange, halves of a vagina) |
| | <i>abó</i> | ‘CLF:EDGE; edge (N)’ | <i>bó-</i> | sides; edges (of a container, of a computer screen) |
| | <i>acéô</i> | ‘CLF:FINGER; extension (N); offshoot (N)’ | <i>céô-</i> | fingers; bodies with fingers (lengths of ginger rhizome, rootstocks) |
| Spec. Obj. | <i>naahúu</i> | ‘granary (N)’ | <i>húu-</i> | granaries/granaries’ worth (mensural) |
| | <i>namó</i> | ‘house (N)’ | <i>nám-</i> | houses |
| | <i>ríkó</i> | ‘field (N)’ | <i>rîk-</i> | fields |
| | <i>ipìn</i> | ‘CLF:HOMESTEAD; homestead (N)’ | <i>pìn-</i> | homesteads (house <i>and</i> land) |

Table 8.8 – Sortal classifiers 1

¹⁷⁹ A comprehensive investigation of the semantic parameters of Galo classifiers, which would involve comparison with the semantic parameters used in classification in other languages (as discussed by Adams and Conklin (1973) and Aikhenvald (2000:272-273)), has not yet been conducted. This is projected to be carried-out in the context of research for Nyodu, Post et al. (in preparation).

¹⁸⁰ May in fact represent two distinct classifiers *pî-* and *pî̃-*, one classifying eggs and other round things and the other classifying birds. My consultants have differed in their assessments both of the tonality and semantic relatedness of these forms, which remain, accordingly, topics for continuing research.

| | | | | |
|-------------|-------------|--------------------------------|-------------|--|
| Life | <i>adór</i> | ‘CLF:HIGH.ANIMAL’ | <i>dór-</i> | high animals (all mammals, plus large lizards and frogs (as well as humans, in jocular sense), but not small reptiles, snakes, fish, birds or insects) |
| | <i>anə</i> | ‘CLF:STEM; CLF:FISH; stem (N)’ | <i>nə-</i> | living plants/plant stems, fish ¹⁸¹ |
| | <i>atíí</i> | ‘CLF:GROUP’ | <i>tíí-</i> | groups/flocks/herds of animate entities (cattle, dogs, chickens, people...) |
| | <i>atír</i> | ‘CLF:GROUP’ | <i>tír-</i> | (ibid.) |
| Abstr. | <i>abáa</i> | ‘CLF:VARIETY; variety (N)’ | <i>báa-</i> | types/varieties |
| | <i>agóm</i> | ‘CLF:SPEECH; speech (N)’ | <i>góm-</i> | vocalizations/vocalizers (mouths, words, points/topics) |
| | <i>abàa</i> | ‘CLF:SONG’ | <i>bàa-</i> | songs |
| | <i>adáp</i> | ‘CLF:VOLUME’ | <i>dáp-</i> | things which occur in levels or volumes (books, grades/classes, levels in a course) |
| | <i>abàr</i> | ‘CLF:TREASURE’ | <i>bàr-</i> | treasures (units of currency, brass platters, ornaments) |
| Time 182 | <i>ə̀nì</i> | ‘CLF:YEAR; year (N)’ | <i>nì-</i> | years |
| | <i>alóo</i> | ‘CLF:DAY; day (N)’ | <i>lóo-</i> | days |
| | <i>arúm</i> | ‘CLF:EVENING; evening (N)’ | <i>rúm-</i> | evenings/nights (non-day periods of time) |
| | <i>ajùp</i> | ‘CLF:NIGHT.CYCLE’ | <i>jùp-</i> | night cycles (full dusk-dawn cycles) |

Table 8.9 – Sortal classifiers 2

8.2.2.2.1. Discussion on the lack of human and generic sortal classifiers

Galo appears to be highly unusual among South-East Asian languages in lacking both a specific classifier for *humans* and a *generic* classifier comparable to Chinese *ge*, Thai *ʔan* or Burmese *khu*. Instead, terms denoting humans and novel or unclassifiable items are directly enumerated by numerals in Galo (292).

¹⁸¹ Rather than expressing any underlying semantic relation, this ‘polysemy’ seems to be the result of a merger of two distinct etyma, i.e. *nə́* ‘leaf, plant’ and *nə́* ‘fish’; cf. Lare *anə́* ‘living leaf’ and Pugo *mə́ənə́* ‘fish’.

¹⁸² Conspicuously missing from this set are classifier root reflexes of *jə́* ‘night’ and *rə́* ‘morning’. *ʔ/*jə́-nì* ‘CLF:NIGHTS-two’ was described by at least one consultant as potentially comprehensible but unlikely, since it would (and did) invite laughter through association with the near-homophonous *jə́nì* ‘fuck off’ (< *jó-* ‘fornicate’ + *-nì* ‘DEPART FROM SCENE’). *ʔrə́nì* ‘two mornings’ has not yet been tested.

(292) *kocari əkə akən-əpigo rətó. ní kəbə kaamá.*

kachari əkə **akən-əpì** = go rə-tó ní kəbə káa-máa
 TRIBE IDEF.PL **one-two**=IND live/exist-PFV person other have/exist-NEG
 ‘**One or two** of those Kacharis were here. There wasn’t anyone else.’ (NyR, MDS
 009-010)

It is not clear to me why exactly Galo should lack both human and generic classifiers, although at least part of the explanation may be found in the existence of an *individuating* article *go* (292). As was demonstrated by Post (2007), *individuation* in the context of tracking discourse-referents is the most frequent use of a generic classifier by far in at least some South-East Asian languages, and may represent the primary motivation for generic classifier grammaticalization. The fact that Galo already *has* an independent means of individuating referents seems to remove this motivating factor. However, while this *may* explain why Galo has no well-grammaticalized generic classifier, it does not explain why Galo lacks one *at all*.¹⁸³ Future comparative research in Tani languages will pay close attention to this question.

8.2.2.3. Mensural classifiers

Mensural classifiers may be used as lexical nouns denoting an *entity* which is used to collect or group other entities (293), or an abstractly-conceived *unit of measurement* of an individual, set of individuals, or substance (294). Or, they may be used as postposed quantifiers of a nominal head (295)-(296).

(293) *əbár gó*

əbár = go
 large.loosely.woven.conical.basket=IND
 ‘an *ebár* basket’

(294) *ajûm gò*

ajûm = go
 CLF:HANDFUL=IND
 ‘a handful’

¹⁸³ It might also be argued that Galo has a “zero” classifier for humans and unclassifiable referents. While this might be a formally useful way to “round off” the system, in absence of any structural or distributional evidence or implications it would seem to amount to an empty claim.

(295) *opôo əbár gó*
 opòo əbàr = go
 liquor large.loosely.woven.conical.basket=IND
 ‘a basket of (unfiltered) opo’

(296) *ân̄r ajùm gò*
 amò ajùm = go
 paddy CLF:HANDFUL=IND
 ‘a handful of rice paddy’

Mensural classifiers are further divided into *quantitative*, *collective* and *divisive* subtypes. Quantitative classifiers denote some particular fixed number of individuals or multiplication thereof (*five **dozen** eggs*). Collective classifiers denote a group, collection or undifferentiated mass of individuals or a substance in terms of some particular method for containing it or them (*a **bucket/handful** of chilies/water*). Divisive classifiers denote a fragment or portion of an individual or mass (*a **piece** of (this) cake*).

Table 8.10 lists the mensural classifiers attested to date in Lare Galo together with a characterization of the items they quantify, and their free form counterpart with its gloss.

| Type | Free | Gloss | Bound | Quantifies |
|-------|-------------|----------------------------|-------------|---|
| Quan. | <i>acám</i> | ‘CLF:TENS’ | <i>cám-</i> | any set of individuals ¹⁸⁴ in groups of ten |
| | <i>ahú</i> | ‘CLF:FOURS’ | <i>hú-</i> | any set of individuals in groups of four |
| | <i>atík</i> | ‘CLF:BUSHEL’ | <i>tík-</i> | bushels of large-sized leaves (40 by standard) |
| | <i>arò</i> | ‘CLF:BUNDLE.POLE’ | <i>rò-</i> | bundles of staffs or poles (40 by standard) |
| | <i>arík</i> | ‘CLF:BUNDLE.STICK’ | <i>rík-</i> | bundles of sticks (40 by standard) |
| Coll. | <i>ajùm</i> | ‘CLF:HANDFUL’ | <i>jùm-</i> | handfuls of any substance |
| | <i>aók</i> | ‘CLF:HEAPING.HANDFUL’ | <i>ók-</i> | heaping handfuls of any substance |
| | <i>aùm</i> | ‘CLF:MOUTHFUL’ | <i>úm-</i> | mouthfuls, especially of liquid |
| | <i>apùm</i> | ‘CLF:HEAP; (N)’ | <i>pùm-</i> | heaps of any substance or individual |
| | <i>atùm</i> | ‘CLF:CLUMP; clump (N)’ | <i>tùm-</i> | clumps of any substance of individual (such as packed-together soil) |
| | <i>alùm</i> | ‘CLF:CLUSTER; cluster (N)’ | <i>lùm-</i> | clusters of individuals |
| | <i>igìn</i> | ‘tight conical basket (N)’ | <i>gìn-</i> | tight conical basketfuls of any substance |
| | <i>əbár</i> | ‘loose conical basket (N)’ | <i>bár-</i> | loose conical basketfuls of any substance |
| | <i>uzùk</i> | ‘gourd ladle (N)’ | <i>hùk-</i> | ladlefuls of any substance |
| | <i>apée</i> | ‘CLF:BUNCH’ | <i>pée-</i> | bunches of sticklike things, such as bananas |
| | <i>apár</i> | ‘CLF:TEAM’ | <i>pár-</i> | teams; work groups; divisions of labour |
| | <i>apár</i> | ‘CLF:GRINDING’ | <i>pár-</i> | grinding’s worth; set of paddy or other grain, viewed as the amount ground at one time in a mortar |
| Div. | <i>akór</i> | ‘CLF:PACE’ | <i>kór-</i> | any length/distance as measured by paces |
| | <i>agóp</i> | ‘CLF:HANDSPAN’ | <i>góp-</i> | any length/distance as measured by handspans |
| | <i>adú</i> | ‘CLF:FOREARM.SPAN’ | <i>dú-</i> | any length/distance as measured by forearm spans |
| | <i>azék</i> | ‘CLF:SLICE’ | <i>zék-</i> | slices of any substance or individual |
| | <i>aták</i> | ‘CLF:FLAT.SIDED.FRAGMENT’ | <i>ták-</i> | flat sided entities which are cut- or broken-off sections of a whole, such as betelnut |
| | <i>atók</i> | ‘CLF:STRETCH’ | <i>tók-</i> | lengths/stretchers of a long thing, such as wood chips cut from a pole, or stretches of road or river |
| | <i>adúu</i> | ‘CLF:BAMBOO.SECTION’ | <i>dúu-</i> | sections of bamboo of any size |
| | <i>atəə</i> | ‘CLF:BAMBOO.SECTION.FULL’ | <i>təə-</i> | full sections of bamboo (including knot) |

Table 8.10 – Mensural classifiers

¹⁸⁴ By “individual” here and below is meant “individuated entity” (regardless of animacy).

As with sortal classifiers, with mensural classifiers we find a distinction between the majority of *a*-prefixed terms which denote one *individual* of, in this case, a given quantity, and a few which denote an abstract *concept* or a *type* of entity which is employed in measurement or collection. Interestingly, among the latter we find a small number of terms which have undergone root-nuclear vowel harmony, and one fascinating case in particular reflecting differential lexicalizations of what appears to have been proto-variation. *uzùk* ‘gourd ladle’ and *hùk-* ‘ladleful’ represent regular reflexes of proto-variants PT **zuk* ~ **ɛuk* ‘ladle’ respectively. **uhùk* is unattested and ?*zùk-* is considered odd by Lare speakers as a classifier for ladlefuls; it has not been naturally attested.

8.2.2.4. Classifier expressions

Bound forms of sortal and mensural classifiers are compounded to *core numeral roots* (§8.2.1) and monosyllabic adjectival roots (§5.2.3.2) to form Enumerative classifier expressions and Adjectival classifier expressions respectively, as *bór-úm* ‘CLF:SHEETS-three’ ‘three sheets (of something)’ and *bór-tà* ‘CLF:SHEETS-big’ ‘big, of a sheet-like entity’ (cf. also (273)-(274) above). Sortal classifiers freely occur in either Enumerative or Adjectival classifier expressions, but many (certainly not all) mensural classifiers can occur on Enumerative classifier expressions only. Both Enumerative and Adjectival classifier expressions realize single grammatical and phonological words.

The syntactic status of a classifier expression is determined by its second constituent root. Enumerative classifier expressions in essence pattern like numerals, although inasmuch as they cannot themselves directly modify classifiers, it may be preferable to identify a single position in the NP syntax “Enumerator or “Enumerative expression”, which may be filled either by a two-word sequence [CLF NUM]_{ENUM} or by a single term [CLF.EXP]_{ENUM} (297)-(298).

(297) *ikîi adór kanəgò*

[[ikîi]_{NOM} [adór kanə] _{ENUM} = go]_{NP}
 dog CLF:HIGH.ANIMAL seven=IND
 ‘seven dogs’

- (298) *ikîi dôrɲi gò*
 [[ikîi]_{NOM} [dôr-ɲi]_{ENUM = go}]_{NP}
 dog CLF:HIGH.ANIMAL-two=IND
 ‘two dogs’

The basic function of an Enumerative classifier expression is to *enumerate entities*, as in (298). Basically patterning as a numeral, classifier expressions also participate in complex numeral formation, much like a numeral base (cf. §8.2.1.1). In (299), classifier expressions based on *lôo*- ‘CLF:DAY’ form all three types of numeral formation in Galo: simple/compounded, addition with the numeral conjunction *golaa* and appositive multiplication. Note that due to the fact that *lôo*- ‘CLF:DAY’ uniquely classifies *alôo* ‘day’, ellipsis of the nominal head results in no loss of information.

- (299) *loorɛ̃ lô...loorɛ̃ golàa looŋó lô...*
 lôo-rɛ̃ = lo lôo-rɛ̃ golaa lôo-ŋó = lo
 CLF:DAY-ten=LOC CLF:DAY-ten NUMCNJ CLF:DAY-five=LOC
loorɛ̃ âɲi lô...opôo gò nênlə tɛ̃rɛ̃ kú
 lôo-rɛ̃ âɲi = lo opôo = go nênlə(a) tɛ̃rɛ̃-kú
 CLF:DAY-ten two=LOC liquor=IND filter.opo-NF imbibe-IRR-CMPL
arú.
 aru
 CONC.CEXP(<Asm)
 ‘After ten days...fifteen days...twenty days, we’ll filter out some opo and drink it, in fact.’ (LN, OPO 041)

Adjectival classifier expressions basically pattern like any other adjectival. Standing as a predicate head, Adjectival classifier expressions classify the clause subject (300). As head of a relative clause, they classify the relative clause head; in (301), note that *dôr-tə-nà* ‘CLF:HIGH.ANIMAL-big-NZR:SUB’ stands as a headless relative clause in a headless NP which serves as CC argument of the copula. Since copula clauses are basically equative in Galo, this means that the classifier expression also classifies the CS argument.

- (300) *aló...câr-tə-câr-tə duè. dotó.*
 [aló]_S [câr-tə câr-tə-dùu-ée]_{PRED} dó-tó
 salt CLF:GRAIN-big CLF:GRAIN-big-IPFV-DISJ.IPFV eat-PFV
 ‘The salt...was very big-grained. We ate it.’ (TB, OAM 005)

- (301) *homén ədə́ maazí dōrtə nagò eenà,*
 [homén əə = da]_{CS} [maazí **dōr-tə**-nà = go]_{CC} [ee = na]_{COP}
 tiger TOP=CNTR very CLF:HIGH.ANIMAL-**big**-NZR:SUB=INDCOP.PFV=DECL
ablá!
 abla
 whoa!
 ‘But this tiger was a really big one, wah!’ (RmR, CC 045)

Finally, although examples like this are rare, Adjectival classifier expressions may head a derived adverbial as in (302). In this case, the classifier expression generally seems to classify the clause subject. Here again, note that although the subject is ellipsed, since *rík*- ‘CLF:FIELD’ uniquely classifies *ríkə* ‘field’, ellipsis results in no loss of information.

- (302) *əddĩn kaibó ríktə bə́ rídù.*
 [əddĩn-nà kaí = bó]_{ADV} [**rík-tə** = bó]_{ADV} [rì-dùu]_{PRED}
 incredible-NZR:SUB big=AVZR CLF:FIELD-**big**=AVZR do-IPFV
 ‘The fields are all very big.’ (lit., ‘(The fields) do very big and **big-field-ly**’) (LN, MH 052)

8.3. Qualifying nouns

“Qualifying nouns” constitute a somewhat heterogeneous set of terms whose principal function is to qualify the referential status or scope of an NP by limiting it, increasing its precision, or otherwise modifying it in some way. Most qualifying nouns are in essence subtypes of noun or pronoun, and may usually head a nominally- or pronominally-headed NP – usually, with anaphoric or otherwise dependent reference (303). Many also occur as the head of a “qualifying” NP in a Referential qualifying expression, in which their host NP is apposed to a preceding “primary” NP whose reference it “qualifies” (304) (see §6.3.2). In addition, most qualifying nouns also occur *NP-internally*, modifying a distinct NP head. In the majority of cases, NP-internal qualifying nouns are *postposed* to the head (305); very rarely, they may also occur *head-preposed* (306).¹⁸⁵

¹⁸⁵ Head-preposition of Qualifying nouns runs quite counter to the overall trend in Galo NP syntax for non-lexical modifiers (i.e., those other than modifying nominals and genitive phrases) to be *postposed* to the head. In principle, pre-head Qualifying nouns may be treated syntactically as *modifying nominals* (cf. §6.1.2.1); however, this is basically an *ad-hoc* solution for what appears to be a genuine syntactic anomaly. To the extent that there is any difference between pre-head and post-head position, it may be that pre-head position signifies *every* (modification of a count noun only) while post-head position signifies *all* (modification of either count or non-count nouns). Future research will be brought to bear on this question.

buppî ‘all; every; everyone’ is one of the rare qualifying nouns (in fact, so far the *only* one) which is attested in all four of the relevant syntactic positions (303)-(306).

- (303) *buppî lòk aṇṇí jaarûuna...kə́nók zâab*

[[**buppî** lokè]_{GENP} aṇṇí-jàa-rûu-nà = əə]_{NP} kə́nók≡zâa≡bó
all PART little-COMP-SUPR-NZR:SUB=TOP enthusiastic≡REAL≡SBRD
jupká.

jùp-káa

sleep-PF

‘The smallest of **all** (of them)...was sleeping away enthusiastically.’ (TR, FA 074)

- (304) *nunnəm buppîəm ajaá dù!*

[nunù-əəm]_O [**buppî** = əəm]_{RQE} [ajaá-dùu]_{PRED}
 2.PL-ACC **all**=ACC love-IPFV
 ‘I love you **all**!’ (OL, 9:15)

- (305) *mm, ajò buppîəm jubgâmtó.*

mm [ajò **buppî** = əəm]_{NP} jùp-gám-tó
 yes night **all**=ACC sleep-SUCCESSFULLY-PFV
 ‘Yes, I slept **all** night long.’ (TR, OL14:110)

- (306) *higì aapûkəm buppî nījém dopî doobá...*

higì aapûk = əəm [**buppî** níi = əəm]_{NP} dó-píi-dó(o) = bó
 SPRX.IND heart=ACC **all** person=ACC eat-SATISFY.O-STAT=SBRD
întə ká. ”

în-tó = káa

cut.by.sliding.across.fixed.blade-IPTV.ODIR=HORT.ADVS

‘‘Cut this heart such that it’s enough for **everyone** to eat.’’ (lit., ‘for **all** persons’)
 (MK, TT 203)

Table 8.11 lists the qualifying nouns attested to date in Galo, together with two approximate glosses. The first gloss gives the semantic value of a qualifying noun when used as an NP-head (basically, as a lexical noun or, more rarely, an adjective). The second gloss corresponds to their functional value as modifiers of a distinct head noun or NP.

| Type | Term | Meaning as Head | Meaning as Mod | Attested positions | | | |
|------|---|-------------------------|------------------------------|--------------------|-----|-----|-----|
| | | | | Head | RQE | PRE | POS |
| N | <i>kəbə</i> | -- | ‘other’ | -- | -- | Y | Y |
| | <i>dikɨ</i> | -- | ‘every (time)’ | -- | -- | -- | Y |
| | <i>gadə</i> | ‘group’ | ‘Plural’ | Y | -- | -- | Y |
| | <i>təttə</i> | -- | ‘only; nothing but’ | -- | Y | -- | Y |
| | <i>naruu</i> | ‘everything’ | ‘all/every’ | Y | Y | -- | Y |
| | <i>takām</i> | ‘whole area/range’ | ‘every’ | Y | Y | -- | Y |
| | <i>nəgɨ</i> | ‘variety’ | ‘every kind (of)’ | Y | Y | -- | Y |
| | <i>ənɨi</i> | ‘bit (N); little (ADJ)’ | ‘a bit’ | Y | Y | -- | -- |
| | <i>azék</i> ¹⁸⁶ | ‘slice; bit’ | ‘a bit’ | Y | Y | | |
| | <i>jaakáa</i> | ‘multiplicity’ | ‘many’ | Y | Y | -- | -- |
| | <i>akèn</i> | ‘one (N); same (ADJ)’ | ‘alone’ | Y | Y | -- | -- |
| | <i>atɨ</i> ~ <i>atɨ</i> ¹⁸⁷ | ‘group’ | ‘as a group’ | Y | Y | -- | -- |
| | <i>aɨ</i> | ‘body’ | ‘(by) oneself’ | Y | Y | -- | -- |
| | <i>ləkèn</i> | ‘once’ | ‘at once; suddenly’ | Y | Y | -- | -- |
| | <i>atúu</i> | ‘subset’ | ‘some (of)’ | Y | Y | -- | -- |
| | <i>akèn-akèn</i> | -- | ‘each (one of)’ | -- | Y | -- | -- |
| | <i>aɨ-aɨ</i> | -- | ‘one another; each (one of)’ | -- | Y | -- | -- |
| | <i>nəgɨ-nəgɨ</i> | -- | ‘every kind (of)’ | -- | Y | -- | -- |
| PRO | <i>jòo</i> | ‘what’ | ‘etcetera’ | Y | Y | -- | Y |
| | <i>joojòo</i> | ‘whatever; what sort’ | ‘and all that sort’ | Y | Y | -- | Y |
| | <i>appɨ</i> | ‘everything; everyone’ | ‘all (of)’ | Y | Y | -- | Y |
| | <i>buppɨ</i> | ‘everyone’ | ‘all (of)’ | Y | Y | Y | Y |
| | <i>buppâa</i> ¹⁸⁸ | ‘everyone’ | ‘all (of)’ | Y | Y | -- | -- |
| | <i>ənùppâa</i> | ‘both of them’ | ‘both (of)’ | Y | Y? | -- | -- |

Table 8.11 – Qualifying nouns (RQE = Referential Qualifying Expression, PRE = NP-internal, pre-head, POS = NP-internal, post-head)

As Table 8.11 shows, the majority of attested qualifying nouns occur as the Qualifying NP-head in a Referential qualifying expression (§6.3.2). Most of those

¹⁸⁶ Also occurs as classifier (§8.2.2.3).

¹⁸⁷ Also occurs as classifier (§8.2.2.2).

¹⁸⁸ *buppâa* and *ənùppâa* are not accepted by all speakers, and are claimed by some of my consultants to represent a very recent merger (possibly confined to foothills Galo) of *buppɨ* and Topic marker *əə*, with *ənùppâa* representing a subsequent fusion of *ənì* ‘two’ and *buppâa* (the provenance of the [aa] vocalism would, however, remain unexplained). They are included here for sake of completeness, although both forms are very sparsely attested in my data.

qualifying nouns are also capable of standing as an NP-head with a basically lexical value. Some are further able to occur NP-internally, almost always in a post-head modifying function. Only two qualifying nouns are so far attested in *pre-head* position (in addition to being able to occur post-head). Finally, only three qualifying nouns are *not* able to occur in a Referential qualifying expression, but can *only* occur NP-internally.

In addition to this already-diverse positional subclassification, a great deal further diversity in the marking and behaviour of Qualifying nouns might yet be introduced – so much so that a full description would have to treat each Qualifying noun individually, and quite probably would eventually force the conclusion of placing each term into an individualized subclass. For example, *díkɛ́* ‘every (time)’ seems to occur inside Dative temporal NPs exclusively, as *alóo díkɛ́ = bə́* ‘day every.time=DAT’ ‘every day’, and seems unable to modify a time noun (or other noun) in a core argument function. In addition, although Qualifying nouns which derive from reduplications cannot generally occur as NP-heads, *aíí-aíí* ‘self-self’ ‘one another’ is attested as a Genitive phrase head, as in *bulù aíí-aíí = gə́ kusí = bə́* ‘3.PL self-self=GEN freedom(<Ind)=DAT’ ‘They, according to their own wishes...’; other reduplicated Qualifying nouns cannot occur in this position. Finally, a few Qualifying nouns which preferentially head *indefinite* NPs in a Referential qualifying expression – ostensibly qualifying a preceding, primary NP – have (probably due to frequent predicate-adjacent use) shifted their scope over the *predicate* – a basically adverbial function. Examples include *jaakáa* ‘multiplicity; many’ *əppíí* ‘bit; little (bit)’ and *azék* ‘slice; but’. In (307), note that *əppíí = go* ‘bit=IND’ modifies the preceding NP in a Referential qualifying expression, indicating that a small amount of the S argument referent participates in the event denoted by the predicate. By contrast, in (308) – although the surface syntax is basically identical – *əppíí = go* ‘bit=IND’ quite clearly has a *predicate-modifying* function: ‘a bit’ qualifies the ‘thinking’ event, *not* the S argument referent.

(307) *ahík-akekè àṣṣíí dagdùu nà*

[ahík-akèk = əə]_S [àṣṣíí = go]_{RQE} dàk-dùu-nà = əə
 remainder=TOP **bit=IND** LOC.EXIS.ATTACHED-IPFV-NZR:SUB=COP.IPFV
ná!

na

DECL

‘A little bit (of his head) was still remaining, you see [having cut a good portion of it off]?’ (lit., ‘of the remainder (of his head) **a little bit** was still attached’) (MK, TT 251)

(308) *kəhuóm kaatóm bulù àṣṣíí*

kəhúu = əəm káa-tó = əəm [bulù]_S [àṣṣíí = go]_{ADV}
 tortoise=ACC look-PFV=ACC.TSUB 3.PL **bit=IND**
məəkên kaakú.

[móə-kèn-káa-kú]_{PRED}

think-GOOD/EASY-PF-CMPL

‘Having seen the turtles, they felt **a bit** better.’ (IR, FA 049)

For further discussion of Referential qualifying expressions, see §6.3.2.

9. Clause types

This chapter discusses types of Galo clauses, focusing in particular on the structure of main (= independent) clauses in declarative moods. §9.1 is an overview; it introduces the main/dependent clause distinction and presents an inventory of Galo main and dependent clause types. “Predicative” clauses are then discussed in §9.2, followed by “appositive” clauses in §9.3. §9.4 presents a discussion of cleft/focus constructions. Non-declarative clause types are discussed in §9.5.

9.1. Overview

By “clause” is generally meant a construction consisting of a *predicative head* plus its *arguments*. The head is prototypically a verb, but may also be an adjective or a verb-derived or otherwise verb-like functor, i.e. a copula (Matthews 1981:§8; Croft 2001:137; Givón 2001 [1984]§3; Dixon 2006). It is sometimes possible to encounter clauses in which no overt or obligatory predicator occurs, but in which one or more NPs occur either apposed to one another or to one or more other non-predicative elements, and where the apposition itself constitutes a predication. Such clause types are described as “verbless clauses”.

9.1.1. Main vs. dependent clauses

“Main” clauses are always capable of standing alone as a complete utterance (they do not structurally depend on any other clause).¹⁸⁹ “Dependent” clauses are in principle incapable of standing alone as a complete utterance, instead depending structurally on a main clause. In general, clause dependency is structurally well-marked in Galo, and it is rarely difficult to determine the main or dependent status of a particular clause. (309) illustrates extensive adverbial subordination of a dependent clause in *bə* ‘SBRD’ (cf. §16.5.4) to a predicative main clause. Note that although both the adverbially subordinated clause in *nèn-* ‘exit’ and the higher clause in *ɲɛ-* ‘laugh’ are headed by an inflected predicate, only the higher clause can, in theory, be uttered independently.

¹⁸⁹ Other terms sometimes used to describe more or less the same concept include “independent”, “final” and (in some usages) “finite” clause. The term “final clause” in this grammar is reserved to describe the final clause of a clause chain (§16.4.2). Final clauses are always main, predicative clauses, but not all main, predicative clauses are final (since not all occur within clause chains).

(309) *bɛ̃ nɛ̃gláa nɛ̃n-dùu bó nɛ̃rdù!*

[bɛ̃ [nɛ̃gláa nɛ̃n-dùu = bó]_{DependentClause} nɛ̃r-dùu]_{MainClause}
 3.SG tear exit-IPFV=SBRD laugh-IPFV
 ‘He’s laughing to (the point that) tears are coming out!’ (GS, OL16:115)

In practice, dependent clauses are uttered independently in Galo very often. However, they do not have the same pragmatic status as main clauses when they are. Just as NP-ellipsis is licensed to a great extent by the context of utterance, main clause-ellipsis relies on context to a significant degree. In (310), the narrator of a folktale is describing a situation in which a character is lamenting over having no parting gift to give his shortly-to-be-married-off daughter as a memento of her family. He then says that for the father to give his daughter a memento would be:

(310) *mô^onam garɛ̃ bəi?*

[mò-rə-nam garɛ̃ = bó]_{SBRD} = (ə)ɪ̃
 make-MARK.O-NZR:RLS resemble=SBRD=ETAG
 ‘(It’s) like making a sign,¹⁹⁰ right?’ (MK, TT 156)

Structurally, (310) “requires” a head predicate in *rə* ‘do’ (just as the English translation “requires” a predicate in *be*). However, due to the richness of the context in which (310) is uttered, ellipsis of the predicate leads to no difficulty in understanding.

Additionally, we can easily find evidence in Galo of dependent clause reanalysis as main clauses, i.e., of “de-subordination”; some examples are discussed in §16.5.4.4.2 and §16.6.2.2.1. Such cases seem to derive in most cases precisely from situations such as in (310), when dependent clauses are uttered “independently”, with the higher clause (or higher clause predicate) ellipsed. Importantly, however, a reanalysed (de-subordinated) dependent clause usually does not have the same semantic value as its (pre-reanalysis) source form; usually, it imports some of the implied semantics of the erstwhile ellipsed higher clause as well (again, cf. §16.5.4.4.2). In this sense, then, there is a further distinction to be drawn between true dependent clauses which “stand alone” as utterances due to contextually-licensed higher clause ellipsis, and erstwhile dependent clauses which have been reanalysed as, and now function syntactically as, main clauses.

¹⁹⁰ The Galo sense of ‘sign’ or ‘mark’ associated with Result derivation *-rə* is prototypically related to the activity of making mnemonic marks on objects (such as trees, to serve as way-markers). It does not include most of the more communicatively- or symbolically-oriented senses of English *sign*. Thus, the sense here is that by giving a gift, the father would help his daughter to remember him, just as making a sign on a tree helps one to remember the way.

In sum, despite the possibility of “stand alone” utterance of dependent clauses in Galo – in specifiable conditions, and for particular reasons – I consider the basic main/dependent clause distinction to be a well-motivated structural feature, on both synchronic and diachronic grounds.

9.1.2. Main clause subtypes

Galo main clauses are *predicative* or *appositive*. *Predicative* clauses consist of an inflecting verbal or adjectival predicate head plus arguments S/A/O/E and OBL (according to head type). *Appositive* clauses are *headed* or *headless*: a *headed* appositive clause exhibits one of a set of uninflecting copula heads and two arguments CS and CC. *Headless* appositive clauses consist of two arguments VCS and VCC, with no overt syntactic predicator. These subtypes are described as *copula clauses* and *verbless clauses* respectively. In (311), an appositive copula clause is followed by a predicative clause.

(311) *ilɛ̀ aləpə̀...*

[[ilɛ̀ = ə̀]CS [aləpə̀]CC[= ə̀]COP]AppositiveClause

stone=TOP slippery=COP.IPFV

kôm tə̀ indûu bə̀ rɛ̀mà.

[[kômə̀ tə̀]OBL [ín-dûu = bə̀]S [rɛ̀-máa]PRED]PredicativeClause

PLACE DST.UP go-IPFV=SBRD do-NEG

‘The stones are so slippery, you can hardly walk up at the Kome (River).’ (lit., ‘to walk doesn’t do’) (RmR, CC 092)

The senses in which the terms “predicative” and “appositive” are employed here is somewhat non-standard; in principle, a copula is a predicate, and a clause containing a copula is (therefore) not appositive. Furthermore, an appositive clause still predicates, despite the absence of an overt predicating form. Despite these weaknesses, the terms as defined above were chosen for the purpose of avoiding a number of other potentially even more confusing or misleading alternatives.¹⁹¹ Figure 9.1 schematizes the classification.

¹⁹¹ “Inflecting/finite” versus “uninflecting/appositive” was also considered; however, it should be noted that in many dependent clause subtypes, a predicative clause is not inflected. In addition, terms like “final” or “finite” seem to imply a sense of “completeness” which is as easily applied to an appositive clause as to a predicative clause.

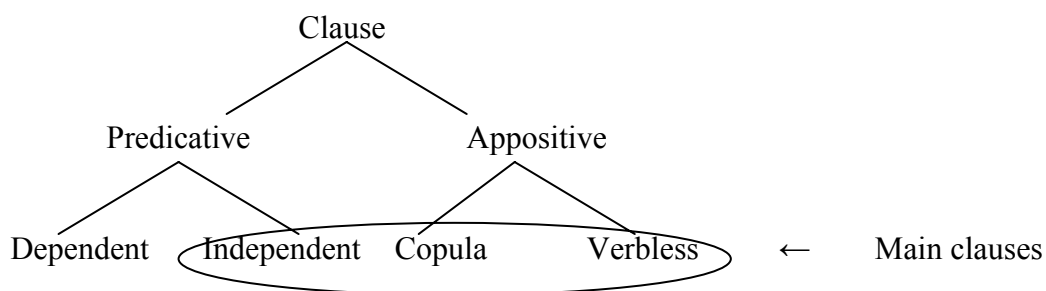


Figure 9.1 – Clause types

9.1.3. Dependent clause subtypes

The major subtypes of Galo dependent clause are *non-final* (= chained, medial, co-subordinate), *adverbially subordinated*, *temporally subordinated*, *nominalized*, and *clause complements*. In addition to these major subtypes, a few minor types involve use of predicate-bound suffixes with specific clause-linking functions; they are best analysed on a case-by-case basis. All dependent clause types not based on nominalizations are discussed in §16. Most clause types based on nominalizations are discussed in §15.

9.2. Predicative clauses

9.2.1. Predicative clause constituents

Predicative clauses are headed by a grammatical *predicate*. Major non-head constituents include *argument NPs*, *oblique NPs*, *adverbials*, and *dependent clauses*, all of which may in principle occur simultaneously within the same clause. The order of elements in a Galo clause is by no means fixed; while the order presented in Table 9.1/Figure 9.2 represents what seems to be a statistical preference in my data, almost any reconfiguration is in principle possible.

- 1) **TOP** – Pre-core “topic” slot (mostly framing clausal nominalizations)
- 2) **TMP** – Temporal phrase/temporally subordinated clause
- 3) **S/A** – Subject noun phrase (S in intransitive clause, A in transitive clause)
- 4) **ADV, DAT, LOC, E** – One or more of: adverbial/adverbially subordinated clause, dative oblique noun phrase, locative oblique noun phrase, extension to intransitive/transitive core (various marking/role types)
- 5) **O** – O argument noun phrase (transitive clause only)
- 6) **PRED** – Predicate
- 7) **PCL** – Clause-final particles

Table 9.1 – Elements of a predicative clause

[TOP] – [TMP] – [S/A] – [ADV/DAT/LOC/E] – [O] – [**PRED**] – [PCL]

Figure 9.2 – Elements of a predicative clause

In practice, inasmuch as ordering preferences do exist, they would seem to correspond to specific construction types and/or sets of specifiable pragmatic conditions; for example, more topical and/or animate referents tend to occur early in the clause, a fact which often determines the relative order of O and E in particular (in an extended transitive clause). In addition, potential interactions of clause constituents can influence ordering; for example, since adverbials may be recursively embedded, a clause containing two predicate-modifying adverbials must be structured to ensure that they are non-adjacent (see §16.5). Unfortunately, it is not possible to provide a full inventory of construction-specific ordering preferences and principles for variation as of this writing; this problem will be addressed more comprehensively in future research.

9.2.1.1. Arguments

Argument NPs are projected by the transitivity specification (= caseframe, subcategorization frame) of the predicate; this process is discussed in detail in §14.1.1 (cf. also §10.4).

Argument NPs are obligatory features of a Galo clause, and are represented “underlyingly” whether or not they have overt syntactic realization. In (312), two transitive clauses occur in sequence. In the first clause, the O argument *ŋoɪ* ‘fish’ has been discussed in previous clauses, and is ellipsed due to contextual predictability. In the

second clause, the A argument *ɲunù* ‘1.PL’ is coreferential with the preceding clause A; its ellipsis serves as a partial cue to this fact.¹⁹²

(312) *ɲunù láagə rəllà, həmbə rāpko molâi?*

[[ɲunù_i]_A [Ø_j]_O [lāa-gəré-là(a)]_{PRED}][[Ø_i]_A [həmbə]_{ADV} [rapkò]_O [mò-là(a)]_{PRED} (ə)_I]
 1.PL take-ACNC-NF SPRX.PADV rack make-NF ATAG
 ‘After we_i caught (the fish_j), (we_i) made a rack like this, see?’ (RmR, CC 098)

9.2.1.2. Obliques

Oblique NPs are not projected by the predicate, but are rather “tacked on” to the clause as an optional adjunct. They include a variety of types and preferred positions. In (313), both of the NPs labelled OBL may be freely inserted into any type of predicative clause, subject to semantic compatability with the predicate.¹⁹³ Unlike argument NPs, oblique NPs which do not occur overtly in the clause are not usually to be viewed as “underlyingly” present or understood from context; they are simply not there.

(313) *poolòm ɲó ləkên-ləɲi bə caarə.*

[poolò = əəm]_{OBL} [ɲó]_S [ləkên-ləɲi = bə]_{OBL} [càa-rə]_{PRED}
 moon=ACC 1.SG once-twice=DAT ascend-IRR
 ‘I’ll come up (to visit you) once or twice each month.’ (MN, B2:31)

Temporal noun phrases and temporally-subordinated clauses are not structurally identical, but they overlap to a significant degree in terms of semantics, marking and distribution. Both types strongly tend to precede the core contents of a clause, although this is not strictly obligatory. (314) illustrates a temporally-subordinated clause, exhibiting the same marking and clausal position as the temporal noun phrase in (313).

(314) *bɛk iidəkəm, sâa molâana.*

[bɛk-kə ìi-dək = əəm]_{TMP} [Ø]_A [hàa]_O [mò-la(a)nà]_{PRED}
 3.SG-GEN descend-COS=ACC.TSUB tea make-IPTV.SOFT
 ‘When he comes down, make (him) some tea.’ (ZR, OLC2:10)

¹⁹² Cross-clause subject co-referentiality is not an obligatory structural feature of Galo clause chains, however it has a strong statistical preference. Ellipsis almost always reflects subject continuity. For further discussion and examples, see §16.4.2.2.3.

¹⁹³ For example, an adjectival predicate would be “semantically incompatible” with the oblique noun phrases in (313), but note that this is not of the nature of a grammatical constraint. To take an example from English, it is perhaps nonsensical to say *I’ll be tall once or twice next month*, but there is nothing grammatically “wrong” in it.

9.2.1.3. Adverbials

Any predicative clause may be freely expanded by one or more *adverbials* of almost any type, all of which function to directly modify the predicate. Adverbials in general have very high syntactic freedom, and may occur in almost any position in the clause. However, as was also noted in §9.2.1, clauses containing multiple adverbials must be structured to avoid any unintended interaction. For example, in (315), the speaker's choice to utter the predicate-modifying adverbial in *maazí* 'very much' *before* the O NP averts the possibility of its interpretation as an embedded modifier of the second adverbial in *káa-kèn* 'look-GOOD/EASY'. The remaining adverbials occur in an appositive structure, separated by an intonational pause; this again averts a misconstrual of scope relations.

(315) *maazí bǎ...gînci-cuucàkè̀m*

[maazí = bǎ]_{ADV} [gînci-cuucàk = ə̀m]

very.much=AVZR basket.conical.small.dense-basket.tiny.dense.planting=ACC

kaakên bǎ...rîmîgbǎ...môzi tó.

[káa-kèn = bǎ]_{ADV} [rî-mîk = bǎ]_{ADV} mò-zí-tó

look-GOOD/EASY=AVZR do-MINUTE=AVZR make-BEN-PFV

'He really...made her such lovely, minutely woven baskets (lit., 'He really made her baskets beautifully, minutely-wovenly.').' (LN, TG 079)

9.2.1.4. Particles

A large number of particles occur clause-finally in Galo, usually giving epistemic or illocutionary force-related functions (or sometimes, both) (316). Most but not all clause-final particles can also mark the focus of a cleft/focus construction (317).

(316) *udúm nó ǎm cênɾə còm ǎi?*

[udúm]_{TOP} [nó]_A [ǎm]_O [cên-rǎ]_{PRED} [com]_{PCL} [ǎi]_{PCL}

cane.container.lidded.cylindrical 2.SG ANAP.ACC know-IRR GUES ATAG

'I **imagine** you know what an *udum* is, **eh?**' (NyPB, LAT 263)

(317) *jòolok eecòm, patúu deekò!*

[jòo = lokə ee = **com**]_{FOC} pá-túu-dée-kò = əə
 what=ABL COP.PFV=**GUES** chop-DIVIDE.ON.WIDTH.S/O-PROS-NZR:LOC/OBL=TOP
 ‘What might it have been, the way to cut it?’ (lit., ‘it was from **I wonder** what, the way to cut it’ (TB, OAM 089)

For additional discussion of clause-final particles, see §13.3.

9.2.1.5. Topic

The topic of a Galo clause is usually also the subject. Sometimes, a pre-core topic may precede the subject, which may or may not be (or be coreferential with) an underlying constituent of the clause. In (316), the pre-core topic is coreferential with the O argument noun phrase; note however that the topic is *not* (unlike the argument) accusative marked. Similarly, it is very common for a clausal nominalization to occur as a pre-core topic, “framing” a clause by summarizing preceding information (318).

(318) *doopé cáaku nammé...attór kaakú.*

[doopí = əə càa-kú-nam = əə]_{TOP} [attór-káa-kú]_{PRED}
 sun=TOP ascend-CMPL-NZR:RLS=TOP be.firm/hard-PF-CMPL
 ‘The sun having risen...(the earth) firmed up.’ (TB, OAM 121)

For further discussion of topic marking and multiple topic constructions, see §14.2.1.3 and §14.2.2.1 respectively. For further discussion of framing clausal nominalizations, see §15.3.2.4.

9.2.2. Predicative clause types

An initial subclassification of predicative clause types may be made on the basis of predicate-projected core argument structures (Figure 14.1).

| | | | | |
|---------------------------|---|---|---|-------|
| (a) atransitive | | | | (OBL) |
| (b) extended atransitive | | | E | (OBL) |
| (c) intransitive | S | | | (OBL) |
| (d) extended intransitive | S | | E | (OBL) |
| (e) transitive | A | O | | (OBL) |
| (f) extended transitive | A | O | E | (OBL) |

Figure 9.3 – Basic set of possible core argument structures (adapted from Dixon (2006: 7))

In what follows, we will limit the discussion to basic clause structure. Discussion of most aspects of argument identification, marking and behaviour may be found in §14.1.

9.2.2.1. Atransitive and extended atransitive clauses

Atransitive clauses have *no* core arguments. Such clauses are rare in Galo, as they seem to be in most languages, and appear to be limited to a handful of clauses describing weather-related events and (possibly) one sense of the direct speech verb ‘say; tell’. (319) is an atransitive clause in *dooní* ‘sun; be sunny’, a lexeme which occurs as both an atransitive predicate head and a noun.

- (319) *dooní duukù*
dooní-dùu-kú
 be.sunny-IPFV-CMPL
 ‘It’s gotten sunny.’ (TR, OL6:37)

Although it is possible to insert a topic ‘the sky’ in sentences such as (319), as *taláə = əə dooní-dùu-kú* ‘sky=TOP be.sunny-IPFV-CMPL’ ‘the sky has gotten sunny’, note that although *taláə* is topic of the utterance, it is *not* a syntactic S argument of the predicate. Unlike all true subjects (§14.1.3.3), *taláə* ‘sky’ *cannot* be subject-relativized in *dooní*, nor, indeed, can *dooní* take subject nominalization at all (320).

- (320) **dooní nə (taláə)*
dooní-nà (taláə)
 be.sunny-NZR:SUB (sky)

It is more difficult to argue for the existence of extended atransitive clauses. In (321), it is clear that the speech report clause has E argument status: a coreferential nominal may be derived via non-subject nominalization of the predicate (§14.1.3.8). However, the clause does not seem to have an underlying subject.

- (321) *əmnəmə, həkkə...kaanék dó əmlâa jú kó.*
 [ám-nam = əə]_{TOP} [həkkə = əə káa-nèk-dó(o)]_E [ám-là(a)]_{PRED} juu kó
 say-NZR:RLS=TOP P_{TOP}.SEMB=TOP look-BAD-STAT say-NF REP INFO
 ‘So, they say this sort of thing...is really ugly.’ (LN, WGD 020)

The difficulty associated with examples like (321) is that, to the extent that the clause is (extended) atransitive, it is based upon an atransitive *sense* of an ambitransitive verb; subject-taking (extended) intransitive and (extended) transitive senses of *ám-* ‘say; tell’ are also available (cf. §9.2.2.4.2). Accordingly, it is always possible to perform a subject nominalization of a predicate in *ám-* ‘say; tell’, as *ám-nà* ‘say-NZR:SUB’ ‘the one who said (something)’. That fact notwithstanding, it is quite clear that in many uses of *ám-* ‘say; tell’, there is no more a ‘sayer’ (S/A) present in the speaker’s construal than there is a ‘said-to’ (O); it seems more logical to capture this fact through reference to an available ‘extended atransitive’ caseframe than to claim that an underlyingly present subject has been ellipsed.

9.2.2.2. Intransitive clauses

Intransitive clauses have a single core argument S. They are headed by intransitive predicates, which may in turn have an intransitive verbal (322) or basic or derived adjectival head (323)-(324). Predicate-level de-transitivization processes other than adjectivalization are rare, if they occur at all in Galo. No clause-level processes of detransitivization (such as a passive) have been found to date. For discussion of adjectivalization, see §11.2.4.2; for the lack of passive in Galo, see §14.1.3.7.

(322) *kaanəmə...ərapə dadá lóokôg là.*

[káa-nam = əə]_{TOP} [əráp = əə dada]_S [lóo-kók-là(a)]_{PRED}

see-NZR:RLS=TOP door=TOP RCUR swing-OPEN-NF

‘Looking, (they saw that) the door opened just like before.’ (TR, FA 033)

(323) *hilòo məròo gə rənám duunəmə ʔɲíɲ*

[hilò-məròo = gə rə-nam dùu-nam = əə]_S [ʔɲíɲ = go]_{ADV}

today-yesterday=GEN live/exist-NZR:RLS stay-NZR:RLS=TOP bit=IND

adók duukù í.

[adók-dùu-kú]_{PRED} (ə)í

different-IPFV-CMPL ETAG

‘The lifestyle of nowadays has become a bit different, eh?’ (MN, FYG 005)

(324) *fléegó tɪkên má.*

[fléek = əə]_S [tɪ-kên-máa]_{PRED}

Flake=TOP imbibe-GOOD/EASY-NEG

‘Flake (cigarettes) are disgusting.’ (lit., ‘not good to smoke’) (KZ, OL9:104)

9.2.2.3. Transitive clauses

Transitive clauses are prototypically headed by a transitive verbal predicate; they have two core arguments A and O. The predicate head may be a lexically transitive verb, as in (325), or an intransitive verb which is transitivized by one of a variety of applicatives, as in (326). In (326), note that the first clause in *ín-* ‘go’ is intransitive (**nó-m ín-ré* ‘2SG-ACC go-IRR’ is unacceptable), while the second clause in *ín-* ‘go’ is transitivized via Comitative applicative *-gá* ‘COMT’. For further discussion of Comitative *-gá*, see §11.2.5.4.

(325) *ŋó issə̀m círdù.*

[ŋó]_A [isì = ə̀m]_O [cír-dùu]_{PRED}
 1.SG water=ACC boil-IPFV
 ‘I’m boiling the water.’ (MN, 19:144)

(326) *nóm zòolə ín-ré,*

[[nó-m]_O [zòo-là(a)]_{PRED}]_{TransitiveClause} [[ín-ré]_{PRED}]_{IntransitiveClause}
 2.SG-ACC lift-NF go-IRR

door^ə bə ingə̀rə nóm!

[[doorə = bə]_{OBL} [ín-gá-ré]_{PRED} [nó-m]_O]_{TransitiveClause}
 wind=DAT go-COMT-IRR 2.SG-ACC
 ‘He’ll snatch you away [lit., ‘pick you up and go’], carry you away with the wind!’ (RmR, CC 161)

Transitive clauses are seemingly headed by *adjectival* predicates in an *adjectival excessive construction*. A rare construction in my data, its basic sense ‘*x* is too [ADJ] for/on *y*’. In it, an Attributee (notional S) of the adjective is expressed as subject, and a notional Undergoer – an entity somehow adversely affected by the extent to which a property is attributable to the subject – is expressed in the Accusative. (327) is the only naturally-attested example in my corpus, although several more examples have been obtained in elicitation. Note that although the subject is ellipsed, if overt it would be unmarked for case. The Undergoer argument of an adjectival excessive construction may be referenced via non-subject nominalization in *-nam* (a standard test for O or E argument status) (328).

(327) *ḡóm adâk dù.*

[ḡó-**m**]o [adâk-dùu]_{PRED}

1.SG-ACC tight-IPFV

‘(These sunglasses) are too tight **on/for** me’ (IR, OLB5:158)

(328) *susmáa adâk nàm níí*

[[susmaa adâk-**nam**]_{RELC} níí]_{NP}

glasses(<Ind) tight-NZR:NSUB person

‘the person **on whom** the sunglasses are too tight’ (IIR, EM 07-06-07)

The adjectival excessive construction presents an exception to the overall tendency toward adjectival intransitivity in Galo.

9.2.2.4. Extended intransitive and extended transitive clauses

Extended intransitive clauses have a core argument S and an extension to core E; extended transitive clauses have core arguments A, O and extension to core E. E argument marking and behaviour are diverse, sometimes resembling that of a transitive clause O, sometimes more closely resembling a particular type of oblique. The status, marking and behaviour of E arguments is discussed from a more general perspective in §14.1.3.8 and §14.1.3.9. Here we present a selection of commonly-encountered intransitive clause types, and a basic description of their structures.

9.2.2.4.1. Motion

Motion clauses are headed by motion verbs, which may be either activity-oriented or goal-oriented (cf. §5.2.4.2). Activity- and goal-oriented motion predicates differ in terms of the argument structures they project over the clause. Activity-oriented motion predicates are intransitive, and project only an Actor argument S. Goal-oriented motion predicates are extended intransitive, and project an Actor argument S and a Goal argument E. Accordingly, clauses headed by an activity-oriented motion verb (like almost any type of activity-oriented intransitive clause) may or may not exhibit a Locative-marked oblique NP, denoting the location in which the activity takes place. By contrast, in a clause headed by a goal-oriented motion verb, the Goal argument is obligatory. Although Location and Goal NPs often share the same (usually Locative) marking, several facts illustrate their underlying difference. For example, while Location-denoting obliques are obligatorily Locative-marked (329), Goal arguments of motion verbs only optionally

take Locative marking, and are very often zero-marked (330). The difference has to do with the prototypicality or predictability (\cong definiteness) of the Goal. In (330), the Actor is described as going up to *her own* granary, something she might be expected to do on a regular basis. In (331), the Actor arrives at a new village for the first time; accordingly, the goal is Locative-marked. Zero-marking of highly predictable core arguments is discussed in a more general context in §14.2.1.1. For additional discussion of E argument Goals in the context of E argument marking and behaviour more generally, see §14.1.3.9.

(329) *ŋó alóo-díkî bɔ́ hibûu *(lò) zaadù.*

[ŋó]_S [alóo dikî=bɔ́]_{OBL} [hibûu=lo]_{OBL} [zàa-dùu]_{PRED}
 1.SG day every=DAT river=LOC swim-IPFV
 ‘I swim in the river every day.’

(330) *arròm naahû caadù bì.*

[arò=əəm]_{OBL} [naahûu]_E [càa-dùu]_{PRED} [bî]_S
 morning=TMP.IRR.SPAN **granary** ascend-IPFV 3.SG
 ‘(She) goes up to **the granary** in the morning, she does.’ (NyPB, LAT 303)

(331) *inlâ inlâ inlâ inlâ innəmɔ́...ikîi doolúu lo*

[ín-là(a) ín-là(a) ín-là(a) ín-là(a) ín-nam=əə]_{TOP} [ikîi doolúu=lo]_E
 walk-NF walk-NF walk-NF walk-NF walk-NZR:RLS=TOP dog **village**=LOC
caalên dù.
 [càa-lèn-dùu]_{PRED}
 ascend-OUT-IPFV
 ‘Walking and walking and walking and walking...he arrived **at a village** of dogs.’
 (NyPB, LAT 104)

Sources of motion do not appear to share the privileged status of Goals, and generally occur as obligatorily Ablative-marked oblique NPs. For discussion and examples, see §14.2.2.1.2.2 and §14.3.6.2.

9.2.2.4.2. Locution and cognition

The principal Galo verbs of locution are *záp*- ‘talk’ *mèn*- ‘speak’ and *ám*- ‘be said; say; tell’. The principal verb of cognition is *máə*- ‘think; want; like’. *máə*- ‘think; want; like’ has a basic transitive caseframe, with an Actor A and an Experiencer O. *záp*- ‘talk’ and *mèn*- ‘speak’ both project basic extended transitive structures, in which the Speaker occurs as A, the Message as O and the Addressee as E. In principle, all three

arguments may be present in the same clause, usually in the order A E O V (332), however in practice either O or E are usually omitted.

(332) *ηό bîm nè agomám zapká.*

[ηό]_A [bî-əəm = nè]_E [agóm = əəm]_O [záp-káa]_{PRED}
 1.SG 3.SG-ACC=NAGT speech=ACC talk-PF
 ‘I talked to him about some things.’ (MN, B2:115)

Clauses in *mèn-* ‘speak’ and *móθ-* ‘think’ also exhibit an *extended intransitive* structure in which a “direct contents” phrase or clause occurs post-clausally (it *cannot* precede the predicate). Note that the extended intransitive sense is distinct from the transitive senses discussed above; in (333), no O argument may occur inside the clause.

(333) *niijó pətáa-kobuè meṇṇâm duukù,*

[nií = əə pətáa-kobùu = əə]_S [mèn-ṇám-dùu-kú]_{PRED}
 person=TOP bird-rodent=TOP speak-EXH-IPFV-CMPL
 “*áo nízîrêm eí dūug tokk^wá.*”

[aò nízîr = əəm eí dùu-gá-tó-kú = káa]_E
 child girl=ACC HEMP stay-COMT-IPTV.ODIR-CMPL=HORT.ADV
 “The people and the animals all said (to him), “just stay (i.e. sleep) with your daughter.”” (NyPB, LAT 329)

Clauses in *ém-* ‘be said; say; tell’ exhibit a different type of extended structure. In an *ém*-headed clause, a “direct contents” phrase or clause occurs clause-internally (it *cannot* follow the predicate). In the extended intransitive sense of *ém-* ‘say’, an Actor S usually precedes the direct content report (334). Further discussion may be found in the context of complementation in §16.6.2.3 and §16.7.

(334) *bî ém purnâm pagbáə lîgləpə əmdù!*

[bî]_S [əəm purna = əəm pák-báə-lîk-lapə]_E [ém-dùu]_{PRED}
 3.SG APRX.ACC old.one(<Ind)=ACC suspend-CTIN-INTO-INTN say-IPFV
 ‘He says he’ll just keep hanging that there old one!’ (lit., ‘He says, “I’m going to keep hanging the old one.”’) (IR, HC 022)

9.3. Appositive clauses

Appositive clauses include *verbless clauses* §9.3.1 and *copula clauses* §9.3.2.

9.3.1. Verbless clauses

Verbless clauses consist of two NPs which stand apposed in a predicative relation, but which lack an overt predicator (inflected verb or adjective, or copula). Following Dixon (2006), the two noun phrases of a verbless clause are described here as core arguments VCS (Verbless Clause Subject) and VCC (Verbless Clause Complement). Note that neither VCS nor VCC is itself a “predicate” (hence we will not refer to “nominal predicates/predicate nominals” in Galo); rather, predication is viewed as a function of the appositive clause structure itself.

The basic structure of a verbless clause is presented in Table 9.2/Figure 9.4.

- 1) VCS – Verbless clause subject
- 2) VCC – Verbless clause complement
- 3) PCL – Clause-final particle

Table 9.2 – Elements of a verbless clause

[VCS] – [VCC] – [PCL]

Figure 9.4 – Elements of a verbless clause

Semantically, Galo verbless clauses are limited to predication of an equative/identity or attributive relation between two NPs (335).

(335) *pânə gə âowə naur, naur gə urti...*

[panə = gə aò = əə]_{VCS} [naur]_{VCC} [naur = gə]_{VCS} [urci]_{VCC}
 NAME=GEN child=TOP NAME NAME=GEN NAME
 ‘Pane’s son is Naur, Naur’s (son) is Urci...’ (NyR, MDS 079)

VCS is always higher in definiteness/topicality, and is usually realized either by a demonstrative- or topic-marked common NP, or by a pronoun or proper name-headed NP.¹⁹⁴ VCC may be a pronoun or proper name; if a common NP it may be either zero-marked (336) or indefinite, and marked in *go* ‘IND’. Under no circumstances may a VCC argument be topic-marked (337).¹⁹⁵

¹⁹⁴ Indefinite noun phrases in VCS function are unattested, but cannot currently be ruled out as a grammatical impossibility.

¹⁹⁵ A topic-marked VCC would render the clause structurally indistinguishable from a copula clause. For further discussion on this point, see §9.3.4.

(336) *opôə âlnə amèn.*

[opôə = əə]_{VCS} [alə-nà amèn]_{VCC}
 liquor=TOP good-NZR:SUB gift
 ‘Liquor is *the* good present (there is no other).’ (IR, B5:22)

(337) *opôə âlnə amên gò.*

[opôə = əə]_{VCS} [alə-nà amên = go]_{VCC}
 liquor=TOP good-NZR:SUB gift=IND
 ‘Liquor is one (example of a) good present.’ (IR, B5:22)

Verbless clause complements are often realized by participant nominalizations (338)-(339). Such expressions are commonly modified by a focus-marking illocutionary force particle of some kind (339), but this is not obligatory (338).

(338) *ruumə maí kaahîr nagó.*

[ruum = əə]_{VCS} [maazí káa-hîr-nà = go = _{VCC}]
 room(<Eng)=TOP very.much look-INTERESTING-NZR:SUB=IND=NFI
 ‘The room was a really impressive one.’ (IR, FA 024)

(339) *hîgî “ahâa”...agóm hîgî, bôk*

[hîgî ahâa agóm hîgî]_{VCS} [bokə]
 P_{TOP}.IND cook(<Hin) speech P_{TOP}.IND DST.ABL.DOWN
aamáa dûunə gò bəreì.
 áa-máa-dûu-nà = go]_{VCC} bəree = (ə)ì
 come-NEG-IPFV-NZR:SUB=IND CJEC=ETAG
 ‘Might this word “aha” not be coming from (the plains languages) down there.’
 [lit., ‘Might this word “ahaa” not be a coming-from-down-there one’] (MK, TT 023)

In a very rare construction only attested on a handful of occasions, a Verbless clause subject has been observed to carry Accusative marking, seemingly when and only when VCC is marked Dative. The construction seems to make underlying reference to a give/transfer event, and may potentially be understood to exhibit an underlying, ellipsed “give” predicate; however, note that the semantic content of the construction is *equative*. In (340)-(341), note that omission of either the Accusative or the Dative markers results in ungrammaticality.

(340) *hîm kîṭəbə*
 [hî-m]_{VCS} [kîṭə = bə]_{VCC}
 SPRX-ACC uncle.maternal.first=DAT
 ‘This is for First Maternal Uncle.’ (LN, B3:68)

(341) *hîm ṇôpə rè?*
 [hî-m]_{VCS} [ṇó-pə]_{VCC} ree
 SPRX-ACC 1.SG-DAT PQ
 ‘Is this for me?’ (LN, B3:68)

In principle, this could be analysed as a case of assimilation of the argument structure of an ellipsed-predicate transitive clause to the appositive structural type, however this question would require additional research.

9.3.2. Copula clauses

Copula clauses consist of two core arguments CS “Copula Subject” and CC “Copula Complement”, plus one of a small set of uninflecting copulas COP (Table 9.3/Figure 9.5).

- 1) CS – Copula subject
- 2) CC – Copula complement
- 3) COP – Copula
- 4) PCL – Clause-final particles

Table 9.3 – Elements of a copula clause

[CS] – [CC] – [COP] – [PCL]

Figure 9.5 – Elements of a copula clause

Like verbless clauses, copula clauses basically predicate equative/identity and attributive relations between its two arguments. However, unlike verbless clauses – which can only predicate relations among two NPs – most copula clause types can take *either* a nominal *or* an adjectival CC (342)-(343).

(342) “ṇó hoozî əəzâa kə.”
 [ṇó]_{CS} [hoozî]_{CC} [əə]_{COP} = zâa kə
 1.SG **chameleon** COP.IPFV=REAL INFO
 ‘I’m actually a chameleon.’ (MK, TT 264)

(343) *kessôo-kelló bulù adəkó.*

[kessóo-kelló bulù]_{CS} [adək]_{CC} [=əə]_{COP}
 lizard.variety 3.PL **different**=COP.IPFV
 ‘Those *kesso-kello* (lizards) are different.’ (MK, TT 243)

Like Verbless clause subjects, Copula subjects are higher than CC in definiteness/topicality, and are usually realized by definite noun phrases, pronouns or proper names. Copula complements are most often *unmarked* for pragmatic status, although there are different interactions between different types of pragmatic marking and the different types of copula available. CS and CC are also asymmetrical with respect to ellipsis. It is very common for CS arguments to be ellipsed (cf. (346)-(347) in the next section §9.3.2.1); however, CC is *never* ellipsed.

9.3.2.1. Types of copula

There are two basic Galo copulas *əə* and *ee*. The functionally unmarked copula is *əə*, glossed ‘COP.IPFV’. It has the basic function of predicating a current, general, or permanent equative or attributive relation (344), (346). The functionally marked copula is *ee*, glossed ‘COP.PFV’. It has the basic function of predicating a past, non-continuing/no-longer-existing or somehow unsuccessful relation (345), (347).¹⁹⁶

(344) *bĥi ticər əənà.*

[bĥi]_{CS} [ticər]_{CC} [əə]_{COP} = na
 3.SG teacher **COP.IPFV**=DECL
 ‘He or she is a teacher (currently).’ (MN, 16:135)

(345) *bĥi ticər eenà.*

[bĥi]_{CS} [ticər]_{CC} [ee]_{COP} = na
 3.SG teacher **COP.PFV**=DECL
 ‘He or she was a teacher (but has lost his or her job or is otherwise prevented from realizing his or her vocation).’ (MN, 16:135)

(346) *tarĥk əənà*

[tarĥk]_{CC} [əə]_{COP} = na
 precise **COP.IPFV**=DECL
 ‘That’s correct.’ (IR, T18:70)

¹⁹⁶ In fact, I do not believe that “Imperfective” and “Perfective” are the ideal terms to capture this difference, although “Present” and “Past” hardly seem any better. I am hopeful that a more refined analysis will become possible following additional research.

(347) *tarík eenà*

[tarík]_{CC} [ee]_{COP} = na

precise COP.PFV=DECL

‘It was correct (but somehow is no longer so or is no longer relevant).’ (IR, T18:70)

In the basic functions presented above, the two copulas are in complementary distribution, with well-opposed semantic values. However, each copula also occurs in a number of extended functions, exhibiting certain idiosyncrasies which possibly reflect their different diachronic origins. It is not yet completely certain that all of the functions to be identified below are synchronic copula functions, and/or are open to both copulas (at all or in the same way).

9.3.2.2. Clausal nominalization

Clausal nominalization is primarily discussed in the context of nominalization-based constructions in §15.3.2. In this section we simply review the argument for analyzing clausal nominalizations as copula clauses.

In a prototypical clausal nominalization, an uninflected predicate is nominalized in Realis event/Non-subject nominalizer *-nam*, which is in turn obligatorily followed by an Imperfective copula *əə* or, less often, a Perfective copula *ee* (348).

(348) *ŋó sikár innám eenà.*

[ŋó]_{CS} [sikar ín-nam]_{CC} [ee]_{COP} = na

1.SG hunting(<Asm) go-NZR:RLS COP.PFV=DECL

‘I had gone hunting (but failed to shoot anything).’ (MN, 16:133)

In (348), it will be noted that the first person singular pronoun refers to the Actor of the nominalized predicate in *ín-* ‘go’. It might therefore be wondered whether the subject of a predicate under clausal nominalization is indeed an argument of the higher (copula) clause, or might instead be internal to the nominalized clause; i.e., with reference to (348), *[ŋó sikár ín-nam]_{CC} [ee]_{COP} na*. This is a difficult problem, which may or may not have a single uniform solution. Although I cannot argue that subjects of clausal nominalizations are always or necessarily outside the nominalized clause – i.e. are always copula clause CS arguments rather than nominalized clause-internal subjects – it does seem to be demonstrable in at least some cases. For example, in (349), *hobó* ‘mithun’ takes topic

marking, and does not take Accusative-marking, despite the fact that it refers to the Patient of both the nominalized verbal predicate and the non-final predicates preceding it. It is also possible to mark *hobó* in the Accusative (350). In the first case, the nominalized predicate is understood as an event nominal, while in the second case, the nominalized predicate is understood as a non-subject nominal – “agreeing”, in a sense, with the marking accorded to CS. The semantic difference between the two clauses is subtle, and may in fact reflect a pragmatic difference in usage which is not yet understood. In any case, the point to be made here is that the CS arguments of (349)-(350) cannot be understood as S arguments of the nominalized predicates, inasmuch as it is never possible to mark a predicative clause O argument as a topic (351).

(349) *hobbó...jadî lokòm ohóo oggó rəllà...*

[hobó = əə]_{CS} [jadî lo = kòm ohóo-ók-gəré-là(a)
mithun=TOP how.much/many LOC=ADD rope-tie.up- ACNC-NF
rîl amáa nammó.

rîl-là(a) á-máa-**nam**]_{CC}[= əə]_{COP}
tie.up.animal-NF keep-NEG-NZR.RLS=COP.IPFV

‘The mithun...is the only animal that never ever gets kept tied up.’ (LN, MH 031)

(350) *hobbém jadî lokòm ohóo oggó rəllà...*

[hobó = əəm]_{CS} [jadî lo = kòm [ohóo-ók-gəré-là(a)
mithun=ACC how.much/many LOC=ADD rope-tie.up-ACNC-NF
rîl amáa nammó.

rîl-là(a) á-máa-**nam**]_{CC}[= əə]_{COP}
tie.up.animal-NF keep-NEG-NZR.NSUB=COP.IPFV

‘Mithuns are the only animals that never ever get kept tied up.’ (MN, T10:68, elicitation based on LN, MH 031)

(351) *{hobbém/*hobbó} jadî lokòm ohóo ogmáa dù.*

{hobó = əəm/hobó = əə}_O [jadî lo = kòm]_{OBL} [ohóo-ók-máa-dùu]_{PRED}
mithun=ACC/mithun=TOP how.much/many LOC=ADD rope-tie.up-NEG-IPFV
‘Mithuns are never tied up.’ (MN, T10:68, elicitation based on LN, MH 031)

Thus, it seems clear that an underlying argument of a nominalized clause *may* be expressed as CS of the higher copula clause, a fact which would argue in favour of analyzing clausal nominalizations as, basically, prototypical copula clauses with structure [[CS][CC][COP]] – despite the non-prototypical internal structure of the CC constituent. However, it is not obvious that this approach will necessarily account for all of the data. Future research in this area is certainly warranted.

9.3.2.3. Irrealis clausal nominalizations and speculative/counterfactual constructions

Clausal nominalizations in Irrealis non-subject/event nominalizer *-há* which occur as CC of a copula clause produce a speculative or counterfactual sense which often forms an element of Conditional constructions. In such constructions, the Imperfective copula is used when speculating upon an unrealized state of affairs which is currently pending, or which is being invoked as a future possibility (352)-(353). In these examples, note that the Imperfective copula surfaces as lengthening/full vocalic specification of the Irrealis nominalizer rhyme; in absence of the Imperfective copula, short final *-a* would be reduced to [ə] (cf. §4.1.3.6).

(352) *mərûm nensâa ne.*

[mərûm nèn-**há**]_{CC}[= **əə**]_{COP} né
 last.evening exit-NZR:IRR=COP.IPFV ADM
 ‘Actually, I had to go yesterday (but I didn’t, so I absolutely must go today).’ (lit., ‘it is a (still-pending) case of me having to go yesterday’) (MN, OLB4:116)

(353) *insáa bəré inmáa háa bəré?*

[ín-**há**]_{CC}[= **əə**]_{COP} bəre [ín-máa-**há**]_{CC}[= **əə**]_{COP} bəre
 go-NZR:IRR=COP.IPFV CJEC go-NEG-NZR:IRR=COP.IPFV CJEC
 ‘Should I go or not (I’m of two minds)? (lit., ‘is it a case of my (pending) going or...’) (IR, B5:49)

The Perfective copula is used to speculate upon a more distant or non-pending, also unrealized state of affairs, almost always within a larger Conditional construction. The same construction may be used to refer to potential events in past or future time (354)-(355).

(354) *jíjé meemáa booló, m̃lòəm*

[níi = **əə** méé-máa-boolo]_{COND} [m̃lòo = **əəm**
 person=TOP be.many-NEG-COND roof=ACC
kabɣám maahaè.
 káp-ɣám-máa-**há**]_{CC}[= **ee**]_{COP}
 shingle-EXH-NEG-NZR:IRR=COP.PFV
 ‘If there aren’t many people, we won’t be able to fully shingle the roof.’ (MN, B3:137)

(355) *ηό silapatár insaé nà, nó aamáá booló.*

[ηό]_{CS} [silapatár ín-**há**]_{CC}[=**ee**]_{COP} na [nó áa-máa-booló]_{COND}
 1.SG PLACE go-NZR:IRR=COP.PFV DECL 2.SG come-NEG-COND
 ‘If you hadn’t come, I would have gone to Silapathar.’ (MN, B8:27)

In a remarkable extension of this construction, Irrealis-nominalized clauses in *-há* which are marked in Individuator *go*, and which occur as Perfective copula complement as above, give rise to a *counterfactual* sense (356)-(357).

(356) *hilôo doopí haggé!*

[hilôo doopí-**há**=**go**]_{CC}[=**ee**]_{COP}
 today be.sunny-NZR:IRR=IND=COP.PFV
 ‘Had it only been sunny today!’ (lit., ≅ ‘were it a case of being sunny’) (IR, OLB4:33)

(357) *ηό silapatár insá geenà, biskút laad^pbà.*

[ηό]_{CS} [silapatár ín-**há**=**go**]_{CC}[=**ee**]_{COP}=na biskút làa-dó(o)=bó
 1.SG PLACE go-NZR:IRR=IND=COP.PFV=DECL biscuit take-STAT=SBRD
 ‘I should have gone to Silapathar (and returned) to get some biscuits (but I didn’t, and that’s why we don’t have any biscuits to serve the guests now).’ (MN, B8:27)

Note in (356) that *go* undergoes Initial gemination (§4.1.5.1) – normally not a property of *go* – and also that it appears to merge to the following copula in most conditions. It may be that this sequence is in the process of grammaticalizing as a distinct counterfactual copula *gee*, although a number of further tests must be conducted before this can be declared with any certainty.

9.3.3. Appositive clauses and negation

Appositive clauses make use of two negators *máa* and *móo*. The first and most general negator *máa* is homophonous with the Negative predicate inflection *-máa* ‘NEG’ (§12.2) as well as negative interjection *máa* ‘no’ (§13.7.3); *móo* is only very rarely represented outside copula clauses, and may represent an irregular retention or semi-

assimilated loan.¹⁹⁷ *máa* is used with the Imperfective copula *əə*, and like other copula operators (§13.3.2.3), follows the copula. *móo* is generally used with the Perfective copula, preceding it.

(358) *takkó má!*

[takó]_{CC} [=əə **máa**]_{COP}
 squirrel=COP.IPFV NEG
 ‘They’re not squirrels!’ (IR, FA 044)

(359) *əgə...hîin gakkó əgə...hîin gokú*

[əgə hîinə gakkóə əgə]_{CS} [hîinə go = kú]_{CC}
 ANAP.IND plant graspable.protrusionANAP.IND plant IND=CMPL
moé jî
 [**móo** = **ee**]_{COP} jî
 NEG.COP=COP.PFV DISC
 ‘That tree branch it seems was not actually a tree.’ (TR, FS 055)

I have few if any examples of negated verbless clauses in my data in which both VCS and VCC arguments are present, although several attested examples of negated noun phrases could in principle be analysed as negated Verbless clause complements, with the VCS argument ellipsed. It is generally possible to assume in such cases that VCS is “underlyingly” represented as a pronoun such as *əgə* ‘ANAP.IND’, with the basic sense ‘that one; it’. Whether such utterances are considered to be true verbless clauses or simply negated noun phrases, the negator in either case would appear to be *máa* (360).

(360) *jîizí maapó...jîp-roodó.*

jîizí máa = jîo jîpè-roodóo
 garbage.fly NEG=CEXP horsefly
 ‘Actually, not a garbage fly, a horsefly.’ (NyPB, LAT 082)

Copula negator *móo* has also sometimes been observed negating dependent clauses under matrix clause ellipsis. In this case, the negator exhibits Initial gemination (§4.1.5.1) in a prosodically qualifying context. Examples may be found in §16.5.3.

¹⁹⁷ Possibly, from *karkóo* Galo, a highly divergent northern dialect with which I have very little experience. PG **a* → *o* is very common in *karkóo*.

9.3.4. On the probable historical origin of the copula construction in a verbless clause

It will have been noted that the Imperfective copula is homophonous with Topic marker *əə*, an article which itself seems to derive from an anaphoric/addressee-proximate demonstrative (§14.2.1.3). It seems likely that the copula construction as it has been described above derives from a verbless clause in which the VCC constituent is marked for definiteness/identifiability via Topic marker *əə*, or a common historical source form.¹⁹⁸

As was noted in §9.3.1, a Verbless clause complement can under no circumstances be marked as a topic, nor can an Imperfective copula complement be marked by a demonstrative or individuator *go*. Thus, if we consider the range of pragmatic marking available to appositive clause complements in Galo, we find the following distribution (Table 9.4).

| Clause type | Ø | <i>go</i> | <i>əə</i> | DEM |
|----------------------------|---|-----------|-----------|-----|
| Verbless clause | x | x | - | X |
| Imperfective copula clause | - | - | x | - |

Table 9.4 – Distribution of pragmatic marking types among appositive clause complements

Accordingly, we might view the emergence of the Imperfective copula construction as in (361).

- (361) *bɪ̃* *ŋó-kə* *azèn* *əə*
 [3.SG]_{VCS} [1.SG-GEN friend **ART**]_{VCC} →
 → [3.SG]_{CS} [1.SG-GEN friend]_{CC} [COP.IPFV]_{COP}
 ‘He is my friend.’

However, in light of the ongoing complementary distribution expressed in Table 9.4, is it certain that the development represented in (361) has in fact occurred? Might an Imperfective copula clause not *still* be analyzable as a verbless clause?

There are two primary arguments against the latter analysis, and in favour of the identification of distinct imperfective copula clause and verbless clause types. The first is that, as was noted in §9.3.2, not only nominals/NPs but also *adjectives* may occur as a CC constituent. Adjectives *cannot* occur as a VCC constituent under any circumstances (i.e., taking any of the other types of pragmatic marking available, including zero), nor can

¹⁹⁸ Demonstrative → Copula is of course a well-attested grammaticalization path (Heine and Kuteva 2002); within Sino-Tibetan, it is found in Mandarin Chinese 是 *shì*.

they, in general, occur as a noun phrase head in any other context in Galo.¹⁹⁹ The second is that Imperfective copula *əə* forms a paradigm with Perfective copula *ee*, in many if not all of their respective functions. Thus, although it seems quite likely that the emergence of an Imperfective copula from a verbless clause construction was recent, and has left many distributional regularities of the source construction in its wake (some of which may translate to distributional *ir*regularities in the modern constructions, such as the differing positions of negation; see §9.3.3), evidence for the development as such would appear to be sufficient.

9.4. Cleft/focus constructions

A *cleft/focus construction* is a formally and functionally marked construction which exhibits structural features of both predicative and appositive clause types. In a prototypical cleft/focus construction, a single, pragmatically important constituent of an appositive or predicative clause is marked as “focused” by one of a wide variety of clause-final particles and often (but not obligatorily) “set off” from the remainder of the clause via left-dislocation. In terms of this construction, the focused constituent will be referred to as the “marked focus” and the particle which marks the focus as the “focus particle”. The remaining constituent will be referred to as the “topic”; schematically: $[[x]_{\text{PCL}}]_{\text{FOC}} [y]_{\text{TOP}}$ ‘[[it is x]_{FOC} [that y]_{TOP}’.²⁰⁰

We first discuss the relatively less-marked case of underlyingly appositive clauses in §9.4.1, then turn to more marked cleft/focus constructions based on underlyingly predicative clauses in §9.4.2.

9.4.1. Appositive cleft/focus construction

The focus of an appositive clause canonically occurs to the right (i.e., in (V)CC function), and does not *necessarily* require any special focus marking (§9.3.1). That fact

¹⁹⁹ This is not to say that individual adjectives cannot be zero-derived for use as nominals; as was discussed in §5.1.2, many of them can. However, this property cannot be generalized over the entire adjective class; by contrast, the ability of adjectives to occur in CC function *is* a categorical property of the adjective class.

²⁰⁰ The sense of “focus” used here is compatible with Lambrecht’s (1994) sense, in which “focus” is defined as any and all information contained in an assertion which significantly *differs* from what is presupposed, and further depends on Dryer’s (1996) inclusion of predicates/propositions among types of information which may be presupposed. I would tend to follow Mazaudon (2003) in reducing Lambrecht’s “predicate” and “sentence” focus to a single propositional focus type, which Mazaudon opposes to argument focus using the terms “broad” and “narrow” focus respectively. Ultimately, however, my purpose here is to describe the basic form of the cleft/focus construction, not to give an overall account of focus marking and constructions in Galo, a project which would require more detailed research into Galo discourse organization than has been conducted as of this writing.

notwithstanding, clause-final particles such as Declarative *na* mark the focus of an appositive clause more often than they do not, and possibly aid in disambiguating topic from focus in what is after all a relatively formally symmetrical construction (362). However, in an appositive focus construction, the focused constituent is fronted to the left of the clause; in this case, the focus is *obligatorily* marked by a focus particle (363).

(362) *îzig kaanám jiijó bîi nà.*

[izì = gə káa-nam níi = əə]_{VCS} [bîi na]_{VCC}
 present=GEN look-NZR:RLS person=TOP 3.SG DECL
 TOPIC FOCUS
 ‘The man (I’m) looking at now is him.’ (MN, B5:86)

(363) *hîgi nà ñòk kaanám jiijó*

[hîgi na]_{VCC} [ñó-kə káa-nam níi = əə]_{VCS}
 SPRX.IND DECL 1.SG-GEN look-NZR:RLS person=TOP
 FOCUS TOPIC
 ‘This is the man I’m looking at.’ MN, B5:86

Although the symmetrical structure of a verbless clause may cause it to appear as though the clause-final particle simply shifts position, that this is indeed a cleft/movement construction can be shown by the position of a copula in an appositive copula clause under leftward constituent focus marking: (364) shows that the copula follows the left-dislocated marked focus, while (365) shows that the copula cannot occur clause-finally when the leftward constituent is focus-marked.

(364) *hîg eenà ñòk kaanám jiijó*

[hîgi ee = na]_{FOC} [ñó-kə káa-nam níi = əə]_{TOP}
 SPRX.IND COP.PFV=DECL 1.SG-GEN look-NZR:RLS person=TOP
 ‘This was the man I was looking at.’ MN, B5:86

(365) * *hîgi nà ñòk kaanám jiiée*

[hîgi na] [ñó-kə káa-nam níi = ee]
 SPRX.IND DECL 1.SG-GEN look-NZR:RLS person=COP.PFV

9.4.2. Predicative cleft/focus construction

A *predicative* cleft/focus construction derives its basic structure from the appositive focus construction described in §9.4.1, and again consists of two major surface constituents, the marked focus and the presupposed topic. However, a predicative

cleft/focus construction is based *underlyingly* on a multi-constituent *predicative* clause; the surface, two-constituent appositive structure of the cleft/focus construction thus interacts with the underlyingly multi-constituent predicative clause structure in a number of ways.

First, the predicate of a predicative cleft/focus construction undergoes obligatory *nominalization* by one of the “Primary” nominalizers *-nà* ‘NZR:SUB’, *-nam* ‘NZR:RLS/NSUB’, *-há* ‘NZR:IRR’, or *-kò* ‘NZR:LOC/OBL’ (§15.2). The nominalized predicate then stands as the core constituent of the clause topic; it may be uninflected/stem-based (366) or inflected (367) (see §15 for definitions of these types).

(366) *mərûm né hukò.*

[mərûm né]_{FOC} [hú-kò = əə]_{TOP}
 last.night ADM wash.body-NZR:LOC/OBL=TOP
 ‘Don’t you see, *yesterday* is when I bathed.’ (IR, OLB4:56)

(367) *jâə bərəə pardûu kò?*

[jâ(ə) bərəə]_{FOC} [pâr-dûu-kò = əə]_{TOP}
 who CJEC make.fire-IPFV-NZR:LOC/OBL=TOP
 ‘Who might it have been who lit (this fire)?’ (KN, OLxx)

The focus particle describes a clear boundary between the marked focus and the topic. This is relatively easy to see in examples like (366)-(367), in which both the marked focus and the topic contain only a single internal constituent. When more than one constituent of the underlying predicative clause is included in the surface structure, they may be treated *either* as marked focus constituents, *or* as topic constituents. In most cases, underlying predicative clause constituents will retain whatever marking they would have taken in the underlying predicative clause – for example, O arguments will (when definitely referential) be marked in the Accusative, and Adverbials will (when derived) be marked by an adverbializing enclitic, etc. However, underlying predicative clause *subjects* are *zero-marked if and only if* they occur inside the *marked focus* (368). Underlying predicative clause subjects which are treated as *topic* constituents are obligatorily in the *Genitive* (369).

(368) *ɣunûk adiə hâmbə nə rîdəkò.*

[ɣunû-kə adi=əə hâmbə na]_{FOC} rî-dó(o)-kò=əə

1.PL-GEN TRIBE=TOP SPRX.PADV DECL do-STAT-NZR:LOC/OBL=TOP

‘This is how our Adi (people) make (houses).’ (lit., ≡ ‘It is **our Adi people**’s like this that (they) make (houses).’ (DM, OL23:132)

(369) *həkkâm nə ɣunûk ləbâə dookò.*

[həkə=əəm na]_{FOC} [ɣunû-kə lə-bâə-dó(o)-kò=əə]_{TOP}

SPRX.SEMB=ACC DECL 1.PL-GEN plant-HAB-STAT-NZR:LOC/OBL=TOP

‘This kind is what we used to plant.’ (lit., ‘It is this kind that is **our** used-to-plant (one).’) (MN, B5:87)

It is not entirely clear why a non-focused constituent of an underlying predicative clause can occur within *either* the marked focus *or* the topic of a predicative cleft/focus construction, or whether there is a significant pragmatic difference between one or the other grouping strategy (there is certainly no semantic difference). Although one might speculate that the First person plural referent constitutes a *secondary focus* in a sentence such as (368), while not at all under focus in (369), this cannot at present be demonstrated with any certainty.

Choice of *predicate nominalizer* in a predicative cleft/focus construction is generally determined by the underlying grammatical relation of the marked focus to the nominalized predicate; that is, a focused underlying subject will tend to select for a subject nominalizer *-nə* ‘NZR:SUB’, while a focused underlying O argument will tend to select for a non-subject nominalizer *-nam* ‘NZR:NSUB’ (cf. §15.3.2). However, variation of the nominalizer is also possible, and may yield subtle and intriguing differences of interpretation – particularly in interrogative cleft/focus constructions. For example, (370)-(371) are a minimal interrogative clause pair in which the predicate is nominalized in *-nə* ‘NZR:SUB’ in the first example and in *-kò* ‘NZR:LOC/OBL’ in the second. The *denotation* of the two sentences is basically identical; however, note that in (370), the locative/oblique nominalizer references the *location* of *jùp*- ‘sleep’, as might be expected given the locative marking on the focus-marked interrogative pronoun. By contrast, in (371), the subject nominalizer references the *actor* of *jùp*- ‘sleep’, despite that this is now *not* coreferential with the focused interrogative pronoun. Almost impossible to translate effectively into a corresponding English sentence pair, the effect of this alternation appears to be to highlight the relative *thematic importance* of one or another clause constituent – quite independently of the effect of focus marking and/or interrogative

pronoun choice. For example, while (370) might be uttered in the context of a conversation about sleeping-places, (371) would be (and in fact was) uttered in the context of a conversation about a person.

(370) *márk jóolo là jubdûu kò?*

[mark jòo = lo laa] [jùp-dùu-**kò** = əə]
 NAME what=LOC CQ sleep-IPFV-NZR:LOC/OBL=TOP
 ‘Where does *Mark* sleep?’ (lit., ≡ ‘It is where that Mark is sleeping?’) (TR, 16:52; elicitation based on (371))

(371) *mark jóolo là jubdûu nà?*

[mark jòo = lo laa] [jùp-dùu-**nà** = əə]
 NAME what=LOC CQ sleep-IPFV-NZR:SUB=TOP
 ‘Where does Mark *sleep*?’ (lit., ≡ ‘Mark is a sleeping-where person?’) (TR, OL16:52)

Focused constituents sometimes exhibit non-canonical marking with respect to their function in the underlying predicative clause, which may at least in part relate to their basic surface status as appositive clause constituents. For instance, in (372) the focused noun phrase is unmarked for case, despite that it underlyingly refers to a *non-subject* argument of *ník*- ‘punch’. This seems to reflect the surface syntactic status of the focused noun phrase as an appositive clause subject. In absence of case-marking, both *goal* and *locative* construals (associated with locative/oblique nominalizer *-kò*) are possible. In (373) however, the focused noun phrase is marked in the accusative, and now, *only* the goal reading is possible. This seems to relate to the usual status of semantic goals as E (extension to core) arguments in Galo, and the association of accusative case marking with E argument status (§14.1.3.8).

(372) *hîgî nà níkkò.*

[hîgî na] [ník-kò = əə]
 SPRX.IND DECL punch-NZR:LOC/OBL=TOP
 ‘This is the place on which I was hit.’ (goal focus) *or*
 ‘This is the place where I was hit.’ (locative focus)

(373) *hîgîm nà níkkò.*

[hîgî-**m** na] [ník-kò = əə]
 SPRX.IND-ACC DECL punch-NZR:LOC/OBL=TOP
 ‘This is the place on which I was hit.’ (goal focus) *but not*
 * ‘This is the place where I was hit.’ (locative focus)

In terms of discourse functions, interrogative cleft/focus constructions are among the most frequent means of asking content questions (§9.5.1.2). Declarative focus constructions are relatively rare, being generally used in cases when a speaker wishes to draw unusually high attention to a contrastive referent, especially one whose identity was explicitly in question. Accordingly, a declarative focus construction is the normal rejoinder to an *interrogative* focus construction (374).

(374) *A: nó jòolo là ìṅkò? B: ací bogín gə*

| | | | | |
|--------------|-------------|--------------------|---------------|------------|
| [nó jòo = lo | laa] | [ín-kò = əə] | [ací | bogin = gə |
| 2.SG | what=LOC CQ | go-NZR:LOC/OBL=TOP | elder.brother | NAME=GEN |

nám âlo nà ìṅkò.

| | | | |
|-------|-------------------|--------------------|--------------|
| namá | alò | na] | [ín-kò = əə] |
| house | DST.LOC.SLEV DECL | go-NZR:LOC/OBL=TOP | |

A: 'Where have you been?' B: 'I've been to Aci Bogin's house.' (MN, OL19:58)

Finally, it may have been noted that in all of the above examples with the exception of (363)-(364) – that is, all examples involving a nominalized predicate – a Topic marker əə is given in the interlinearization, but is never visible (audible) on the surface. This perhaps inconvenient fact is due to a convergence of several phonological factors which need not be reviewed at length here, but which are discussed and exemplified in §4.2.3. For present purposes, it will suffice to show that in a qualifying phonological context, the underlying presence of əə in these constructions can be adequately demonstrated; in (375), note that underlying əə triggers gemination in the underlying CVCV phonological word /rəko/, following the regular process of Triggered foot-strengthening (§4.1.4.6).

(375) *higîm amó higîm nà ṅunûk*

| | | | | |
|--------------|-------|--------------|------|----------|
| [higî-m | amó | higî-m | na] | [ṅunû-kə |
| SPRX.IND-ACC | paddy | SPRX.IND-ACC | DECL | 1.PL-GEN |

lètê rəkkò.

| |
|--------------------------------|
| lè-tà-rə-kò = əə] |
| plant-INCP-IRR-NZR:LOC/OBL=TOP |

'It's this paddy here that's the one we're to plant tomorrow.' (MN, B5:87)

9.5. Non-declarative clause types

In this section, types of non-declarative predicative and appositive clauses are discussed. We first review interrogative clause types (§9.5.1), followed by imperatives, hortatives and suggestives (§9.5.2).

9.5.1. Interrogative clauses

Galo interrogatives are divided into *polar* (a.k.a. “yes/no”) and *content* (a.k.a. “WH-”) subtypes.

9.5.1.1. Polar interrogative clauses

The function of a polar interrogative clause is to ask an addressee whether he or she believes a particular assertion made by the speaker to be in fact the case (‘yes’) or not (‘no’).

In Galo, polar interrogatives are formed according to one of three basic patterns, all of which are based closely on (i.e., do not involve significant reorganization of) main declarative clause syntax.

- 1) tag particles
- 2) interrogative particles
- 3) preferred inflections

9.5.1.1.1. Tag particles

The simplest and most frequent means of forming a polar question is via one of a variety of tag particles, all of which occur as enclitics to a main declarative clause (in any person). Most tag particles represent intonational and/or segmental variants of a “versatile” particle with the core segmental form $(?ə)i$, with correspondingly different pragmatic implications (described in §13.5.1), and may in turn be supplemented in their use by phrasal intonation. The tag particle may directly follow the copula/predicate, or it may follow any other occurring particles, including interrogative particles (§9.5.1.1.2). The resulting construction has the overall sense of an assertion whose validity the speaker wishes to check with the addressee. It and all other polar questions may be answered in *mm* ‘yes’ or *máa* ‘no’, and/or in a repetition of the questioned clause (or some portion

thereof, but always including the predicate) in positive or negative polarities. (376) illustrates a question-response pair in a predicative clause structure; (377) illustrates use of a tag particle in an appositive clause.

- (376) *A: nó acín dokai? B: má, domá.*
 [nó acín dó-káa = (ə)ĩ] [máa dó-máa]
 2.SG cooked.rice eat-PF=ETAG no eat-NEG
 ‘A: Have you eaten (believing you have)? B: No, I haven’t.’

- (377) *abbó ku əĩ.*
 abó = əə = kú (ə)ĩ
 father=COP.IPFV=CMPL ATAG
 ‘(He’s) a father, **isn’t he.**’ (MK, TT 143)

9.5.1.1.2. Interrogative particles

The most explicit means of forming polar questions is via one of several available illocutionary force particles, all of which occur in the same (predicative or appositive) clause-final syntactic position, but which vary in terms of semantic value and pragmatic implications. Among them, *ree* ‘PQ’ is the functionally “unmarked” polar question marker (378)-(379). A table of all currently-attested interrogative particles together with further discussion and examples may be found in §13.3.3.

- (378) *nó məə máa duurè?*
 nó móə-máa-dùu = **ree**
 2.SG think/want/like-NEG-IPFV=PQ
 ‘Don’t you like it?’

- (379) *nó galôə rè?*
 nó galôə = əə **ree**
 2.SG TRIBE=COP.IPFV PQ
 ‘Are you (a) Galo?’ (TN, OL6:29)

9.5.1.1.3. Preferred inflections

An inflected predicative clause with a second person subject may take on polar interrogative illocutionary force in certain aspects, usually with a marked falling intonation. The preferred form for polar questions in a perfect(ive) aspect is Experiential

perfect *-bée* (§12.3.2.7); the preferred form for polar questions in an imperfect(ive) aspect is Stative *-dó(o)* (§12.3.2.2).

(380) *nó acín dobbê?*

nó acín dó-bée=̀
 2.SG cooked.rice eat-EPF=FI
 ‘Have you eaten (yet)?’ (*/? ‘You’ve ever eaten.’)

(381) *nó inlîi dò?*

nó ín-lîi-dó(o)=̀
 2.SG go-DESD-STAT/PQ=FI
 ‘Do you want to go?’ (*/? ‘You generally want to go’)

I have the impression that these conventions may be further grammaticalizing, especially in the speech of younger Galo and/or residents of Assamese contact areas. For many of them, a main declarative clause in Stative *-dó(o)* is almost always viewed as having interrogative force, even in first or third person subjects. At the same time, several of my older consultants and those residing away from Assamese contact areas have criticized overuse of preferred inflections among some “foothills” Galo, and have indicated to me that they in turn sometimes find it difficult to determine whether the speaker intends to form a question or a statement. It remains to be seen exactly how this development will play out in the speech of future generations.

9.5.1.2. Content interrogative clauses

The function of a content interrogative clause is to question some aspect of a state of affairs about which some amount of detail is known, usually by replacing the constituent of a phrase or clause which is under question with an interrogative pronoun. Galo content interrogatives are formed according to one of three structural patterns:

- 1) in-situ
- 2) constituent-internal
- 3) cleft/focus

Use of one or another pattern is dependent on a variety of factors, including the type of interrogative pronoun used, the constituent being questioned, the nature of the predicate/clause type being used to form the question (appositive, predicative and/or

subtype thereof) and the precise nature of the illocutionary force the speaker hopes to achieve. The resulting picture is complex, and has not yet been comprehensively investigated. The following subsections will present the basic patterns involved; a number of the individual distributional characteristics of interrogative pronouns are also discussed in §7.3, where their indefinite uses are also reviewed. Some additional remarks on content question-marking particles are also found in §13.3.3. Ultimately, however, a good deal more research must be conducted before an exhaustive description of Galo content interrogatives can take shape.

9.5.1.2.1. In-situ

In-situ content interrogatives are formed via replacement of a questioned phrase or clause constituent with an appropriate interrogative pronoun. In-situ questioning of clause constituents in Galo *predicative* clauses is not always possible, since the sense of many such constructions is *indefinite* rather than interrogative (cf. §7.3). Where they do occur, such questions often have an informal feel (382)-(384).

(382) *jôo ríkáa kú? kanó kaakú.*

[jòo]_S [rì-káa-kú]_{PRED} kanó-káa-kú
what do-PF dark-PF-CMPL
 ‘**What** happened? It got dark.’ (IR, FA 011)

(383) *acinóm jêə “máa” əmdəbə!*

[acín = əəm]_O [jê(ə)]_A [máa]_E [əm-dó(o) = bó]_{PRED}
 cooked.rice=ACC **who** no say-STAT=SJNC
 ‘**Who** can say no to rice!’ (IR, OLB4:101)

(384) *nó jâdîgo dorká?*

[nó]_A [Ø jâdî = go]_O [dór-káa]_{PRED}
 2.SG **how.much/many**=IND pay-PF
 ‘You paid **how much (money)?**’ (MN, B3:104)

In-situ use of interrogative pronouns in *appositive clauses* is common, and may be unsupported or supported by an appropriate clause-final interrogative particle; unsupported interrogative clauses again tend to have a less formal feel. Although it cannot yet confidently be stated as a categorical requirement, the questioned constituent occurs in (v)cc function with overwhelmingly greater frequency in my data (385)-(387).

(385) *ŋók rokčíkə jóol là?*

[ŋók-kə rokčík = əə]_{VCS} [jòo = lo]_{VCC} (laa)
 1.SG-GEN knife=TOP **what**=LOC (CQ)
 ‘Where’s my knife?’ (TR, 14:112)

(386) *jòo əəkú cóm?*

[jòo]_{CC} [əə = kú]_{COP} com
what COP.IPFV=CMPL GUES
 ‘What can it be?’ (TR, FA 054)

(387) *nó jêək aowê là?*

[nó]_{CS} [[jêək-kə]_{GENP} [aò]_{NOM}]_{CC} [= əə]_{COP} laa
 2.SG **who**-GEN child=COP.IPFV CQ
 ‘Whose child are you?’²⁰¹ (Sili, OLxx)

9.5.1.2.2. Constituent-internal

A subset of the available interrogative pronouns, including *jòo* ‘what’ and *jadĩ* ‘how much/many’ can occur inside a questioned NP, modifying the questioned NP head in a preposed position, unmarked for dependency (such as Genitive phrase-marking, as in (387)) or any other indication of modifier status. This is a highly unusual type of patterning in Galo, inasmuch as most modifying NP constituents occur post-head (§6.1.2.1) (388)-(389).

(388) “*ŋó a/...ŋó...ŋók amînə jóo amîn eè bəré?*”

ŋó ŋó [ŋók-kə amîn = əə]_{CS} [jòo amîn]_{CC} [eè]_{COP} bəree = ‘
 1.SG 1.SG 1.SG-GEN name=TOP **what name** COP.PFV CJEC=NF11
 “My na/...I...What in fact was my name?” (lit., ‘my name was **what name**?’) (MK, TT 209)

(389) *jád aták gó galên rá dĩ?*

[jadĩ aták = go]_O [gá-lên-rá]_{PRED} dĩ
how.much/many CLF:FLAT.PIECE=IND pare-EXIT-IRR WOND
 ‘How many pieces (of betelnut) will you be able to cut (from the whole)?’ (KN, OL23:73)

²⁰¹ This innocuous-sounding expression is in fact a traditional Galo expression of laying down the gauntlet, as when one perceives another to have acted out of turn or caused great offence.

9.5.1.2.3. Cleft/focus

The most explicit, versatile and frequent means of forming a content question is via an interrogative cleft/focus construction, discussed in the broader context of cleft/focus constructions in §9.4. Most types of constituent may be questioned in this manner (390)-(391).

(390) *jêəm là kaakò?*

[jê(ə)-m = laa]_{FOC} [káa-kò = əə]_{TOP}
who-ACC=CQ look-NZR:LOC/OBL=TOP
 ‘Who did you look at?’ (KN, 16:95)

(391) *nó jêək îŋko lolà întə duukò?*

[nó jê(ə)-kə ín-kò = lo = laa]_{FOC} [ín-tà-dùu-kò = əə]_{TOP}
 2.SG **who-GEN** **go-NZR:LOC/OBL=LOC=CQ** go-INCP-IPFV-NZR:LOC/OBL=TOP
 ‘With whom are you going to Silapatar?’ (MN, B5:103)

9.5.2. Imperative, hortative and propositive clauses

Non-declarative clauses other than interrogatives more closely resemble main declarative clauses in terms of basic syntax and marking. Specific indications of illocutionary force are encoded in most cases either via different modality inflections (§12.4.2), via clause-final particles (§13.3.1), or via a combination of the two. Intonation sometimes plays a role, particularly in cases where imperative or other non-declarative speech act markers are homophonous with and probably derived historically from aspectual suffixes. Most imperatives and hortatives are obligatorily second person in Galo, although some suggestives can only occur in first person; these are discussed in several subsections in §12.4.2. Third person hortatives can only occur if licensed via a special particle *pəna* (with a third person subject; see §13.3.1.3), or else by Causative derivation *-mò* ‘CAUS’ (with a third person object; see §11.2.5.3). Two illustrative examples only are given here (392)-(393); for further discussion and examples, see the sections referenced above.

(392) *əkkəm menjó kém.*

[əkə = əəm]_O [mén-jó]_{PRED} = kée = m
 ANAP.SEMB=ACC speak-**PROH**=HORT.POL=RSOL
 ‘Don’t say that sort of thing.’ (MK, LW 018)

(393) *ŋó mozí hookù.*

[ŋó]_A [mò-zí-**hòò**-kú]_{PRED}

1.SG make-BEN-**PERM**-CMPL

‘Let me finally do it for you (since you’ve tried so many times without success).’

(MN, OLB6:99)

10. Predicate complex

10.1. Overview

Chapters §10-§12 discuss aspects of the *predicate complex*. By “predicate complex”, is meant a word or closely-related, tightly-clustered set of words which together realize the *head of a predicative clause* (§9.2), from which clausal argument structure and temporal-aspectual structure are projected and on which clause-level inflections (such as Aspect and Modality suffixes) occur.

Galo predicates are prototypically headed by a *verb* (“prototypically” in the sense of having the greatest statistical frequency and greatest set of structural/behavioural possibilities). However, the term “verb phrase” is avoided for two reasons; first, because of the technical sense in which this term is traditionally used, namely as a high-level clause constituent consisting of a verbal head plus a variety of other phrase- or word-level syntactic constituents (Haegeman 1991:78-88). Clear evidence for such a high-level constituent has not yet been discovered in Galo. Second, because it is also possible for *adjectives* to stand as head of a predicate complex (see §5.1.2). Additionally, the term “phrase” is avoided more here because of the normal implications of head/dependent internal syntactic constituencies. Unlike other types of “phrases” identified in Galo (especially the noun phrase; see §6.1.2), a Multiword predicate complex is not always clearly divisible into hierarchical constituencies *in the same sense* (cf. the discussion of Multiword predicates in §10.5). Finally, we can note that clause-final particles – which often quite clearly have clause-level rather than phrase-level scope – are often difficult to characterize as clearly “within” or “outside” of a grammatical phrase headed by the predicate. For these and other similar reasons, the albeit somewhat ambiguous term “complex” is preferred in this work to the more precise yet potentially misleading term “phrase”.

In the remainder of the chapter, §10.2 presents an overview of basic predicate structure. §10.3 identifies three possible stem types and discusses their different possibilities for derivation and inflection, and §10.4 briefly discusses predicate transitivity and argument structure. In §10.5 we discuss more complex “Multiword predicates”; §10.6 closes with a discussion of possibilities for predicate word-internal “interruption” by “versatile” particles.

10.2. Basic predicate structure

A prototypical main/final clause predicate is headed by an obligatory predicate stem, optionally expanded by predicate derivations, and obligatorily terminated by a predicate inflection. The basic structure is schematized in Table 10.1/Figure 10.1, and exemplified in (394).

- 1) **STEM** – Predicate stem
- 2) **PDER** – Predicate derivations
- 3) **PINFL** – Predicate inflections

Table 10.1 – Elements of a final predicate

[STEM] + ([PDER]) + [PINFL]

Figure 10.1 – Basic structure of a final predicate

(394) *ŋó inl̩ɛ̀ d̀ù.*

ŋó [[ín-]_{STEM}[-l̩ɛ̀]_{PDER}[-d̀ùu]_{PINFL}]_{PRED}
 1.SG go-DESD-IPFV
 ‘I want to go.’

The obligatoriness of the head is almost exceptionless. *Very* rarely, predicate head-ellipsis is observed in rejoinders to polar questions involving derived predicate stems, but this possibility seems to be licensed by only a tiny handful of predicate derivations – possibly, only two.²⁰² The obligatoriness of inflections is similarly almost exceptionless, although there are a few examples in my data in which derived predicate stems stand uninflected as head of a final predicative clause. Although such cases do not constitute even a tenth of one percent of my data, and quite clearly have an informal feel to them, my consultants have not generally described them as ungrammatical (395). No examples at all of underived headless or uninflected predicates occur in my data (396).

(395) *booló aamáa dabó jopcô.*

[bóol = əə áa-máa-dá(a) = bó]_{ADV} [jòp-cóo]_{PRED}
 [ball(<Eng)=TOP come-NEG-ACHV=SBRD] **jump-FIRST**
 ‘He jumped (to head it) before the ball was there (lit., ≅ ‘(During/at) the ball not-yet-arriving, he **jumped early**.’).’ (IR, OLC1:63)

²⁰² Namely, Abilitative derivation *-l̩(a)* cf. §11.2.6.2, exx. (585)-(586) and Reflexive *-hí* (§11.2.5.9; not exemplified).

- (396) **bɛ̃ jòp*.
 bɛ̃ *jòp-*
 3.SG jump

10.3. Predicate stem types, predicate derivations and predicate inflections

It is useful to draw a preliminary distinction between three basic stem types, which will be called *Type A*, *Type B* and *Type C*. A *Type A* predicate stem consists of a single, morphologically simplex, bound verb root, such as *dó-* ‘eat’ or *ín-* ‘go’. A *Type B* predicate stem is complex, and consists of a bound verb root plus a stem-expanding derivation, as in *dó-lɛ̃* ‘eat-DESD’ ‘want to eat’ and *dó-kèn* ‘eat-GOOD/EASY’ ‘delicious’. A *Type C* predicate stem consists of a simplex or complex adjective, such as *zèe* ‘green/blue’, *híkár* ‘cool/cold’ (both simplex) or *ɕár-tə̀* ‘CLF:GRAIN-big’ ‘big-grained’ (complex) (Table 10.2).

| Type | Composition | Example | Gloss |
|------|------------------------|---------------|-------------|
| A | Verb root | <i>ín-</i> | ‘go’ |
| B | Derived predicate stem | <i>ín-lɛ̃</i> | ‘go-DESD’ |
| C | Adjective | <i>híkár</i> | ‘cool/cold’ |

Table 10.2 – Basic predicate stem types

Among *inflections*, all three stem types may directly host a Negative suffix *-máa* ‘NEG’ (§12.2) and Irrealis suffix *-rɛ̃* (§12.4.1), as well as most types of primary and secondary aspectual suffix (§12.3). Modality suffixes denoting non-declarative speech-act functions such as imperatives (§12.4.2) occur on Type A stems, as well as some but not all Type B stems, and few if any Type C stems. Non-final marking and other clause-continuity suffixes (§16.3.2, §16.4) are available to all three stem types.

Among *derivations*, all three stem types may be nominalized by primary nominalizers *-nà* ‘NZR:SUB’, *-nam* ‘NZR:RLS/NSUB’, *-kò* ‘NZR:LOC/OBL’ and *-há* ‘NZR:IRR’ (§15.2). Adverbialization in predicate enclitic *bɛ̃* ‘AVZR/SBRD/DAT’ (§16.5.1) is always available to stem Type C, and sometimes to B, but never to A. Predicate derivations can expand stem Type A, can sometimes (further) expand stem Type B, and can less often expand stem Type C.

Finally, with respect to “grammatical word” status, we can note that while Type C stems can always stand as independent grammatical words, and Type A stems never can, Type B stems usually but not always do so. Table 10.3 summarizes these possibilities.

| Type → | A | B | C |
|-----------------------|-----------|--------------------|-----------|
| Composition → | Verb root | Derived Pred. Stem | Adjective |
| Feature ↓ | | | |
| Non-final marking | yes | yes | yes |
| Negation inflection | yes | yes | yes |
| Irrealis inflection | yes | yes | yes |
| Aspect inflection | yes | yes | most |
| Modality inflections | yes | some | few/none |
| Predicate derivations | yes | some | few |
| Nominalization | yes | yes | yes |
| Adverbialization | no | some | yes |
| Grammatical word? | no | often | yes |

Table 10.3 – Stem types and inflection/derivation

On the basis of the distribution outlined in Table 10.3, one might conclude that while prototypically verbal (A) and prototypically adjectival predicates (C) can be clearly distinguished, derived predicate stems (B) can be more or less verb- or adjective-like in their behaviour. It may ultimately be possible to further subdivide derived predicate stems into “verbal” and “adjectival” subclasses, however that has not been accomplished as of this writing. Some additional discussion on the verbal vs. adjectival nature of derived predicate stems may be found together with relevant in several of the sections referenced above, as well as in §11.

10.4. Predicate transitivity and argument structure

A predicate projects the argument structure of a predicative clause (§9.2). The transitivity of a predicate is in turn a function of its internal constituents. A predicate of simple stem Type C (adjectival) is generally intransitive (§5.2.3.1). A predicate of simple stem Type A (verbal) derives its argument structure directly from the lexically-specified transitivity of the head verb root (§5.2.4.1).

A predicate of complex stem Type B may have a wide variety of transitivity specifications, which are a product of the interaction of the head root together with its one or more derivations. Some predicate derivations function to *reduce* transitivity, often as an outcome of adjectivalization. In (397)-(398), predicate derivation *-kèn* ‘GOOD/EASY’

“raises” the underlying Patient O of transitive verb *tʰi-* ‘imbibe’ to S and suppresses the underlying Actor A.

(397) *ŋó fleegám tʰicém dù.*

[ŋó]_A [fléek=əəm]_O [tʰi-cém-dùu]_{PRED}

1.SG BRAND=ACC imbibe-LIKE-IPFV

‘I like to smoke **Flake (cigarettes)**.’ (elicitation based on KZ, OL9:104)

(398) *fleegó tʰikên má.*

[fléek=əə]_S [tʰi-kên-máa]_{PRED}

BRAND=TOP imbibe-GOOD/EASY-NEG

‘**Flake (cigarettes)** are disgusting.’ (lit., ‘not good to smoke’) (KZ, OL9:104)

Other predicate derivations function to *increase* transitivity, generally by way of an applicative derivation. In (399)-(400), Comitative applicative *-gá* extends the transitivity of *dó-* ‘eat’ by adding an E argument understood as a non-volitional co-participant/actor. (401) shows that an E argument cannot occur in the syntax in absence of a Comitative (or other appropriate) applicative.

(399) *ŋó ŋojjám dodù.*

[ŋó]_A [ŋoí=əəm]_O [dó-dùu]_{PRED}

1.SG fish=ACC eat-IPFV

‘I eat fish.’

(400) *ŋó ŋojjám nó m dogá dù.*

[ŋó]_A [ŋoí=əəm]_O [nó-m]_E [dó-gá-dùu]_{PRED}

1.SG fish=ACC 2.SG-ACC eat-COMT-IPFV

‘I feed you fish/provide fish for you.’ (lit., ‘I bring you on my eating of fish.’)

(MN, T16:4)

(401) **ŋó ŋojjám nó m dodù*

[ŋó]_A [ŋoí=əəm]_O [nó-m]_E [dó-dùu]_{PRED}

1.SG fish=ACC 2.SG-ACC eat-IPFV

For additional discussion of transitivity and argument structure, see §14.1.1. For additional discussion of adjectivalizing and applicative derivations, see §11.2.4.2 and §11.2.5.1 respectively.

10.5. Multiword predicates

Up to now, we have only considered predicates which are composed of a single grammatical word, with linearly-unfolding head-dependent constituency. In this section we discuss *Multiword predicates*. Multiword predicates are morphologically complex; they are also composed of more than one phonological word, and, in a special sense to be outlined below, may also constitute a sequence of multiple grammatical words. However, the “words” contained in a Multiword predicate are *not syntactically independent*, and cannot occur outside of a Multiword predicate construction; hence, Multiword predicates are *not* describable as “serial verb constructions” or “complex predicates” in the traditional senses of these terms.

10.5.1. Structure

The core of a Multiword predicate is a *discontinuous constituent*, which may be one of three attested types:

- (a) Discontinuous compound verb (DCV) (§5.3.2.3)
- (b) Discontinuous predicate derivation (DPD) (§11.3.1)
- (c) Expressive semi-reduplication (ESR) (§11.3.2)

For the purpose of this discussion, the forms in (a)-(c) will be referred-to as the *primary formatives* of a Multiword predicate. By “primary formatives” is meant a set of morphemes which project the basic framework around which a Multiword predicate is organized, and in terms of which it is defined. Note that this concept of “primary formative” is different from that of “head”; in a Multiword predicate, the primary formatives *may* constitute the predicate head, or may not.

The types of primary formative are first exemplified in Table 10.4; for full tables of the attested forms, see the sections referenced above.

| Type | Example | Gloss | F1 | Gloss | F2 | Gloss |
|------|----------------------|------------------------|-------------|---------------|---------------|----------------|
| DCV | <i>dó-...làa-</i> | ‘subsist’ | <i>dó-</i> | ‘eat’ | <i>làa-</i> | ‘take’ |
| | <i>pɪ-...pàa-</i> | ‘make a living’ | <i>pɪ-</i> | ‘craft’ | <i>pàa-</i> | ‘get’ |
| DPD | <i>-pàa...-là(a)</i> | ‘WHATEVER’S AVAILABLE’ | <i>-pàa</i> | ‘ATTN’ | <i>-là(a)</i> | ‘ABIL’ |
| | <i>-kúp...-lék</i> | ‘HELTHER SKELTER’ | <i>-kúp</i> | ‘UPSIDE DOWN’ | <i>-lék</i> | ‘RIGHTSIDE UP’ |
| ESR | <i>-bǎǎ...-jǎǎ</i> | ‘DURATIVE’ | <i>-bǎǎ</i> | ‘DUR’ | <i>-jǎǎ</i> | ‘RDUP’ |
| | <i>-pèn...-jèn</i> | ‘SEPARATE’ | <i>-jèn</i> | ‘SEP’ | <i>-jèn</i> | ‘RDUP’ |

Table 10.4 – Primary formatives of Multiword predicate constructions

Given a set of primary formatives, we can then identify a *constructional template* against which the remainder of a multiword predicate is constructed. The constructional template of a Multiword predicate minimally consists of two additional morpheme positions which we can describe as being *projected* by the primary formatives. In the case of a discontinuous compound verb, the two lexically-specified root positions *project* two suffix positions. For a discontinuous verb derivation or expressive reduplication, the two lexically-specified suffix positions *project* two verb root positions (Figure 10.2).²⁰³

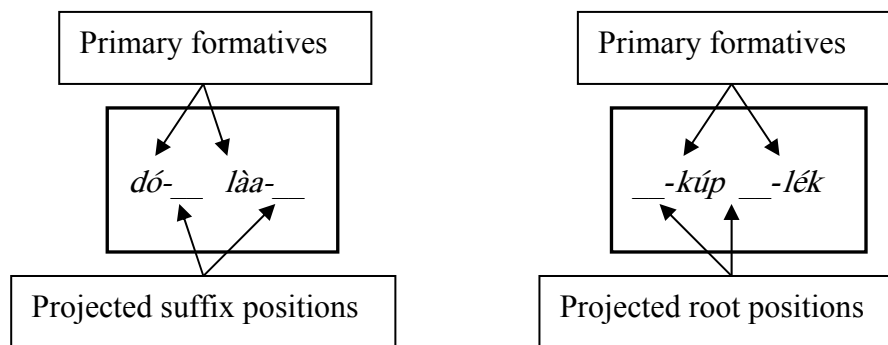


Figure 10.2 – DCV Template

DPD/ESR Template

Given two projected suffix or root positions, it then becomes necessary for them to both be filled. In the case of a discontinuous compound verb, the two projected suffix positions are generally filled by *separate iterations* (i.e., a repetition) of *whatever morpheme* immediately depends on the root. In the case of a discontinuous verbal derivation or expressive reduplication, the two projected root positions are generally filled by two iterations of the head verb root (Figure 10.3).

²⁰³ There is basically one grammatical reason for both of these facts, which is that verb roots and suffixes are both types of bound morpheme.

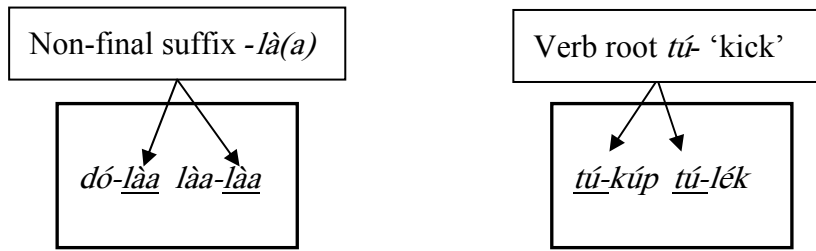


Figure 10.3 – DCV Projected SFX positions filled DPD/ESR Projected root positions filled

The resulting quadrisyllabic constructions are invariably represented as two phonological words, as *dolâa laalâa* ‘sustained oneself, and...’ and *tukúp tulék* ‘kick (something) all over the place’. However, in each case the constructions retain the status of a *single grammatical predicate*, with a *single overall denotation*, a *single head* and a *single set of dependents*. This is an important point; although a Multiword predicate may superficially appear to represent a clause chain, serial verb construction, or compound verb, none of these analyses are in fact tenable. This is because a clause chain or serial verb construction consists of a series of elements with a degree of syntactic independence, and which usually stand in some hierarchical relation. However, the elements of a Multiword predicate have *no syntactic independence*, and so can stand in no such relation. Instead, a Galo Multiword predicate represents a *single grammatical word*, whose surface structure is adjusted to accommodate the fact that one or more of its constituents is specified for *multiple, discontinuous realizations*. The mapping relation between the underlying structure of a Galo Multiword predicate and its surface realization might be informally represented as in Figure 10.4.

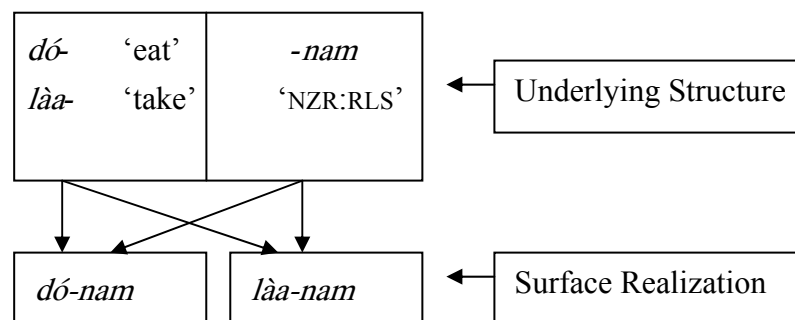


Figure 10.4 – Mapping relation between underlying and surface structures of nominalized DCV functioning as multiword predicate

Although such uses are rare in my corpus, it is also possible for a Multiword predicate to be formed around a discontinuous compound verb *and* a discontinuous predicate derivation or expressive semi-reduplication simultaneously. The only difference

now is that since all four template positions are filled by lexically-specified formatives, no reiteration of these or any other morphemes is necessary (Figure 10.5).

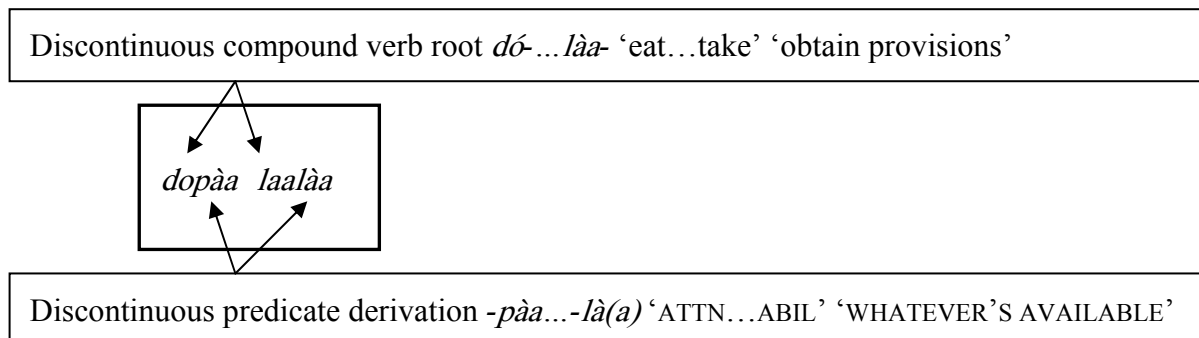


Figure 10.5 – Multiword predicate formed by combination of DCV and DPD

Up to this point, we have only discussed the *core* of a Multiword predicate, namely the two phonological words composed of its primary formatives and their two projected root or suffixal positions. However, when a predicate is realized in a particular grammatical function, such as head of a predicative clause, it may of course exhibit several additional suffixal positions, relating to aspectual or modality specification and so on. In the case of a Multiword predicate, once all four positions of a Multiword predicate template have been filled, any remaining suffixes or enclitics pertaining to the predicate simply take their positions in turn (402)-(403). Note that since there are no remaining positions in the template, remaining suffixes are not reiterated. For example, ?*dolâaku laalâaku* is not an acceptable alternative to (402).²⁰⁴

- (402) *dolâa laalâa kú*
 dó-là(a) làa-là(a)-**kú**
 eat-NF take-NF-CMPL
 'came to make a living'

²⁰⁴ ?*dolâaku laalâaku* is grammatical only as a casual-speech reduction of a clause-coordination *dolâaku(,)*

okkóo *laalâaku* 'came to eat and came to drink (as after having been ill with rabies, e.g. and not having drunk or eaten over that period)'. That is to say, it can only be analysed as a *sequence* of coordinated verbs, which should furthermore be marked by an intervening prosodic pause; it cannot be described as a Multiword predicate.

- (403) *tukúp tulék ká*
 tú-kúp tú-lék-**káa**
 kick-OVERTURN.1 kick-OVERTURN.2-PF
 ‘kicked it over’

The mapping relation between the underlying structure and the surface realization of a Multiword predicate with more than one suffix position may be informally represented as in Figure 10.6.

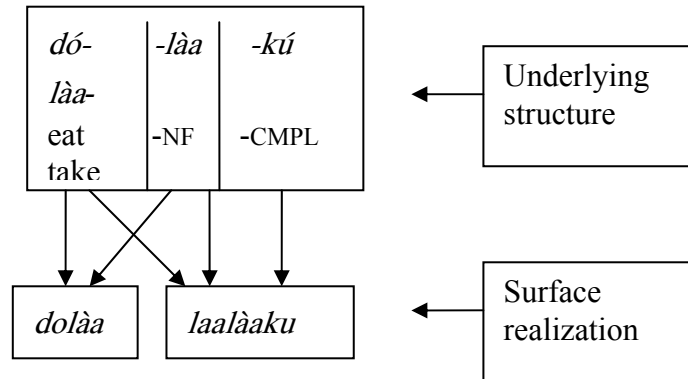


Figure 10.6 – Mapping relation between underlying and surface structures of discontinuous compound verb with more than one suffix

As shown in (402)- (403), and in Figure 10.6, a Multiword predicate with three underlying suffixes is realized as two phonological words, in which the third underlying suffix terminates the second phonological word. In case there are more than three underlying suffix positions, the two final suffix positions occur as a separate phonological word, as is the Galo norm (404) (Figure 10.7).

- (404) *tukúp tulék kaakú*
 tú-kúp tú-lék-**káa-kú**
 kick-OVERTURN.1 kick-OVERTURN.2-PF-CMPL
 ‘finally kicked it over’

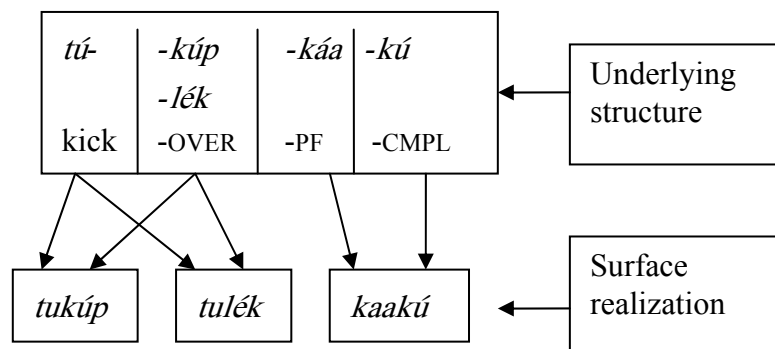


Figure 10.7 – Mapping relation between underlying and surface structures of Multiword predicate with three underlying suffixes

10.5.2. Functions

Despite their often high internal complexity, Multiword predicates can seemingly be deployed in virtually any predicate function; in addition to main clause predicate functions, they may occur in nominalizations, adverbially subordinated clauses, and so on. In (405), a nominalized Multiword predicate is built upon the Discontinuous compound verb *rî...dó* ‘do...eat’ ‘work; perform labour’; note that while the predicate derivation *-ráa* ‘ISOL’ (which here has the basic sense ‘as odd one out (working while others are not, in their place)’) occurs twice – filling both suffix positions of the Multiword predicate projected by the Discontinuous compound verb – the following subject nominalizer *-nà* occurs once only.

(405) *rîráa dorâa nàm...jaakáa go*

[[*rî-ráa* *dó-ráa-nà*]_N = əəm]_O [*jaakáa* = go]_{RQE}

do-ISOL **eat-ISOL-NZR:SUB=ACC** multiplicity=IND

laalik paakulâ.

[*làa-lìk-pàa-kú-là(a)*]_{PRED}

take-APPL:INTO-ATTN-CMPL-NF

‘Like that, now we get/manage to take in many people, we can take in...many **workers** (lit., ≡ ‘**ones who labour on our behalf**’).’ (LN, GMW 075)

Sometimes, Discontinuous compound verbs or Discontinuous predicate derivations/semi-reduplications may project Multiword predicates which interact in surprisingly complex ways over the course of a particular clause sequence, allowing for highly nuanced expressive possibilities. In (406), the speaker presents a nonsubject nominalization of the Discontinuous compound verb *dó...làa* ‘eat...take’ ‘obtain provisions’ – with the overall sense ‘provisions one has obtained’ – standing as O argument of the very same Discontinuous compound verb, the second time expanded by a Discontinuous predicate derivation.

(406) *donám laanàm mûməm dopâa*

[[**dó-nam** **làa-nam**]_N mûm = əəm]_O [**dó-pàa**
eat-NZR:NSUB take-NZR:NSUB JUST=ACC **eat-ATTN**
laalâa là; əmbə rədù.

làa-là(a)-là(a)]_{PRED} əmbə rə-dùu
take-ABIL-NF ANAP.PADV live/exist-IPFV

‘One way or another, (we) manage to put food on the table; (we) live like that.’
(lit., ≡ ‘(we) just **obtain whatever obtained-provisions happen to be available**’)
(NyR, MDS 029)

In (407) – a masterwork of Multiword predicate use – the speaker employs a Discontinuous predicate derivation *-kèn...-pàa* ‘GOOD/EASY...ATTN’ ‘EASY TO DO/GET’ and a Discontinuous compound verb *dó-...tǎ-* ‘eat...imbibe’ ‘sustain oneself’. However, she does not simply merge them within the same Multiword predicate (in the fashion of (406)). The first formative *-kèn* of the Discontinuous predicate derivation depends on a verb headed by *rə-* ‘live/exist’, which falls outside of the Discontinuous compound verb *dó-...tǎ-* ‘eat...imbibe’ ‘sustain oneself’. The Discontinuous compound verb in fact begins in the *next* clause, where the *second* formative of the Discontinuous predicate derivation *-pàa* also occurs. With both Discontinuous predicate derivational formatives now realized and the second formative of the Discontinuous compound verb *tǎ-* yet to be realized, the speaker decides to *repeat* the second formative of the Discontinuous predicate derivation *-pàa*. This process is schematized in Figure 10.8.

(407) *ηêə, aiiyá ardá róm, ηêə buddí kaarém...ηunukè...*
 ηêə aii=əə ardá-ró=əəm ηêə buddi káa-ró=əəm ηunù-kà
 1.REFL self=TOP clever-IRR=ACC1.REFL brains(<Ind) have/exist-IRR=ACC 1.PL-GEN
məra, rəkên maadée kò bədáa kaamá,
 məráa ró-kèn-máa-dée-kò bədáa káa-máa
 HEST live/exist-**GOOD/EASY**-NEG-PROS-NZR:LOC/OBL road have/exist-NEG
dopáa maadéek bədáa kaamá,
 dó-pàa-máa-dée-kò bədáa káa-máa
 eat-ATTN-NEG-PROS-NZR:LOC/OBL road have/exist-NEG
típáa maadéek bədáa kaamáai?
 tíi-pàa-máa-dée-kò bədáa káa-máa=(ə)î
 imbibe-ATTN-NEG-PROS-NZR:LOC/OBL road have/exist-NEG=ETAG
 ‘Should I myself be clever, should I myself have brains, our...I mean, there’s no
 way to have a hard life, no way to not get enough to eat, no way to not get enough
 to drink, eh?’ (LN, GMW 072)

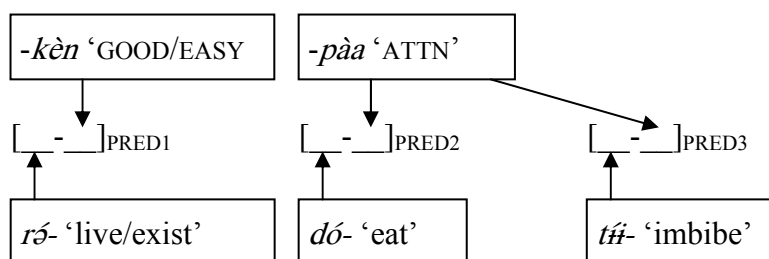


Figure 10.8 – Illustration of complex Multiword predicate use in discourse context (based on (407))

10.5.3. Discussion

The above two sections have presented a basic overview of Galo Multiword predicates, but it must be admitted that the status of the “word” constituents of a Multiword predicate remains a challenging topic for further investigation. That is, from a *phonological* perspective, it is quite ordinary in Galo to find a preference for disyllabic word shapes, as was discussed in §4.1. However, the *grammatical* status of the words in a Multiword predicate is much more complicated. On the one hand, there is no doubt that they together constitute a single predicate, and no doubt that they bear a single semantic denotation which is not wholly derivable from the elements. In these respects, they seem to constitute a single grammatical word, as was claimed in §10.5.1. On the other hand, however, it is as clear to the native Galo speaker as it is to the linguist or any casual observer, for that matter, that, e.g., examples like (403)-(404) contain two words organized around the verb root *tú-* ‘kick’. Ordinarily, when a verb root occurs as a

constituent of a verb, it is that verb's head, and, ordinarily, when two headed expressions occur in sequence, we consider this to be sequence of two grammatical words.

As with many problems concerning “wordhood” in Galo, there is no easy solution here. There appear to be conflicting criteria for grammatical analysis at the word level in Multiword predicate constructions, and there would not appear to be a straightforward means of resolving them. Rather than make arbitrary decisions, it seems to me to be preferable to retain the ambiguity inherent in the term *Multiword predicate* – leaving open the precise sense in which it consists of multiple “words” while yet being one “predicate”.

10.6. Interruption of the predicate complex

As the above subsections have discussed, there is good evidence for the relative *phonological* independence of sub-predicate “words”, but less evidence for their grammatical independence. This view of the predicate as a basically irreducible syntactic constituent is to an extent challenged by the ability of certain “versatile” particles (discussed in more detail in §13.5) to “interrupt” the predicate complex – usually, with an emphatic function, and always at the boundary of a phonological word. In (408), Emphatic particle (ə)í occurs twice, first at the edge of a temporally-subordinated clause and the second time “interrupting” the predicate *rə-kú-máa* ‘live/exist-CMPL-NEG’ ‘not live/exist anymore’. Note that **rəkú* and **maané* cannot be analysed as grammatical words themselves, since the predicate overall is ungrammatical here if unsuffixed by *-máa* (*-kú* ‘CMPL’ is a Secondary predicate inflection which cannot itself license a grammatical predicate word; see §12.3.3.1). Furthermore, *né* is a clause-final particle which marks the illocutionary force of the entire utterance (§13.3.2.2.2), and stands in no immediate dependency relation to Negative suffix *-máa*. In (409), (ə)í interrupts the predicate complex at a different point, following the verb stem and preceding all inflections. The boundary of such grammatical word-internal “interruptions” is conventionally marked “≡” in this grammar.

(408) *iilà, caalà, ogò...homén rədák*
 ìi-là(a) càa-là(a) ogò homén rə-dàk
 descend-NF ascend-NF TMP.SEQ tiger exist-COS
hokkə́, mané hodùm-horə́ cìn
 hokkə́ = (ə)í mane hodùm-horə́ = cìn
 SPRX.ABL=EMPH that's.to.say(<Asm) barking.deer-boar=ADD
rəkuí maané.
 rə-kú = (ə)í = máa = né
 live/exist-CMPL=EMPH=NEG=DECL.ADM
 'Coming, going, **just** because of the tiger being there, I mean big game was
nowhere to be found.' (RmR, CC 046)

(409) *məpəí kumá*
 məpə-pàa = (ə)í = kú-máa
 think-ATTN=EMPH=CMPL-NEG
 'Oh! I can't **even** remember!' (TR, OL14:78)

It is important to note that versatile particles cannot occur simply anywhere within the predicate complex – for example, (ə)í cannot be inserted immediately following a verb root (**məí paakumá*) or immediately preceding the final suffix in the predicate complex (**məpāa kuí mā*). The reason for this appears to be mainly phonological rather than grammatical in nature. That is, (ə)í can only occur following one of the *phonological words* into which a predicate is naturally divided, generally following metrical foot-formation as discussed in §4.1.3.1. (ə)í does not itself participate in the determination either of the predicate's metrical structure or of its grammatical form. Rather, its appearance in a particular position in the surface form of an utterance would seem to be a matter of opportunistic insinuation for pragmatic effect into a particular rhythmic position to which it does not grammatically (directly) pertain. This is perhaps not the only possible analysis, but it seems preferable to one which would regard *məpāa* and *kú-máa* as in (408) as distinct *grammatical* constituents of the predicate complex (with (ə)í able, in essence, to follow either of these), since this would then require us to explain what kind of “head” status the Completive suffix *-kú* might have with respect to a hypothetical predicate constituent *kú-máa*, as in (409). This would seem highly awkward, inasmuch as the same morpheme is so clearly a dependent *suffix* in an example like (408). As far as I can see, there would be no easy escape from this conundrum.

For further discussion of versatile particles and examples in a variety of contexts,
see §13.5.

11. Predicate derivations

This chapter discusses what will be called “predicate stem-expanding derivations”, or “predicate derivations” for short. The basic definition of a predicate derivation is of a *morphologically bound predicate formative* which occurs to the right of a predicate head (verbal or adjectival root/stem), which *expands the stem* to which a final predicate suffix (inflection or primary nominalizer) is bound but which *is not itself* a final predicate suffix. Similar forms found in other languages have been given labels such as “lexical suffix” (Coupe 2007), “adverbial suffix”, “aktionsart suffix” (Bickel 1999), “auxiliary verb” (Rutgers 1998), “bound verbal morpheme” (Matisoff 1973) “event specifier” (van Breugel in preparation) “following verb” (Lorrain 1995 [1910]) and “verb particle” (Abraham 1985). While certain of these terms are perhaps more melodious than the term I have chosen, most in fact appear to apply to the formal and/or functional equivalent of a subset of the morphemes to be discussed here. In addition, certain aspects of some of the above terminology – in particular, “auxiliary”, “adverbial” and “particle” – seem to put the categorie(s) under discussion somewhat at odds with the traditional senses of their labels. Ultimately, I have tried to select a term which most accurately describes what I believe to be a unified morphological category in Galo, while at the same time preserving the standard or consensus value of my chosen terminology. That said, arguments in favour of adopting a different overall label for the forms to be discussed, or for some subset or subsets thereof, in Galo or in languages with similar form-classes, can undoubtedly be made.

The chapter is divided into four main sections: §11.1 presents an overview of the structure and functions of predicate derivations. The inventories of simplex and complex predicate derivations are then discussed in detail in §11.2 and §11.3 respectively; in most cases discussed therein, we are dealing with derived *verbal* stems. §11.4 then discusses a set of predicate derivations and associated constructions which are specific to *adjectival* predicates.

11.1. Basic structure and functions

11.1.1. Position within the predicate complex

A predicate derivation is a *morphologically bound* element occurring immediately to the right of a predicate head (root or stem). In (410)-(411), predicate derivations are in **bold**.

- (410) *dol# dù.*
 dó-~~l#~~-dùu
 eat-**DESD**-IPFV
 [VROOT-**PDER**-PINFL]_{PRED}
 ‘(I) **want to** eat.’

- (411) *dolâa dù.*
 dó-lâ(a)-dùu
 eat-**ABIL**-IPFV
 [VROOT-**PDER**-PINFL]_{PRED}
 ‘(I) **can** eat.’

Predicate derivations may bind directly to a verb root, as in (410) and (411). Some but not all may also attach to an adjectival predicate head, as in (412). (413) shows the same Terminative predicate derivation -*ròo* ‘TERM’ bound to a verb root.²⁰⁵

- (412) *kán rôom tokú là, bullè...duudêe kò*
 kanó-**ròo**-mò-tó-kú-là(a) bulù = əə dùu-dée-kò
 be.dark-**TERM**-CAUS-PFV-CMPL-NF 3.PL=TOP stay-PROS-NZR:LOC/OBL
kaakú má.
 káa-kú-máa
 have/exist-CMPL-NEG
 ‘After it **got** dark, they...had no place where they could stay.’ (TR, FA 004)

²⁰⁵ That *kanó* is an adjective is demonstrated by its ability to stand as a Copula Complement, as in *kannó*, *kanó* = əə ‘dark=COP.IPFV’ ‘It’s dark.’ That *mò* is not an adjective is similarly demonstrated by inability to occur in this syntactic position. For further discussion, see §5.1.2.

(413) *ɲunù ɛdĩina hòŋ-hoɲò hìm morôola, ɲunnə.*

ɲunù ɛdĩi-nà hotə-hoɲò hì-m mò-ròo-là(a) ɲunù = əə
 1.PL incredible-NZR:SUB elephant-tiger SPRX-ACC make-TERM-NF 1.PL=TOP
 ‘We wiped out lots of wild animals, we did.’ (lit., ‘we made-**finished** incredible
 (numbers of) these wild animals)’ (NyR, MDS 067)

Predicate derivations are followed in the predicate complex by predicate inflections. No predicate inflection may precede a predicate derivation, nor can a predicate derivation ever follow or stand as or in place of a predicate inflection (414).

(414) **ɲunù ɛdĩina hòŋ-hoɲò hìm moròo*

ɲunù ɛdĩi-nà hotə-hoɲò hì-m mò-ròo
 1.PL incredible-NZR:SUB elephant-tiger SPRX-ACC make-TERM
 *‘We wiped out lots of wild animals.’

11.1.2. Basic functions

The basic function of a Galo predicate derivation is to *modify the semantic core of a predicate*, in terms of one of the following seven dimensions:

- | | |
|-------------------------|-----------|
| 1) Manner | (§11.2.1) |
| 2) Result | (§11.2.1) |
| 3) Motion/Direction | (§11.2.2) |
| 4) Aspect/Aktionsart | (§11.2.3) |
| 5) Class Change | (§11.2.4) |
| 6) Argument-determining | (§11.2.5) |
| 7) Modal | (§11.2.6) |

Often, the type of modification which a particular predicate derivation imparts to a predicate stem involves such semantic complexity that the resulting term must be translated into English using complex, sometimes multi-clausal, syntactic constructions (415)-(416).

(415) *rûci laamâa dó*

rú-cì-là(a)-máa-dó(o)
 slide-REACH.GOAL-ABIL-NEG-STAT
 ‘unable to slide it **all the way in**’ (NyR, MDS 102)

(416) *hīgìm jəə bərə nuutír tannà?*

hīgì-m jəə bərə nùu-**tír-tà**-nà = əə

SPRX.IND-ACC who CJEC bob.knees-**BREAK.LENGTH-INCP-NZR**:SUB=TOP
 “Who’s **going to** bob their knees up and down (while standing on) this (stick),
such that it breaks?” (NyPB, LAT 138)

Despite the complexity of the semantics involved, it must be clearly understood that the Galo expression retains the *structural status* of a *single grammatical predicate word*, and the *semantic status* of a *single, simple, predicate-coded event or state*.

Predicate derivations are thus both structurally and semantically quite distinct from adverbial subordinations (§16.4.2), non-final constructions (§16.5) and clausal nominalizations (§15.3), all of which have the capacity to represent complex, multi-layered event-structures and indeed multiple events.

11.1.3. Morphological complexity and syllabicity

Galo predicate derivations are either *simple* or *complex*. While simple predicate derivations are irreducible, complex predicate derivations are most often analysable either as historical/lexicalized or synchronic/active collocations of two simple predicate derivations, or as a reduplication or (more often) a partial reduplication of a single simple predicate derivation. (417) and (418) illustrate use of the simple predicate derivations *-kèn* ‘GOOD/EASY MANNER’ and *-pàa* ‘ATTN’, while (419) illustrates use of the complex predicate derivation *-kèn...-pàa* ‘EASY TO DO’. The latter derives from the discontinuous collocation of simplex *-kèn* and *-pàa*; for further discussion of complex predicate derivations, see §11.3; for the syntactic status of the resulting Multiword predicate in terms of the Galo predicate complex, see §10.5.

(417) *fleeɡə tìkên má.*

fléek = əə tìi-**kèn**-máa

Flake=TOP imbibe-**GOOD/EASY**-NEG
 ‘Flake (cigarettes) are **disgusting**.’ (KZ, OL9:104)

(418) *impâa doorè?*

ín-**pàa**-dó(o) = ree

walk-**ATTN**-STAT=PQ

‘Can you **manage to** walk/find the path (it being very dark)?’ (RmR, OL15:35)

- (419) *mən-kən mən-pàa má.*
 mən-**kən** mən-**pàa**-máa
 say-EASILY.1 say-EASILY.2-NEG
 ‘It’s not **easy** to say.’ (KN, OLB2:45)

The majority of simple predicate derivations are *monosyllabic*, as *-pàa* ‘ATTN’.

Although complex predicate derivations such as *-kèn...-pàa* ‘EASY TO DO’, being composed of two discontinuous simple, monosyllabic, predicate derivations, are thus by definition disyllabic when viewed as a lexical entry, since they are discontinuous in realization they are monosyllabic in terms of the phonological words in which they are realized. True polysyllabic predicate derivations, in the sense of a derivation realized by a continuous sequence of more than one syllable, are extremely rare and have apparently arisen as a result of relatively recent fusions of earlier monosyllables. Examples of this type are found in §11.3.3.

11.1.4. Concatenation of multiple predicate derivations in a single predicate stem

As discussed in §11.1.1, predicate derivations may be bound directly to an adjective (412) or verb root (413). However they may also occur on a stem which has already been expanded by another predicate derivation; (412) is such an example, in which the Causative Valence-changing derivation *-mó* ‘CAUS’ follows the Terminative Aspect/aktionsart derivation *-róo* ‘TERM’. In (420), we find an example of three predicate derivations occurring in direct sequence in the same predicate stem.

- (420) *tíi-ǵám côm lakè!*
 tíi-**ǵám-còo-mò**-là(a) = kée
 imbibe-EXH-FIRST-CAUS-IPTV.SDIR=HORT.POL
 ROOT **PDER PDER PDER** INFL PCL
 ‘Let him finish drinking first, will you?’ (MN, OL23:75)

Examples like (420) are relatively rare, and may be said to represent an extreme case of predicate derivation “stacking”. That is to say, although I have not seen a speaker reject a sentence as being ungrammatical on the apparent basis that its predicate contained too many predicate derivations, due to the often quite complex and particular semantic content of most predicate derivations, it is often all but impossible to contrive a situation

in which more than two or three might be used; three is the largest number of concatenated derivations I have attested naturally, as in (420).

11.1.5. Positional variability, derivational scope, and subclassification

Given that multiple predicate derivations may occur within a single predicate stem (§11.1.4), it follows that their order will be either 1) *free* 2) *fixed* or 3) *meaningfully variable*. The possibility of *free* ordering may be immediately discarded, for reasons which will become clear in passing. The possibility of *meaningful variation* can be clearly substantiated, as will be shown below. However, the question of whether there is or is not an underlying, more or less *fixed* structural template into which Galo predicate derivations “naturally” fall, and in violation of which “marked” or ungrammatical utterances may be said to occur, is less straightforward.

Generally speaking, all predicate dependents in Galo have *leftward scope* (§10.3); accordingly, only a predicate derivation which is semantically and/or functionally capable of subsuming all leftward elements under its scope may occur on a predicate stem. Consider the examples (416) and (422). In (416), reproduced for convenience as (421), the Result derivation *-t̥r* ‘BREAK LENGTH’ precedes the Incipient Aspect/aktionsart derivation *-t̥a* ‘INCP’; together with the root, the resulting sense is (roughly) ‘be about to stand (on a stick, thus) breaking (it).’ The predicate derivations in this case cannot occur in any other order, since leftward application of *-t̥r* ‘BREAK LENGTH’ over the complex *n̥uu-t̥a* ‘bob.knees-INCP’ ‘be about to bob the knees’ would imply a breakage *actually* resulting from an action which explicitly *did not even reach inception*, which is logically nonsensical.

(421) *h̥ig̥m̥ j̥ə̯ b̥ə̯r̥ə̯ n̥uut̥r̥ t̥ann̥ə̯?*

h̥ig̥m̥ j̥ə̯ b̥ə̯r̥ə̯ n̥uut̥r̥-t̥a-n̥ə̯ = ə̯ə̯
 SPRX.IND-ACC who CJEC bob.knees-BREAK.LENGTH-INCP-NZR:SUB=TOP
 “Who’s going to bob their knees up and down (while standing) on this (stick),
 such that it breaks?” (NyPB, LAT 138)

Similarly, in (422), Ability derivation *-l̥a(a)* has leftward scope over *d̥ó-ŋám* ‘eat-EXH’ ‘eat up everything’, with the overall concatenation giving the sense ‘able to eat up everything’. Variation in the relative order of derivations here too is impossible; since the Exhaustive derivation *-ŋám* ‘EXH’ explicitly references a diffuse, collectively (actually)

affected O argument (when occurring on a transitive stem; see §11.2.5.10), it cannot have scope over an expression denoting the *potential* of the A argument to bring about a particular event.²⁰⁶

(422) *çhigó-doogoó...doḡám lamâ doobó.*

çhigóo-doogóo = əə dó-ḡám-là(a)-máa-dó(o) = bó
 whole.town-whole.world=TOP eat-EXH-ABIL-NEG-STAT=SJNC
 ‘It was as though everyone was unable to eat up everything.’ (NyR, MDS 068)

However, in felicitous semantic circumstances (which are admittedly rare), it *is* possible to vary the order of derivations; in this case, there are clear semantic contrasts which appear to be the outcome of scope effects. Consider (423), an example which was constructed on the model of the naturally-attested example (420).

(423) *tiiçôo moḡâm lakè!*

tii-çôo-mò-ḡám-là(a) = kée
 imbibe-FIRST-CAUS-COLL-IPTV.SDIR=HORT.POL
 ‘Let us all drink first.’

In (423), the Causative derivation *-mò* causes the underlying O argument to be understood as a nonvolitional Actor, i.e., a drinker. This in turn causes the Exhaustive derivation *-ḡám* ‘EXH’ – which references a diffused O argument – reference a diffused *Actor*. This is quite a different meaning from that of (420), in which the Causative derivation applies later in the string, and in which the Collective derivation thus has immediate scope over the predicate root only. For more information on the valence-altering properties of the Causative derivation, see §11.2.5.3.

The point to understand here is that order variation *is* possible under certain circumstances, and that when it is possible, it will generally create differences in meaning which appear principally to relate to derivational scope. For this reason, I have been unable to date to determine any underlying structural template to which Galo predicate derivations absolutely relate, nor have I been able to assign them to exceptionless positional subclasses. In practice, the majority of examples in my data will agree with the semantically-based positional template given in the first line of Figure 11.1; however, the fact of (albeit limited) variability in ordering suggests that more generalized semantic

²⁰⁶ This difference is extremely difficult to capture in English translation, but might be understood quite roughly as the difference between “He can eat everything” and ? “He can eat, such that everything was affected”.

dimensions such as in the second and third lines of Figure 11.1 may more accurately describe the cognitive underpinnings of the system. Future research in this area is certainly warranted.

MANNER/RESULT – MOTION/DIRECTION – ASPECT/AKTIONSART – ARG-DETERMINING – MODAL
 SEMANTICALLY PARTICULAR ----- SEMANTICALLY GENERAL
 APPLICABLE TO LIMITED RANGE OF EVENTS----- APPLICABLE TO DIVERSE EVENTS

Figure 11.1 – Semantically-based predicate derivational ‘position classes’ and their potential cognitive underpinnings

11.1.6. Predicate derivations, predicate complex and the question of sub-predicate “words”

The careful reader will have noticed a wide discrepancy between the surface line of transcription in all examples given above and the parse; namely, morphemes which look like they form initial elements of “words” in the surface line are given as bound, right-branching dependent formatives in the parse line. Although this basic discrepancy is related to the general problem of the disconnect between phonological and grammatical words in Galo, discussed in detail in §4.1, there are some aspects of this problem which relate crucially to the grammatical status of predicate derivations, and which therefore deserve detailed treatment in this section.

11.1.6.1. Phonological factors

As we noted in §11.1.2, the majority of simple predicate derivations in Galo are monosyllabic. Since predicate derivations very often follow a bound, monosyllabic verb root – and since disyllabic sequences are usually realized as phonological words in Galo (§4.1.3) – the sequence [VERB ROOT + PREDICATE DERIVATION] is realized as a phonological word, and is subject to word-level stress- and tone-assignment (§4.1.3.1-§4.1.3.2), word-boundary phonotactics (§4.1.3.6) and internal assimilation sandhi (§4.1.3.7). However, these rules do not, or not in the same way, apply at the boundary of a predicate derivation in second syllable position and whatever form succeeds it. This is demonstrated by the application of Regressive voicing assimilation (§4.1.3.7) at the boundary of the Abilitative suffix with its host verb root in (424), but not at its juncture with the ‘CLEAN’ Result suffix in (425).

(424) *ŋó ríglàa dù*
 ŋó rík-là(a)-dùu
 1.SG wash.clothes-ABIL-IPFV
 ‘I can wash it.’

(425) *ŋó ríkkák ladù*
 ŋó rík-kák-là(a)-dùu
 1.SG wash.clothes-CLEAN-ABIL-IPFV
 ‘I can wash it clean.’

For a more generalized description of phonological wordhood and word-internal and -external phonological processes, see the sections referenced above. The point to understand here is that according to all tests for phonological wordhood currently identified for Galo, *ríkkák* and *ladù* in (425) constitute *independent phonological words*. Accordingly, the predicate derivation *-là(a)* ‘ABIL’ is analysed as a phonologically *dependent* element of the word *ríglàa* in (424), and the phonological *head* of the word *ladù* in (425).

11.1.6.2. Grammatical factors

The *grammatical* status of “words” such as *ríkkák* and *ladù* in (425) – and, in turn, the grammatical status of their constituent formatives – is a more complex problem. First consider the grammatical status of the sequence [VERB ROOT-PREDICATE DERIVATION] ([VROOT-PDER] for short) such as *ríkkák* in (425):

11.1.6.2.1. Grammatical status of the sequence [VROOT-PDER] 1: “Standalone” utterance

As was discussed in §5.3.2, verb roots such as *rík-* ‘wash clothes’, being bound, have no “standalone” sense, nor any capacity to be uttered in isolation as “words”. By contrast, sequences of the form [VROOT-PDER] such as *rík-kák* ‘wash.clothes-CLEAN’ can often be uttered in isolation, and assigned a context-free semantic value by speakers. For example, *ríkkák* as in (425) has the standalone sense ‘wash (clothes) fully clean’, and *ríglàa* as in (424) has the standalone sense ‘can wash (clothes)’ or ‘be able to wash

(clothes)’. Accordingly, disyllabic forms with the internal structure [VROOT-PDER] often occur in wordlists, in Galo as in other Tani languages, which may suggest that they have at least some cognitive reality as “words”. In addition, we can note the occurrence of a few verb roots whose sense may be incomplete in absence of an appropriate predicate derivation. For example, consider the transitive verb root *cíK-* ‘operate door’, which to some consultants has no real meaning unless an appropriate Result derivation such as *-kók* ‘OPEN’ or *-túm* ‘CLOSED’ is added. So, although *cikkók* ‘open a door’ and *cittúm* ‘close a door’ are both perfectly good “words”, some consultants reject *?cinnám* ‘to operate a door’ (< *cíK-* ‘operate door’ + *-nam* ‘NZR:RLS’) – possibly because there is little substance to the idea of operating a door unless one is either opening or closing it.

We can also note a few rare but important cases in which sequences of the form [VROOT-PDER] seem to have lexicalized. For example, *kahí* ‘hide’ apparently derives historically from the PG sequence **ká-čí* ‘send-REFL’, i.e. ‘send oneself’, however the erstwhile verb root appears to have obsolesced in modern Lare, and it is no longer possible to treat *kahí* ‘hide’ as synchronically compositional as a result. Similarly, *takàa* ‘ask’ may derive from *tà-káa* ‘obey-TENT’, literally ‘try to follow/accord with what someone says’, although lexicalization and attendant semantic shift seem to have occurred; consultants have only the vaguest sense, if any at all, of the compositionality and semantic sub-contents of this form. In such cases, it would seem that we are obliged to grant these (albeit not actively-formed) sequences of [VROOT-PDER] the standalone status of “words”.

However, we must be cautious about generalizing grammatical “word” status, in this standalone sense, over the sequence [VROOT-PDER] as a structural type. For, although we have seen that many such sequences may be uttered and assigned semantic values by Lare speakers in isolation, *not all may*.²⁰⁷ Furthermore, although it is interesting that such sequences may develop strong interdependency relations to the extent that they may even lexicalize as units, this fact does nothing to unseat a more robust generalization, which is that the construction [VROOT-PDER] is highly *productive*, and is generally open to any two semantically and functionally compatible qualifying forms. Furthermore, the fact that collocations of [VROOT-PDER] frequently occur in Tani wordlists translating what are

²⁰⁷ For example, some of my consultants have disagreed about whether *takàa* ‘ask’ qualifies as a “word”. Whether this fact relates to its possible reanalysis as a bound root is an interesting question which I cannot at present confidently answer.

often structurally and semantically simplex terms in another language may say less about their formal and functional equivalence than it does about the lack of thoroughness with which the analyst may have conducted his elicitation.²⁰⁸

In sum, evidence from isolation utterances, from a few cases in which verb roots derived by predicate derivations are more straightforwardly recognized by consultants as “words” than is the same verb root in the infinitive, and from a few cases of possible lexicalization all suggest that in some “standalone” sense, sequences of the form [VROOT-PDER] can have the grammatical status of “words”; at the same time, it is not possible to make a generalization to the effect that they always or necessarily do. The next section treats their ability to pattern as *syntactic* words.

11.1.6.2.2. Grammatical status of the sequence [VROOT-PDER] 2: Syntactic factors

A very large number of predicate derivations derive terms which may be used as nominals (as head of an argument NP) or as adjectivals (as CC, or as head of a derived adverbial); (426) and (427) illustrate use of the Manner derivation *-kèn* ‘GOOD/EASY’ and the Result derivation *-tər* ‘TO.ENDPOINT’ as derivations to a Type A (verbal) final predicate stem, while (428) and (429) illustrate the capacity of the same forms to derive an adjectival (here standing as Copula Complement) and a nominal (in core argument S function) respectively.

- (426) *fleegó t̥ikên má.*
 [fléek = əə]_S [t̥íi-kèn-máa]_{PRED}
 Flake=TOP imbibe-GOOD/EASY-NEG
 ‘Flake (cigarettes) are disgusting.’ (KZ, OL9:104)

²⁰⁸ For example, at least one previous researcher gives the form *gucàa* (regularized by this author) for ‘burn (Intransitive)’, which we might suppose had been elicited by demonstrating or pointing to an open fire burning away inside a house. One might never think to illustrate a fire burning downwards, or to the south, as it would, for example, if oppressed from above by a northerly wind. And yet, this sense – *gubòk* (< *gù-* ‘burn (Intransitive)’ + *-bók* ‘DOWN/SOUTH’) – is as straightforwardly expressed in Galo as is *gucàa* (< *gù-* ‘burn (Intransitive)’ + *-càa* ‘ASCEND’), which in fact means ‘burn upwards’. Confusions of complex for simplex forms abound in the literature on Tani languages, and it is therefore essential for the fieldworker engaged in research into a Tani language to test, through subtraction and variation, *every one* of the syllables of any term returned by a consultant in elicitation, to be sure that underlying compositionality is consistently discerned and that one’s data do not inadvertently contain morphosemantically complex forms where simplex translations are given.

(427) *ŋó hogò mentâr dù.*

[ŋó]_S [hogò]_{OBL} [mèn-**târ**-dùu]_{PRED}
 1.SG SPRX.LOC speak-**TO.ENDPOINT**-IPFV
 ‘I’m going to speak up to this point (in the text).’ (IR, T8:18)

(428) *en-kênə!*

[én-**kên**]_{CC}[=əə]_{COP}
 feel-**AZR:GOOD**=COP.IPFV
 ‘Oh, sweet victory (lit., ‘it feels good’)!’²⁰⁹ (KN, OL15:145)

(429) *rítâr kaamá.*

[rì-**târ**]_S [káa-máa]_{PRED}
 do-**NZR:ENDPOINT** have/exist-NEG
 ‘This is endless (of an elicitation list).’ (TR, 19:0)

The capacity of predicate derivations to change the grammatical class of a predicate will be discussed in detail in §11.2.4; the point here is to understand that these functions are properties of *particular predicate derivations*; while *-kên* ‘GOOD/EASY’ has the ability to derive adjectivals, many other predicate derivations, such as Extensive *-kɛ̃* ‘EXT’ apparently do not; Copula Complements in *-kɛ̃* are usually rejected by consultants. Thus, while it is the case that certain sequences of the form [VROOT-PDER] count as syntactic words in the sense that they can take up what are unambiguous “word” slots outside the predicate complex, it is not possible to generalize this property over the entire class of predicate derivations.

11.1.6.2.3. Grammatical status of the sequence [PDER-*x*] 1: against an “auxiliary verb” analysis

Up to now, we have been considering the grammatical status of “words” composed of a verb root plus predicate derivation. What of the grammatical status of “words” composed of two predicate derivations, or a predicate derivation plus predicate inflection, as *ladù* in (425)?

Here again, the situation is somewhat complex. Consultants are often comfortable uttering “words” such as *ladù* in (425) in isolation, but are only rarely able to assign them

²⁰⁹ This very common Galo expression *may* be used with its literal sense, but is more commonly spoken with a sense of *schadenfreude*, as when rejoicing at the misfortune of an adversary.

a semantic value. Might a form such as *ladù* be assigned the syntactic status of “auxiliary verb”, as in (430)?

(430) *ŋó ríkkák ladù*

[ŋó]_S [rík-kák -là(a)-dùu]_{PRED}
 1.SG wash.clothes-CLEAN -ABIL-IPFV

or ?[ŋó]_S [[rík-kák]_V [là(a)-dùu]_{AUX}]_{PRED}
 1.SG wash.clothes-CLEAN **can**-IPFV
 ‘I can wash it clean.’

In all syntactic theories of which I am aware, “auxiliary verb” is treated as a syntactic word, whether viewed as a constituent of the predicate or verb (Chomsky 1971 [1957]), predicate/verb phrase (Chomsky 1965) or sentence (Haegeman 1991). It is never, so far as I am aware, construed as a syntactic word in some cases and an internal constituent of another word – i.e. an affix, which would no longer be referred-to by syntactic rules – in other cases. Among functional characterizations, Givón (2001 [1984]:§7) identifies “auxiliary verbs” as a *small subset* of verbs (in most languages which have them), occupying a particular position in a specific diachronic process of grammaticalization, viz. MAIN VERB > **AUXILIARY** > TAM MARKER > TAM AFFIX, and similar (though more detailed) characterizations are given by Heine (1993). Thus, although there is expected to be a particular point in the process when the auxiliary has shed most of its erstwhile verbal properties and begins to be subsumed under another syntactic word (generally, though perhaps not necessarily, the main verb), by the time it occurs as a bound local dependent it is no longer referred-to by the term “auxiliary”; i.e., it is now a “TAM affix”.

To summarize, I understand the category “auxiliary verb” to include *syntactic words* which are diachronically derived from main verbs, which are undergoing specific processes of grammaticalization, and which are (therefore, probably) expected to be few in number. I do not understand it to indifferently include suffixes, bound formatives and free words, nor to designate terms which have the capacity to surface sometimes as a suffix, and sometimes as a word, and I would not expect there to be a large or indeterminate number of auxiliary verbs in a language for which they are identified.

Recall, then, that within a Galo predicate complex, the predicate derivation *-là(a)* ‘ABIL’ may either occur as a phonologically and grammatically bound dependent of a verb, as in (424), or as a phonologically unbound but, as I will maintain, grammatically bound dependent of the same verb as in (425)/(430). Even if one were to dispute the idea of *-là(a)*

being grammatically bound in (425)/(430), one could not, it seems to me, dispute it in the case of (424) (since it appears to license a term which is grammatically bound, and must therefore presumably be grammatically bound itself). Thus, analysing *-lâ(a)* as an auxiliary verb head in (425)/(430) would require us to state that Galo auxiliary verbs head *grammatically free* terms in some cases, and are *grammatical dependents* of other terms in other cases. This is not theoretically impossible, perhaps, but it would, in the specific case of “auxiliary verbs”, amount to a radical re-conception of the meaning of this term and of the type of syntactic object it could represent. Worse, it would necessitate specifying that the *motivation* for the surfacing of *-lâ(a)* as a free word head as opposed to a bound dependent is nothing more than the fact that *another* morpheme (in the case of (425)/(430), the Result derivation *-kák*) happened to be occurring in its designated dependent slot. This would strike me as a syntactically sloppy and poorly-motivated analysis.

Furthermore, adopting the second analysis illustrated in (430) would necessitate positing an indefinitely large number of “auxiliary verb heads” in Galo, for the simple reason that *any bound dependent of the predicate* occurring in the third syllable position would then be subject to analysis as the head of an auxiliary verb. Consider the examples in Table 11.1.

| | | | |
|------------------|----------------------|----------------------|----------------------------|
| <i>riglî</i> dù | ‘wanting to wash it’ | <i>rikkák lî</i> dù | ‘wanting to wash it clean’ |
| <i>rikkên</i> dù | ‘easy to wash’ | <i>rikkák kên</i> dù | ‘easy to wash clean’ |
| <i>riksí</i> dù | ‘washing oneself’ | <i>rikkák hí</i> dù | ‘washing oneself clean’ |
| <i>rigñám</i> dù | ‘washing everything’ | <i>rikkák ñám</i> dù | ‘washing everything clean’ |
| <i>rigbéo</i> dù | ‘still washing it’ | <i>rikkák béo</i> dù | ‘still washing it clean’ |
| <i>rigñoó</i> dù | ‘habitually wash it’ | <i>rikkák ñoodù</i> | ‘habitually wash it clean’ |
| (...) | | (...) | |

Table 11.1 – “Suffix/Auxiliary” alternations in the predicate complex

The formal and functional identity of the bolded morphemes in Table 11.1 is self-evident, and the principal arguments against analyzing them in the first column as bound dependents and in the second column as auxiliary verb heads are, I hope, by now clear.

Finally, we may note that it is never possible to extract forms such as *ladù* in (425)/(430) or *lîdù* or *kêndù* in Table 11.1 from their position in the predicate complex (fronting them before the verb, for example, as **ño ladù rikkák*). Nor is it possible for

most types of syntactic word or particle to intervene, e.g., between *rĭkkák* and *lĭdù* in Table 11.1, or any similar arrangement (for an overview of important exceptions to this generalization, see §13.5).

11.1.6.2.4. Grammatical status of the sequence [PDER-*x*] 2: against a “verb serialization” analysis

Some readers, while perhaps conceding an argument against analysis of predicate derivations as auxiliary verb heads, might be unconvinced that they are not in fact *serial verbs*. In this analysis, (425)/(430) might be reanalysed as in (431), with *v1* standing as semantic head of the predicate, but depending syntactically on *v2*. This closely recalls the syntax of most Mainland South-East Asian languages, such as Standard Thai (432).

- (431) *ŋó rĭkkák ladù.*
 [ŋó]_S [[rĭk-kák]_{V1} [lă(a)-dùu]_{V2}]_{PRED}
 1.SG wash.clothes-CLEAN can-IPFV
 ‘I can wash it clean.’

- (432) *phǒm sák-phâa dâj*
 [1.MASC]_S [[wash.clothes-clothing]_{V1} [can]_{V2}]_{PRED}
 ‘I can wash clothes.’

However, arguments similar to those deployed against the auxiliary verb analysis also apply here. First, we would have to explain why it is that serialized verb heads, as in the second column of Table 11.1, also occur as bound formatives as in the first column. Also, we would have to explain why so many putatively serialized “verbs” (including most terms in the second right-hand column of Table 11.1) cannot themselves stand as head of a simple predicate; surely, the minimal requirement of a serial verb analysis is that the terms involved are in some very basic sense “verbs”, and that is not the case here.²¹⁰ Finally, although it is not always possible in verb-serializing languages to find syntactic material such as adverbials, negators or (other) particles intervening in a serial verb string (Aikhenvald 2006), it is quite common among Mainland South-East Asian languages; for example, in the Standard Thai example (432), it is possible to insert both an adverbial *rêw-rêw* ‘quickly’ and negator *mâj* between the two serialized verbs, with

²¹⁰ It is of course common for serial verbs to grammaticalize, and to progressively shed their basic verbal status; a paradigm example is Mandarin Chinese 把 *bǎ* (Li and Thompson 1973; Post 2007). However, it is not normally the case for the *majority* of putative serial verbs in a given language to lack the capacity to independently head a predicate (or at least, I am not aware of any such description).

the expanded overall sense ‘I can’t wash clothes quickly.’ Such interventions are not generally allowed in the Galo predicate complex (§10.1).

11.1.6.2.5. Native speaker intuition

Finally, we can revisit the question of native speaker intuition. Although speakers are often comfortable assigning a “standalone” sense to sequences of the form [VROOT-PDER] (§11.1.6.2.1), they are less comfortable assigning standalone senses to sequences of the form [PDER-*x*] such as *ladù* in (425)/(430)/(431). None of my consultants have so far been able to assign a sense to a phonological word of the form [PDER-PDER], as in (420), reproduced here and **bolded** for convenience (433).

(433) *tiiŋám **còom** lakè!*

tii-ŋám-**còo**-mò-là(a) = kée

imbibe-COLL-**FIRST-CAUS**-IPTV.SDIR=HORT.POL

‘Let me finish drinking first, will you?’ (MN, OL23:75)

11.1.6.2.6. Interim summary

To briefly summarize this section, we have considered evidence from native speaker intuitions concerning the capacity for sub-predicate “words” to stand alone, and be assigned a “standalone” meaning, concerning the capacity for sub-predicate “words” to clearly pattern as words in the syntax, whether as terms of syntactic constituents other than the predicate complex or as terms of movement within the predicate complex, and concerning the morphological status of sub-predicate word “heads”, in terms of whether it is sensible or not to analyse them sometimes as heads of free syntactic words, and sometimes not. Overall, I conclude that while it is certain that sequences of the form [VROOT-PDER] have grammatical “word” status in many cases, it is not possible to generalize this status over an entire syntactic category which such sequences could be said to realize in every case. The evidence for grammatical “word” status of sequences of the form [PDER-*x*] is even weaker. Ultimately, it would appear that the only type of post-head syntactic “word” that could be identified within the predicate complex would be one whose head can be either a predicate derivation or a predicate inflection, which is homophonous with and functionally identical to bound morphological dependents, and whose only *raison d’être* would appear to be the fact of occurrence in third syllable position in the predicate complex (which is, of course, a phonological rather than a grammatical fact).

I therefore conclude that the only *complete* sense in which sub-predicate words in Galo are “words” is a *phonological* sense; grammatically, there is no great motivation for considering Galo predicate derivations as anything other than bound predicate formatives.

Precisely what *kind* of bound formative they may be is the topic of the next section.

11.1.7. Morphological status of predicate derivations – roots, suffixes or both?

In the preceding section §11.1.6 we reviewed the phonological and grammatical statuses of sub-predicate “words” in Galo, concluding that while data clearly support the analysis of sub-predicate words in a *phonological* sense, data do not generally support an analysis of sub-predicate words in a *grammatical* sense. Having concluded that Galo predicate derivations constitute a category of bound predicate formatives, it remains to consider their morphological status; i.e., whether they are best analysed as roots, suffixes, or (in some sense) both. The ultimate question is whether to adopt the analysis schematized in (434), in which predicate derivations, or some subset thereof, are analysed

as lexical roots – in some sense equivalent to verb roots – or that of (435), in which predicate derivations, or some subset thereof, are analysed as suffixes.

(434) *ŋó rikkák ré.*

| | | | | | |
|----------------------------------|---------------------------|--------------------|--|------------|--------------------|
| ŋó | rík-kák | | | -rɔ́ | |
| 1.SG | wash.clothes-clean | | | -IRR | |
| | [[ROOT-ROOT |]] _{STEM} | | -SFX |]] _{PRED} |
| | [[COMPOUND HEAD |]] | | -DEPENDENT |]] _{PRED} |
| 'I'll wash (the clothes) clean.' | | | | | |

(435) *ŋó rikkák ré*

| | | | | | |
|----------------------------------|------------------------|--------------------|-------------------|--------------------|------------|
| ŋó | rík | | -kák | | -rɔ́ |
| 1.SG | wash.clothes | | -CLEAN | | -IRR |
| | [[ROOT |]] _{STEM} | -SFX |]] _{STEM} | -SFX |
| | [[SIMPLEX HEAD |]] | -DEPENDENT |]] | -DEPENDENT |
| 'I'll wash (the clothes) clean.' | | | | | |

11.1.7.1. Structure and semantics

All predicate formatives in Galo would appear to have the same potential syllable structure, segmental composition, and capacity for tonal assignment. This means that there is no way of determining on a purely morphological basis whether a given predicate formative has lexical (root) or functor (suffix) status. In addition, since there appears to be no grammatical limitation on the type of predicate base to which a predicate derivation may be bound, and no clear procedure yet identified for assigning predicate derivations to a structurally-determined set of position-classes, nor to categorically-determined head or dependent positions within sub-predicate words (see §11.1.6.2), we are left with a very thin set of structural criteria indeed with which to determine the morphological status of bound formatives of the predicate.

However, one possibility not yet addressed in detail is that of predicate derivations themselves *standing as a predicate head*. Surely, if it were possible for a predicate derivation to stand as the lexical head of a predicate, this would be strong evidence in favour of its analysis as a bound lexical root rather than a suffix. And, in fact, there are clear indications that large numbers of predicate derivations have homophonous, semantically-relatable “counterpart” verb roots. Consider examples (436) through (440), in which the first sentence has a **bold** verb root which is homophonous with and semantically relatable to the **bold** predicate derivation in the second sentence. Note that

these are surface transcriptions, which therefore bear some formal differences, but that underlyingly, the bolded morphemes are fully homophonous.

- (436) *ŋó zírə* ‘I’ll give it to him.’ *give*
ŋó rīgzí rə ‘I’ll wash it for him.’ **BENEFACTIVE APPLICATIVE**
- (437) *ŋó morə* ‘I’ll make it.’ *make*
ŋó rīgmo rə ‘I’ll have/let him wash it.’ **CONCESSIVE CAUSATIVE**
- (438) *ŋó caarə* ‘I’ll go up.’ *ascend*
ŋó naacāa rə ‘I’ll throw it up there.’ **ASCEND TO GOAL DIRECTIONAL**
- (439) *ŋó cənɾə* ‘I’ll know.’ *know*
ŋó docēn rə ‘I’ll recognize this food.’ **KNOWING MANNER**
- (440) *ŋó kagrə* ‘I’ll clean (a surface).’ *clean a surface*
ŋó rikkák rə ‘I’ll wash (the clothes) clean.’ **CLEAN RESULT**
- (...)

Dozens more such examples may be found, and some of my more reflective consultants are explicitly aware of the formal and semantic relatedness, not to say identity, of forms like *cən-* ‘know’ and *-cən* ‘KNOWING MANNER’ in (439). Predicate derivations with even more detailed semantic values exist, and often have clear correspondences to homophonous verb roots; for example, consider *húk-* ‘of a blade, to separate from the handle to which it is bound as a knife, machete or sword’ and *-húk* ‘DE-HANDLE RESULT’, as in *tú-húk* ‘kick (a knife, machete or sword), with the result that the blade separates from the handle’.

Even more significant, perhaps, is evidence that speakers are able to alternate their expression of certain information between verb root and predicate derivational instantiations. For example, consider the passage in (441), in which Speaker A’s restatement of the predicate in his second sentence could be construed as a case in which the predicate derivation *-càa* ‘ASCEND’ is *moved* to predicate head position; potentially, such decision would relate to the fact that *càa-* ‘ascend’ is more semantically general than

gacàa ‘scale to top’. *càa-* ‘ascend’ would then be more appropriately deployed in a sentence in which the focal information is contained in the noun phrase and the predicate semantics are de-emphasized or backgrounded, as seems to be the case here.

- (441) A: “ə-hêə abó-taníi cèn-tùu-kú-nam = əə jii óm-làa
 ə-hô! father-mankind know-CONT-CMPL-NZR:RLS=COP DISC say-NF
ləlîi-ləlakgə gacàa kaakú! B: əə.
 ləlîi-ləlak = gə gá-**càa**-káa-kú əə
 shining.path=GEN scale-ASCEND-PF-CMPL AFF
 A: *dooní ləlîi-ləlakgə caakâaku arú.*
 dooní ləli-ləlak = gə **càa**-káa-kú aru
 sun shining.path=GEN **ascend**-PF-CMP CONC.CEXP(<Asm)
 A: ‘Saying “Aya! Abo Tani has come to know my secret!” she climbed back up
 via the shining path.’ B: ‘Uh-huh.’ A: ‘She went back up via the rays of the sun,
 you see.’ (NyPB/MN, LAT 323-325)

It seems evident that a patterned relationship exists between the predicate derivation *-càa* ‘ASCEND’ of Speaker A’s first sentence and the verb root *càa-* ‘ascend’ of his second sentence. On this basis, we might go as far as to suggest that *càa-* and *-càa* in fact reflect a single underlying form, which takes on different properties when differently employed within the predicate morphology, but which has a single underlying cognitive value.

And yet, important as these strong correspondences between predicate derivations and other types of morpheme may be, they do not apply to all or even the majority of Galo predicate derivations. In fact, of the 321 predicate derivations currently attested for Galo (not counting the multiple senses or functions of several of them), only 76, or 23.7%, have clear verb root cognates. A further 32, or 10%, are potentially cognate with bound nominal or adjectival roots, although it is less clear in many such cases whether or not an active synchronic relationship can be said to exist. In any case, this still leaves 213 predicate derivations – almost two thirds of the available data – for which neither I nor two of my consultants who worked through the entire list of 321 attested predicate derivations with me in detail have been able to associate with any other root occurring in the language.

Neither does it appear to be the case that presence or absence of a cognate verb root (or any other type of root) in the language correlates in any way with what we might call the *depth of grammaticalization* of a predicate derivation. That is to say, it appears neither to be the case that the more functor-like predicate derivations attested in Galo *lack*

a cognate verb root, nor that the more semantically particular or idiosyncratic-seeming predicate derivations *have* verb root cognates, even as an overall tendency. For example, the Comitative applicative derivation *-gɔ* and the Causative applicative derivation *-mò* are two of the most abstractly functional of all predicate derivations, having both developed clause-continuity functionality in addition to clause valence-altering functions (discussed in §11.2.5.4 and §11.2.5.3 respectively). And yet, they have two of the most clearly relatable verb root sources we can find: *gɔ* ‘carry/wear’ and *mò* ‘make’. On the other hand, *-mèn* ‘PLAYFUL MANNER’ and *-kə* ‘DEAD RESULT’ (§11.2.1.1) seem so semantically particular that they (intuitively, perhaps) *must* be expressible as lexical heads – and yet, they aren’t.²¹¹

Furthermore, as was also discussed in more general terms in §2.3, it is almost *never* safe to analyse a predicate derivation in terms of direct importation of the semantics of a putatively cognate root, even when they appear clearly relatable. For example, although the verb root *kák* ‘wash surface’ has a clear semantic restriction against selection of human/animate or clothing O argument referents (for which the separate verb roots *hú* ‘wash a body’ and *ɾák* ‘wash clothes’ respectively exist), this restriction does not apply to the Result derivation *-kàk* ‘CLEAN’, as shown in (435). Similarly, the Benefactive Applicative derivation *-zɪ* ‘BEN’ clearly relates to the verb root *zɪ* ‘give’, and a few of my consultants have drawn explicit links between these forms. And yet their properties with respect to the organization of argument structure in a clause are quite different. For details, see §11.2.5.2.

Finally, although it is generally the case that predicate derivations are homophonous with apparently cognate roots, it is not always. For example, PTs **len* ‘exit’ has a regular Galo reflex in the Directional predicate derivation *-lèn* ‘OUT’; however, its verb root counterpart exhibits a rare, irregular *l- → n- / #_* change in *nèn* ‘exit’. Such

²¹¹ The apparent non-correspondence between persistence or decline of the lexical source form of a functor in Galo and its depth or extent of grammaticalization is a perhaps surprising discovery given the plethora of correlations between these facts which have been identified in the literature on grammaticalization in Mainland South-East Asian languages. For example, obsolescence of the lexical source of a putatively functional serialized verb is routinely employed as an argument in favour of its advanced reanalysis and structural adjustment (Li and Thompson 1981). Post (2007) even went so far as to suggest that lexeme obsolescence could have an implicitly *causal* relation to advanced structural adjustment of functor morphemes in Chinese. Although the typologies of these languages largely differ with that of Galo – in particular, the morphemes in question are usually syntactic *words* in Mainland South-East Asian languages, whereas in Galo they are bound *formatives*, and presumably must be assumed to have different cognitive statuses – the facts we have reviewed here at least suggest that the place of lexeme obsolescence in grammaticalization theory may require some reconsideration; indeed, it may be of no relevance whatsoever.

facts seem to provide strong evidence for the need to posit distinct representations for at least some predicate derivations and their verb root “counterparts”, if not in all cases.

Concerning associations between predicate derivations and types of root *other* than verb roots, here again we find good evidence of relatedness, but lack the ability to generalize over entire classes or even subclasses. For example, the predicate derivation *-gò* ‘WARM/HOT RESULT’ seems clearly relatable to the adjectival root *gò-* ‘warm/hot’, as in *agò* ‘warm/hot’. And yet, no other adjectival root in this semantic class has a predicate derivation counterpart; resultative expressions such as ‘cool it down’ are formed periphrastically. Similarly, the predicate derivation *-zèk* ‘INTO CHUNKS’ seems clearly relatable to the Quantity classifier root for ‘slices’ *zèk-*, and yet it is apparently the only predicate derivation with such a classifier root counterpart; i.e., the fact of cross-category correspondence in this case appears to be an idiosyncratic property of the individual roots, and not generalizable across their respective categories.

In sum, there *is* evidence that some predicate derivations are relatable to lexical roots (mainly, verb roots) which occur elsewhere in the language, a fact which would argue in favor of analyzing predicate derivations as themselves *roots*, rather than *suffixes*. At the same time, it is not possible to identify a complete overlap between all or a subclass of predicate derivations and any other class of roots, due primarily to frequent functional/semantic and occasional structural discontinuities between their members. Furthermore, the majority of predicate derivations lack cognate forms anywhere in the modern language, and thus lack the ability to themselves head independent syntactic words. Therefore, we are left with the possibility that while predicate derivations may indeed have large numbers of *homophonous* (and probably cognate) roots in the language, this fact may have no bearing on whether predicate derivations are synchronically analysable as roots themselves.

11.1.7.2. Productivity

A further means of assessing the “root” or “suffixal” status of predicate derivations is of course productivity. Ordinarily, we would expect most active “suffixes” in a given language to be highly productive, and capable of occurrence on any functionally/semantically compatible base, while lexical “roots” may be more idiosyncratic or have combinatorial properties which are less often predictable.

Among Galo predicate derivations, the data are mixed; however, the basic trend is one of *productivity*, *functional consistency*, and *predictability*. Consider again the predicate derivation *-mèn* ‘PLAYFUL MANNER’. Some of its more conventional uses are to form terms denoting conventional leisure activities which are commonly lexicalized as single-word concepts in other languages (Table 11.2). At the same time, there would appear to be no limit to the type of verb which can occur in *-mèn*, leading to the potential existence of literally hundreds of terms in Galo for which one would, it seems to me, strain greatly to find even a single example of lexicalization in another language (Table 11.3).

| VROOT | Gloss | + PDER | Resulting term | Meaning |
|-------------|-----------------------|--------------------------|----------------|----------------------------|
| <i>ín-</i> | ‘go (VIE); walk (VI)’ | <i>-mèn</i> ‘AS.PLAY’ | <i>inmèn</i> | ‘stroll (VI(E))’ |
| <i>dùu-</i> | ‘sit (VI)’ | | <i>duumèn</i> | ‘loungue about (VI)’ |
| <i>jùp-</i> | ‘sleep (VI)’ | | <i>jubmèn</i> | ‘nap; take a catnap (VI)’ |
| <i>káa-</i> | ‘look/see (VT)’ | | <i>kaamèn</i> | ‘take a look; glance (VT)’ |
| <i>dó-</i> | ‘eat (VT)’ | | <i>domèn</i> | ‘snack (on) (VT)’ |

Table 11.2 – Selection of conventional leisure activities realized in Galo by verbs in *-mèn* ‘PLAYFUL MANNER’

| VROOT | Gloss | + PDER | Resulting term | Meaning |
|-------------|---------------------|--------------------------|----------------|-------------------------------|
| <i>zíK-</i> | ‘melt (VI)’ | <i>-mèn</i> ‘AS.PLAY’ | <i>zimmèn</i> | ‘melt playfully (VI)’ |
| <i>dír-</i> | ‘break (VI)’ | | <i>dirmèn</i> | ‘break playfully (VI)’ |
| <i>pìi-</i> | ‘boil over (VI)’ | | <i>piimèn</i> | ‘boil over playfully (VI)’ |
| <i>àk-</i> | ‘scoop liquid (VT)’ | | <i>agmèn</i> | ‘scoop liquid playfully (VT)’ |
| <i>kùu-</i> | ‘weigh (VT)’ | | <i>kuumèn</i> | ‘weigh playfully (VT)’ |

Table 11.3 – Selection of idiosyncratic “leisure activities” realized in Galo by verbs in *-mèn* ‘PLAYFUL MANNER’

In sum, *-mèn* ‘PLAYFUL MANNER’ is a fully productive predicate formative, and verbs in *-mèn* are *not* in most cases analyzable as lexicalized compounds, but instead reflect active formations.

Some predicate derivations are more selective than *-mèn* ‘PLAYFUL MANNER’. For example, *-báa* ‘QUICK MANNER’ (§11.2.1) only occurs on verbs which are *graded* or *iterative*, and cannot occur on punctual verbs. A few predicate derivations are so semantically particular that they may only occur on a tiny subset of verbs; *-jóo*

‘INSULTING MANNER’ has only been accepted by my consultants on verbs of locution. Finally, there are a few predicate derivations whose behaviour can only be described as stubbornly idiosyncratic. For example, *-gò* ‘WARM/HOT RESULT’ (also discussed in §11.1.7.1), is rejected on nearly every possible stem with the exception of verbs of manipulation. It is the only Result derivation which has been rejected in combination with the verb root *mò-* ‘make’ (the standard means of determining the core semantic value of a Result derivation in Galo). The reason for this lone rejection can only be wondered at.

In sum, there *is* evidence of highly semantically-particular and/or idiosyncratic selectional behaviour among predicate derivations, which would tend to point toward their analysis as compounded lexical roots. However, the greater trend is in favour of productivity and predictability of behaviour within a specified range.

11.1.7.3. Class-openness

A final criterion we might consider is class-openness. That is, we might expect that whereas a grammatical class of suffixes might be closed or highly resistant to expansion, a lexical class of roots might be more open to expansion. Again here, the data are mixed.

We can immediately discount the possibility of unrestricted use of Galo roots as predicate derivations; for example, as discussed already in §11.1.7.1, although the predicate derivation *-zèk* ‘INTO CHUNKS’ has an apparent classifier root cognate in *zèk-* ‘CLF:SLICES’, it is also apparently the only one; it is not possible in Galo to use simply any classifier root as a predicate derivation.

The most promising candidate source category for expansion of the class of predicate derivations would appear to be verb roots. It is here that we find the largest number of forms which are apparently cognate to predicate derivations, they are morphologically adjacent, and even exhibit a certain functional consistency, as shown in (441). So *can* verb roots be freely imported for use as predicate derivations?

In brief, no. Consider again the case of Galo ‘wash’ verbs *kák-* ‘wash a surface’, *rík-* ‘wash clothes’ and *hú-* ‘wash a body’. Recall from §11.1.7.1 that *kák-* ‘wash a surface’ has a likely cognate in the predicate derivation *-kák* ‘CLEAN RESULT’, which occurs in terms such as *ríkkák* ‘wash clothes clean’ *hukák* ‘wash a body clean’ and *kakkák* ‘wash a surface clean’. However it is not possible to say **rigrík*, **kagrík*, **hurík*,

**riksú*, **kaksú* or **husú*, i.e., it is not possible to enlist the verb roots *rik-* ‘wash clothes’ and *hú-* ‘wash a body’ for use as predicate derivations.

At the same time, predicate derivations are sometimes discovered in situations in which it seems extremely difficult to discount the possibility that they are being directly, and actively, derived from verb roots. For example, when I asked one of my consultants to explain to me the meaning of the verb root *cəp-* ‘pinch’, I was shown a piece of paper being stuffed between the wall and its crossbeam, an activity which my consultant then described as *hî-cəp-nam* ‘press-PINCHED-NZR:RLS’ ‘to press something (between two surfaces), pinching it’. This would seem to be a clear indication that my consultant saw the forms *cəp-* ‘pinch’ (the form I had asked for) and *-cəp* ‘PINCHED RESULT’ (the form which he actually returned) as, in effect, semantically interchangeable (although, potentially, pragmatically different). Furthermore, it seems to me here that the order of derivation would be most straightforwardly analysed as *verb root* → *predicate derivation* rather than the reverse; could this not be describable as an active synchronic derivational process?

It seems to me that it could. However, observations such as these raise an interesting theoretical and methodological question: how is it possible for the analyst of Galo grammar to distinguish, phenomenologically, between 1) observing a case of expansion of the class of predicate derivations and 2) discovery of a predicate derivation which had been previously unattested? Unless the boundaries of the class of predicate derivations were initially well-defined, it is not easy to see what “expansion” would necessarily mean.²¹²

11.1.7.4. Interim conclusion

Returning to the question posed at the outset of this section, are Galo predicate derivations *roots*, *suffixes*, or (in some sense) *both*? Evidence reviewed to date suggest that in some sense, they are both. That is to say, certain predicate derivations – such as *-cəp* ‘PINCHED RESULT’ – so closely resemble a probably cognate verb root that it

²¹² One promising test might involve loanwords or nonce forms. That is, one might stipulate a form **lò-*, with the nonce semantic value * ‘of a pitcher, to break’ and test its ability to pattern as a novel Result derivation, e.g. My efforts in this area to date have failed, with consultants invariably returning the Result derivations (or other types of predicate derivation) which they would actually use in this function. Whether a more imaginative experimenter than myself might design a better test than I have and return more promising results, I shall leave to be seen. As for loans, I have found no indications to date that they may *ever* be used as predicate derivations.

would appear that the predicate derivation should be similarly analysed as a type of root – potentially, as the same root in two different functions. At the same time, other predicate derivations – such as *-hí* ‘REFL’ – apparently reconstruct to Proto-Tani as predicate derivations in the same function (in this case PTs **ɕu* ‘Reflexive’), are highly abstract and do not seem to relate to a lexical root; such forms seem quite straightforwardly describable as suffixes. These two types seem to represent two fairly comfortable analytical extremes. However, there are also numerous examples of virtually every imaginable type in between; a paradigm example would be *-kák* ‘CLEAN RESULT’ (cf. §11.1.7.3).

To avoid drawing an arbitrary division, I will continue to refer to Galo predicate derivations as *bound dependent predicate formatives*, without adopting a final position as to their categorically more root-like or suffix-like status, both individually and as a class. It is conceivable that an effective categorical division – such as “combining root” versus “derivational suffix” – or subcategorical division – such as “lexical” versus “functional” predicate derivations – will eventually be able to be made; however, I am unable to find clear evidence for such divisions at present.

11.2. Simplex predicate derivations

This section describes *simplex predicate derivations*, which are defined as monomorphemic predicate stem-expanding formatives. They are grouped for convenience into the semantically based classes of *manner* and *result* (§11.2.1), *motion* and *direction* (§11.2.2), *aspect/aktionsart* (§11.2.3), *class-changing* (§11.2.4), *argument-determining* (§11.2.5), and *modal* (§11.2.6). However, certain predicate derivations appear to fall within two or more semantic classes; for example, manner and result derivations may sometimes accomplish predicate class-change and/or valence-change. Thus, the overview below should be viewed not as an exclusive form-functional subcategorization of predicate derivations per se, but rather as a subclassification of potential predicate derivational functions.

11.2.1. Manner and result predicate derivations

The largest subset of Galo predicate derivations denote predicate *manner* and/or *result*. *Manner* derivations specify the *manner* or *way in which an event is brought about*,

or the manner or way in which a state or property obtains. *Result* derivations specify an outcome or state resulting from an event (or, less often, of a state or property); in most cases, the result pertains to S or O (according to stem transitivity), although in a few cases results pertaining to S/A are also found. In (442), an example from a text in which a character has just entered a house having been lost in the jungle and had been feeling cold and uncomfortable, the manner derivation *-ɲāk* ‘INTENSE MANNER’ expresses the intensity of his manner of warming himself by the fire. In (443), the result derivation *-túm* ‘CLOSED.S/O RESULT’ describes the ‘closed’ state which in this case results from the propping of a stick against a door.

(442) *akên nà da êm iɲāk hɪlà duutò.*

akên = na da əmà-íi-**ɲāk**-hí-là(a) dùu-tó
 one=SLCT CNTR fire-bask-**INTENSELY**-REFL-NF sit-PFV
 ‘And then one of them was sitting and warming himself intensely.’ (TR, FA 022)

(443) *əɾəpəm hɪdâago lâagəɾəmɔ...tuutûml aká.*

əɾáp = əm hɪdâa = go làa-gəɾɔ = əm = əə tùu-**túm**-là(a) á-káa
 door=ACC stick=IND take-ACNC=ACC.TSUB=TOP prop-**CLOSED.S/O**-NF keep-PF
 ‘Taking a stick, they propped the door **shut**.’ (IR, FA 033)

Manner derivations generally express concepts which are expressed by *manner adverbs* in many other languages, while *result* derivations are often best translated by *resultative complements*, as in the English translations of (442) and (443). However, it is important to bear in mind that Galo predicate derivations are not themselves syntactic words (§11.1.6), and so are not themselves analysable as adverbs or verbal complements.

Manner and result derivations are closely related in Galo, such that it is sometimes difficult to determine a particular predicate derivation’s status on semantic grounds alone. Consider *-kùm* ‘GATHER’ in (444), which could as easily be interpreted as a manner derivation (‘gatheringly hook something’) as it could be a result derivation (‘hook something such that it is gathered’).

- (444) *buppâ...jarâəm akkûm akcáə là molà*
 buppî = əə jarâa = əəm ák-**kùm** ák-cáə-là(a) mò-là(a)
 all=TOP goods=ACC hook-GATHER hook-STABILIZE-NF make-NF
atûu kuəmă...
 á-tûu-kú = əəm = əə
 keep-CONT-CMPL=ACC.TSUB=TOP
 ‘After hanging up all of their things and keeping them there...’ (TR, FA 046)

When semantics are insufficient, it is possible to apply certain tests; for example, *adjectivalization* (§11.2.4.2) is generally a property of manner derivations rather than result derivations, and *-kùm* ‘GATHER’ appears to fail this test.²¹³ However, such tests are not absolutely flawless, and have not been extensively applied in all potentially ambiguous manner/result derivations attested to date. More research in this area is required.

Table 11.4 displays a selection of the more than two hundred Manner and Result derivations currently attested for Lare Galo, together with a brief meaning, a fuller description, and (if available) a related lexical root and its meaning. A full description of all attested Manner and Result derivations is expected to appear in Nyodu, Post et al. (in preparation).

²¹³ For example, **tí-kùm = əə = ree?* ‘pick-GATHER=COP=PQ’ * ‘are they stacked?’, in which *-kùm* is construed as an adjectivalizer licensing a copula complement, is rejected by my consultants.

| Type | Form | Meaning | Distribution and meaning | Ex. | Meaning | Rel. Root | Meaning |
|------|--------------|--------------------|---|----------------|--|-------------|-------------------------------|
| M | - <i>ìr</i> | ‘Provokingly’ | activity verbs; indicates S/A brings about predicated event with intention of misguiding others or provoking them to do evil | <i>mèn-ìr</i> | ‘misguide/lead to evil through speaking’ | N/A | N/A |
| | - <i>kák</i> | ‘Brightly’ | intransitive state verbs; indicates S undergoes state ‘brightly’ or ‘shiningly’ | <i>úu-kák</i> | ‘shine brightly’ | <i>kák-</i> | ‘wash surface’ |
| | - <i>kík</i> | ‘Overly’ | any verb; indicates S/A brings about event/state ‘to excess’, ‘overdoing it’ in process | <i>jùp-kík</i> | ‘sleep like a log’ | N/A | N/A |
| | - <i>kìn</i> | ‘Muddledly’ | any verb; indicates event/state proceeds in a muddled or confused way. If transitive, indicates that O is in confusion or disarray | <i>máo-kìn</i> | ‘confused’ | N/A | N/A |
| | - <i>kúu</i> | ‘Affect tons of O’ | transitive activity verbs; indicates that a large amount or quantity of the O argument referent is affected | <i>dó-kúu</i> | ‘eat like a glutton’ | <i>kúu-</i> | ‘weigh’ |
| | - <i>kùr</i> | ‘As second round’ | activity verbs other than of motion or position; indicates that the activity is occurring ‘as a second round’ or ‘for a second time’ | <i>tí-kùr</i> | ‘drink a second round’ | N/A | N/A |
| | - <i>kén</i> | ‘Spitefully’ | any verb; indicates that S/A participates in event/state to spite someone else | <i>dó-kén</i> | ‘eat in front of a hungry person’ | N/A | N/A |
| | - <i>kèn</i> | ‘Good/easy’ | any verb; adjectivalizes; raises underlying non-subject of verb to S, indicates that it is ‘good/easy’ to act upon, affect or experience, according to the verb semantics | <i>dó-kèn</i> | ‘delicious (good/easy to eat)’ | N/A | N/A |
| R | - <i>úu</i> | ‘Awake’ | transitive verbs; indicates O is ‘awakened’ as result of activity | <i>kók-úu</i> | ‘awaken by crowing’ | <i>úu-</i> | ‘(be) awake; shine’ |
| | - <i>kàa</i> | ‘Cool’ | all verbs where S/A can be construed as ‘cooled down’ as result of activity | <i>ín-kàa</i> | ‘go cool down’ | N/A | N/A |
| | - <i>kák</i> | ‘Clean’ | transitive verbs; indicates O is ‘fully clean’ as result of activity | <i>dí-kák</i> | ‘peel clean’ | <i>kák-</i> | ‘wash surface’ |
| | - <i>kíi</i> | ‘Sharp’ | patient-taking verbs; indicates O is ‘sharpened’ as result of activity | <i>pá-kíi</i> | ‘sharpen (tip) by chopping’ | <i>kíi-</i> | ‘sharp (adjective formative)’ |
| | - <i>kùu</i> | ‘Bent O’ | transitive verbs; indicates O is ‘bent’ as result of activity | <i>kér-kùu</i> | ‘twist into U-shape’ | <i>kùu-</i> | ‘thin’ |
| | - <i>kúp</i> | ‘Upside-down’ | intransitive activity verbs, indicates that S results in face-down position as outcome; on transitive verbs, indicates same of O | <i>dàa-kúp</i> | ‘tumble, landing face-down’ | N/A | N/A |
| | - <i>kúm</i> | ‘Senseless’ | most verbs; adjectivalizes; indicates that S is undergoer of ‘senseless (drunken or dizzy)’ state resulting from activity | <i>tí-kúm</i> | ‘drunk’ | N/A | N/A |

Table 11.4 – Selected Manner and Result predicate derivations

11.2.1.1. Result derivations and two-part stems

A number of Galo verb roots are preferentially – possibly obligatorily, at least for some speakers – followed by a result derivation of some kind. Some well-attested examples are *kàr-* ‘chop (something large, as a tree)’, *cíK-* ‘operate a door’, *zɬ-* ‘sink’, *tók-* ‘move down’, and *kùm-* ‘stack (objects with length/extent)’, although it is possible that others exist. In most such cases, the motivation appears to be that the sense of the verb root is viewed as incomplete in absence of some specified result. For example, although it is perhaps possible to imagine operating a door in the abstract, in practice one cannot operate a door without either opening or closing it; hence, (445) is straightforward, but (446) has been rejected by my consultants (note, incidentally, that there is no basic English lexeme with this sense either).

(445) *cittúm toké!*

cíK-túm-tó = kée

operate.door-CLOSED.S/O-IPTV.ODIR=HORT.POL

‘Close (the door)!’ (MN, OL17:61)

(446) **ŋó ərəpém cikká.*

ŋó əráp = əəm **cíK-káa**

1.SG door=ACC **operate.door-PF**

* ‘I **operated** the door.’

In a similar vein, the sense of *kàr-* ‘chop (something large, such as a tree)’ is incomplete without an appropriate result derivation such as *-tùu* ‘IN HALF’ (compare also English *?I’m chopping the tree*, which is odd in absence of a result complement such as *down*, *up* or *into bits*), and the sense of *zɬ-* ‘sink’ is incomplete without a result derivation such as *-bùk* ‘INTO SUBSTANCE’ (presumably since one cannot sink without being submerged as a result).

However, some other verb roots which require a following result derivation, such as *tók-* ‘move down’ (which seems to require following result derivation *-ɬ* ‘LOW RESULT’) seem less easily analyzable in this way, and may simply be that they are in the process of lexicalizing as a two-part stem. In this case, it appears that *tók-* ‘move down’ may *once* have functioned as a general motion verb with the sense ‘descend’ (in Mising, a probably

cognate form *tok-* occurs as the general ‘descend’ verb), but that this function has obsolesced in Galo in favor of the general ‘descend’ verb *ĩĩ*.²¹⁴

11.2.1.2. Purpose

In a few cases, *purpose* senses may be inferred from Manner or Result derivations. For example, Manner derivation *-pòk* has the basic sense ‘PLACATINGLY’, as in *báə-pòk* ‘carry/hold-PLACATINGLY’ ‘hug someone placatingly’; the latter sense could as easily be translated ‘hug someone in order to placate them’, according to the speaker’s construal. Similarly, the Result derivation in *mĩK-dòr-tó* ‘blow-INCREASE-PFV’ ‘blew on something (such as a fire, thus) increasing it (as its strength)’ could be as easily construed as ‘blew on the fire in order to increase its strength’. I have not yet attested a predicate derivation which entailed a purpose sense to the exclusion of (or in preference to) a sense of manner or result; however, it seems likely that at least some purposive senses are preferentially expressed by Galo speakers via the use of manner and/or result derivations.

11.2.1.3. Attainment *-pàa*

Attainment *-pàa* ‘ATTN’ is in a sense a “generic” result derivation. It has a basic sense of *attainment* of the state or condition denoted by the predicate; when marking a state or activity verb, its sense is usually that the subject referent ‘manages’ to bring about the predicated event/state, and/or that some state resulting from the predicated event/state is successfully or fully reached (447).

(447) *bupnè...kirkíóm...lèkkôk paalà...*

bupnè = əə kirkíi = əəm lèk-kók-**pàa**-là(a)

3.DL=TOP window(<Asm)=ACC slide-OPEN-ATTN-NF

kaabôk bihitò.

káa-bók-bì-hí-tó

look-DOWN/SOUTH-DCOL-REFL-PFV

‘They two **got** the window open and looked down together.’ (TR, FS 016)

²¹⁴ Some of my consultants have denied that it is even possible to form an infinitive in *tók-*, rejecting ?*tognám* as ‘a Mising word’ and insisting that the corresponding Galo form must be *togñinam*. However, opinions on this point were mixed.

Often – and particularly among verbs of cognition and perception – *-pàa* is found indicating attainment of a resulting state which is often lexicalized in a suppletive verbal form in English (though not in most Asian languages), as *móə-pàa* ‘think-ATTN’ ‘remember’, *káa-pàa* ‘look-ATTN’ ‘see’, *èn-pàa* ‘feel-ATTN’ ‘notice’, *tá-pàa* ‘listen-ATTN’ ‘hear’, and *má-pàa* ‘search for-ATTN’ ‘find’.

Marking in *-pàa* is particularly common in negative polarity clauses; in this case, its effect is to indicate that although the activity denoted by the predicate is initiated, its realization is somehow imperfect or incomplete. In (448), the A argument referent (in this case the speaker) has clearly initiated an event of ‘thinking’, but is unable to fully or completely bring the thought on or about which he intends to think (referent of the underlying O argument) fully to mind.

- (448) *tâ mərə́... jôoe bərə́? məəpâa kuddá má.*
 tò mərə́a jòo = ee bəree = ₂ móə-**pàa**-kú-dáa-**máa**
 DST.UP HEST what=COP.PFV CJEC=EMPH think-ATTN-CMPL-ACHV-NEG
 ‘Up there...now what was it (called)? I’ve **forgotten** yet again.’ (TB, OAM 218)

11.2.1.4. Argument structure

The argument structure of a predicate stem expanded by a Manner or Result derivation may be the same as or different from the argument structure of the head root. Often, the valence of a transitive stem may be *reduced* through Manner derivation; in many if not all cases, this can be viewed as a process of *adjectivalization*, as discussed in §11.2.4.2; for example, the Manner derivation *-kèn* ‘GOOD/EASY’ raises the underlying O of a transitive verb to S (deleting the A), as in *dó-kèn* ‘eat-GOOD/EASY’ ‘good/easy to eat’. The resulting word may be used as a derived adjective with the sense ‘delicious (of a Patient of eating)’, and occurs as an intransitive predicate or in any other syntactic context in which adjectivals occur (cf. also §5.2.3).

Valence may also be *restructured* by means of a Manner or, more often, Result derivation. In (449), note that *aapùk* ‘heart’ stands as O argument of *ìn-* ‘cut by sliding across a fixed blade’, and that *níi* heads the O argument of the adverbially subordinated predicate in *dó-* ‘eat’. However, *níi* is *not* a Patient of ‘eat’, despite that this is the

semantic role ordinarily assigned to the O argument of ‘eat’; rather, the Result derivation *-pʰ* ‘SATISFY.O’ appears to govern the semantic role of the O argument.

(449) *hīgɛ̃ aapùkəm buppʰɛ̃ nɪjǝm dopʰɛ̃ doobɛ̃...*

hīgɛ̃ aapùk = əəm [[buppʰɛ̃ nɪi = əəm]_O [dó-**pʰ**-dó(o)]_{PRED} = bɛ̃]_{SBRD}
 SPRX.IND heart=ACC all person=ACC eat-SATISFY.O-STAT=SBRD
ìntə ká. ”

ìn-tó = káa

cut.by.sliding.across.fixed.blade-IPTV.ODIR=HORT.ADVS

“Cut this heart such that it’s enough for everyone to eat.” (MK, TT 203)

Interestingly, Result derivation *-pʰ* ‘SATISFY.O’ has a counterpart in the S=O ambitransitive verb *pʰ*- ‘suffice; satisfy’. In its transitive use, *pʰ*- subcategorizes for an Experiencer O – ordinarily, a person who experiences satisfaction by means of the A argument referent. Seemingly, then, the argument structure of the adverbially subordinated predicate in (449) is more directly associable to the Result derivation than to the verb root.

This fact notwithstanding, it is not always possible to describe the argument structure of a derived predicate in terms of the argument structure of a possibly cognate root. In (450), the result derivation *-zík* ‘MELT.S/O’ is presumably relatable to the verb root *zík*- ‘melt’. However, the verb root is *intransitive only*. Thus, the transitive argument structure of the predicate in (450) is not describable in terms of a direct importation from the argument structure of a lexical source root.

(450) *doopɛ̃ pʰlastikəm amzík kaakú.*

doopɛ̃ = əə pʰlastik = əəm ám-**zík**-káa-kú
 sun=TOP plastic(<Eng)=ACC roast-MELT.S/O-PF-CMPL
 ‘The sun melted the plastic.’ (MN, B2:119)

Ultimately, the interactions of various Manner and Result derivations with the argument structures of various types of root is a complex matter which must be described on a case-by-case basis. Although such a comprehensive description exceeds the scope of this thesis, I have hopes that it will be able to be undertaken in a future work.

11.2.2. Motion and direction predicate derivations

Motion and direction derivations modify the core semantics of a predicate by specifying the direction associated with a type of motion, type of motion or spatio-temporal direction associated with an activity, or directedness or vector associated with a state (Table 11.5).

| Form | Meaning | Related VROOT form | Meaning |
|--------------|-----------------------------------|--------------------|-----------------------|
| - <i>càa</i> | ‘ASCEND (TO GOAL)’ | <i>càa-</i> | ‘ascend (VIE)’ |
| - <i>lòo</i> | ‘DESCEND (TO GOAL)’ | N/A | N/A |
| - <i>áa</i> | ‘ALLATIVE (TO PROXIMATE GOAL)’ | <i>áa-</i> | ‘come; enter (VIE)’ |
| - <i>àa</i> | ‘ABLATIVE (TO DISTAL GOAL)’ | N/A | N/A |
| - <i>lèn</i> | ‘OUT (OF SOURCE)’ | <i>nèn-</i> | ‘exit (VIE)’ |
| - <i>lìk</i> | ‘INTO (GOAL)’ | <i>lìk-</i> | ‘insert (VIE)’ |
| - <i>ín</i> | ‘FORWARD/AWAY’ | <i>ín-</i> | ‘go (VIE); walk (VI)’ |
| - <i>kùr</i> | ‘BACKWARD/RETURN’ | N/A | N/A |
| - <i>dúu</i> | ‘UPWARD/NORTHWARD’ | N/A | N/A |
| - <i>bòk</i> | ‘DOWNWARD/SOUTHWARD’ | N/A | N/A |
| - <i>én</i> | ‘RAISE’ | N/A | N/A |
| - <i>hì</i> | ‘LOWER’ | N/A | N/A |
| - <i>fk</i> | ‘UNDER’ | N/A | N/A |
| - <i>bòo</i> | ‘OVER/PAST’ | <i>bòo-</i> | ‘cross over (VT)’ |

Table 11.5 – Motion and direction predicate derivations (full attested set)

The basic function of a motion/direction derivation is to supplement the predicate semantically by specifying some motion or direction-oriented aspect of an event for which a predicate head (usually a verb) is not inherently specified. Thus, for example, *càa-* ‘ascend’ is lexically specified for topographical trajectory (upward) and goal-orientation, but does not include the concept of orientation vis-à-vis a deictic centre. Accordingly, modification in *càa-kùr* ‘ascend-RETURN’ indicates an ascent *back* to a place from which the subject has come. Similarly *gá-* ‘scale’ is potentially directed up, down, or in any other direction (i.e., the verb includes the ‘moving by means of climbing’ sense of the English translation, but not the attendant upward directionality); use of directional -*càa* ‘ASCEND’ in (451) disambiguates the set of possibilities. Failure to mark *gá-* ‘scale’ with an appropriate motion/direction derivation in (451) would lead to a sense

that the subject simply climbed around aimlessly on the ‘shining path’. Similarly, in (452) use of the directional *-áa* ‘ALL.PRX’ indicates that the sun is returning to its home,²¹⁵ i.e. is setting; failure to mark *ò-* ‘fall’ with an appropriate directional here would lead to a sense that the sun is simply falling out of the sky.

(451) “*ə-hêə abó-taní centûu kunəmə jì*” *əəm*

ə-hêə abó-taní cèn-tùu-kú-nam = əə jii əm-làa
o-ho! father-mankind know-CONT-CMPL-NZR:RLS=COP DISC say-NF
ləlîi-ləlakgə gacâa kaakú!

ləlîi-ləlāk = gə gá-**càa**-kâa-kú
shining.path=GEN scale-**ASCEND**-PF-CMPL
‘Saying “Aya! Abo Tani has come to know my secret!” she climbed back **up** via the shining path.’ (NyPB/MN, LAT 323-325)

(452) *doopí oâa duukù.*

doopí = əə ò-**áa**-dùu-kú
sun=TOP fall-**ALL.PRX**-IPFV-CMPL
‘The sun is setting.’ (lit., ≅ ‘The sun is falling **home**.’) (GS, OL16:109)

A second, equally important function of at least some (possibly not all) motion/direction derivations is an *applicative*-like function (cf. §11.2.5.6), in which a locative argument of the predicate for which the predicate head is not inherently subcategorized is added by way of the derivation (usually, a Goal). In (453), use of the directional *-câa* ‘ASCEND’ adds a Goal to which the Patient is transferred. In absence of the derivation, the locative noun phrase would be understood as a general location in which the event is construed to happen – not as a Goal. Similarly, in (454) the speaker is teasing her son by threatening to fly his paper airplane *into* a fire. Failure to mark the predicate in *-lîk* ‘INTO’ would result in an almost nonsensical sentence in which the speaker states his intent to make the plane somehow fly while she happens to be (herself) located in or inside a fire.

²¹⁵ For a general discussion of the semantic association of the proximate allative concept *come* with home/village-orientation in Galo, see §7.4.1.

(453) *əgəm ogò taajôo*

[əgə-m]_O [ogò taajòo]_E

APRX.IND-ACC APRX.LOC **top**

paacâa toké.

[pàa-**càa**-tó]_{PRED} = kée

stack.voluminous-ASCEND-IPTV.ODIR=HORT.POL

‘Put that (stone) **on top** of it.’ (IR, MPO 020)

(454) *əm aló dəəlgla morə!*

[əmə aló]_E [dəə-**lik**-là(a) mō-rə]_{PRED}

fire DST.LOC.SLEV soar-**INTO**-NF make-IRR

‘I’m going to make (the paper airplane) fly **into** the fire!’ (KN, OL23:81)

Directionals may also be used with *stative* predicates, again usually specifying a goal-oriented trajectory to the event which would otherwise be not expressible as an argument of the clause. In (455), the speaker is describing the outcome of his group’s migration from their homeland of *daarɛ̃* to *silɛ̃* village, from where he was speaking at the time. Note that although this is translated into English using a directional preposition *down*, the corresponding Galo Locative/allative postposition *bolò* ‘at/to down there’ cannot be used here since it would improperly locate the location being referenced *downward of the speaker* at the time of speaking. Instead, the predicate derivation -*lòo* ‘DESCEND’ is used to locate *silɛ̃* village relative to the reference point *daarɛ̃*.

(455) *rɪdâkkòm...çogò...rəlôo nammé...*

rɪ-dakkòm hogò rə-**lòo**-nam = əə

do-CONC SPRX.LOC live/exist-DESCEND-NZR:RLS=TOP

dúk-kostó...əmbə zâa kaamá.

dúk-kostó əmbə zâa kâa-mâa

suffering(<Asm)-difficulty(<Asm) ANAP.PADV much have/exist-NEG

‘However, living **down** here...there’s not much pain and suffering.’ (NyR, MDS 028)

In addition to *spatial* functions, directional derivations may have *temporal*-directional reference. In (456), use of the allative proximate derivation -*âa* ‘ALL.PRX’ invokes a sense of continuous temporal trajectory until the present.

(456) *mərûm golokə menâa dù.*

mərùm golokà mèn-**áa**-dùu
 last.evening since speak-ALL.PRX-IPFV
 ‘(They’ve been) talking since last night **up to** (now).’ (MN, OLT15:36)

11.2.3. Aspect/aktionsart predicate derivations

Aspect/aktionsart derivations add or modify some feature of the *inherent temporal or procedural structure* of a predicate. As such, they are among the most frequent of Galo predicate derivations, however unlike aspectual inflections none are unable to license a final predicate (§10.3). My use of the ambiguous label “aspect/aktionsart” here does not reflect a polyfunctionality inherent in the category (as was the case, for example, in “motion/direction” derivations). Rather, it reflects the fact that, in my view at least, the meaning of the terms “aspect” and “aktionsart” is not well spelled-out in the literature with regard to derivational forms. That is, “aspect” is frequently associated with inflectional morphology while “aktionsart” is usually associated with the event-structure encoded in a lexeme, whereas the forms we will discuss in this section seem to me to be precisely intermediate. The forms attested to date are listed in Table 11.6.

| Form | Meaning | Rel. form | Meaning | Section |
|--------------------|-----------------------------|---------------|---------------------|------------|
| <i>-káa</i> | ‘TENTATIVE’ | <i>káa-</i> | ‘look (VT)’ | §11.2.3.1 |
| <i>-tà</i> | ‘INCIPIENT’ | N/A | N/A | §11.2.3.2 |
| <i>-kók</i> | ‘INITIATIVE’ | <i>kók-</i> | ‘open (VT)’ | §11.2.3.3 |
| <i>-rəp</i> | ‘INCEPTIVE’ | <i>-rəp</i> | ‘UPRIGHT’ | §11.2.3.3 |
| <i>-níi...-náa</i> | ‘ABORTIVE INCEPTIVE’ | N/A | N/A | §11.2.3.3 |
| <i>-kə</i> | ‘ABORTIVE’ | N/A | N/A | §11.2.3.3 |
| <i>-káa</i> | ‘SINGLE-ITERATIVE’ | <i>káa- ?</i> | ‘have/exist (VI)’ ? | §11.2.3.4 |
| <i>-dó...-dó</i> | ‘REPETITIVE’ | N/A | N/A | §11.2.3.5 |
| <i>-ləə</i> | ‘GRADUAL’ | N/A | N/A | §11.2.3.6 |
| <i>-bəə</i> | ‘HABITUAL’ | N/A | N/A | §11.2.3.7 |
| <i>-bəə</i> | ‘CONTINUOUS’ | <i>bəə-</i> | ‘carry/hold (VT)’ | §11.2.3.8 |
| <i>-kə</i> | ‘EXTENSIVE’ | <i>kə-</i> | ‘repose (VI)’ | §11.2.3.9 |
| <i>-jáp</i> | ‘DURATIVE’ | N/A | N/A | §11.2.3.9 |
| <i>-jáp</i> | ‘DURATIVE’ | N/A | N/A | §11.2.3.9 |
| <i>-jār</i> | ‘DURATIVE/FREQUENTATIVE’ | <i>jār-</i> | ‘LENGTH(WISE)’ | §11.2.3.9 |
| <i>-bén</i> | ‘INTENSIFIER/FREQUENTATIVE’ | N/A | N/A | §11.2.3.10 |
| <i>-ròo</i> | ‘TERMINATIVE’ | <i>ròo-</i> | ‘NZR:COMPLETION’ | §11.2.3.11 |
| <i>-pàa</i> | ‘ATTAINMENT’ | <i>pàa-</i> | ‘get (VT)’ | §11.2.1.3 |

Table 11.6 – Aspect/aktionsart predicate derivations (full attested set)

11.2.3.1. Tentative *-káa*

The term *Tentative (aspect)* was, as far as I am aware, first introduced by Matisoff (1973) in his description of Lahu. The core sense of a Tentative aspectual value is one of a hesitant or “testing-the-waters” realization of an event/state, as with an intent to “see” what the outcome will be. As in the English lexical resultative expression *V (and) see*, structures with Tentative values tend to derive diachronically from verbs of perception, as in Assamese *sa-* ‘see; Tentative Auxiliary’ (Post forthcoming) and in Galo *-káa* (prob. < PTs **kaŋ* ‘look’). Tentative-marked predicates in Galo are sometimes best translated by lexemes with inherent Tentative aktionsart values in English, as in *dó-káa* ‘eat-TENT’ ‘taste (food)’ or *tíi-káa* ‘imbibe-TENT’ ‘taste (drink)’ or else by periphrastic expressions as in *káa-káa* ‘look-TENT’ ‘have a look’. It is common for Tentative expressions in Galo, as well as elsewhere, to have an *Attemptive* sense, as *try and/to*. This would seem to reflect a common uncertainty or decreased likelihood that the marked event/state will be fully or

successfully brought about which is shared among these two functions. However, it appears to me that while the term “Tentative” can effectively encompass “Attemptive”, the reverse is not (or is less) the case.

Examples of Tentative *-kǎa* in Galo from texts are in (457)-(459). In (457), the speaker is giving instructions to an interlocutor to select certain items and place them in a particular configuration as shown in a photograph which only the speaker can see. Use of *-kǎa* ‘TENT’ here and elsewhere in the same text relates to the speaker’s uncertainty that his interlocutor will in fact select the correct item.

(457) *ám...əə, əm laakǎa tó, kainə, kozzúugə.*

əəm əə əəm làa-**kǎa**-tó kaí-nà kozzúu = gə
ANAP.ACC bamboo ACC take-TENT-IPTV.ODIR big-NZR:SUB awhile.ago=GEN
‘Go ahead/try and get that bamboo, the big one from just before.’ (IR, MPO 003)

In (458) from a narrative text, the A argument referent is curious about some goings-on in a granary, which his wife appears to have concealed from him. Use of Tentative *-kǎa* here similarly reflects an uncertainty as to whether he will discover what is happening or not.

(458) *abó-taní bəm kaakǎa rûupə lagidù!*

abó-taníi bə-m kǎa-**kǎa**=rûu=pə lagí-dùu
father-mankind DST.DOWN-ACC look-TENT=CERT=CTZR:IRR must(<Asm)-IPFV
‘Abo Tani (feels) he just *has* to **take a** look!’ (NyPB, LAT 291)

In (459), also from a narrative text, the A argument referents are unaware of whether anyone is inside a house at which they’ve arrived, and so knock on the door. Use of Tentative *-kǎa* here reflects their desire to see what the outcome of their knocking will be (i.e., will anyone answer or not).

(459) *“jəə bərə duunà” əmlà, cǐkǎa tó.*

jəə bəree dùu-nà = əə əm-là(a) cǐ-**kǎa**-tó
who CJEC exist.LOC.ANIM-NZR:SUB=TOP say-NF slap-TENT-PFV
‘Saying “who might be there”, they knocked **to see**.’ (TR, FA 010)

Tentative *-kǎa* appears to occur on all types of verb, but not on adjectives.

11.2.3.2. Incipient -tə

‘Incipient’ marker -tə is among the most frequent and abstract of the aspect/aktionsart derivations, and cannot currently be traced to any lexical source form. It seems to occur on all types of verb, but not on adjectives. In the most straightforward cases, its sense is similar to English *start to*, *be about to* or *be going to*; i.e., it refers to the verge of an event or state’s realization. Although use of Incipient -tə generally entails a construal of expectation that the predicated event/state will come about, it need not be realized in fact (460)-(461).

(460) *akiə dēttə duukù!*

akíi = əə déK-tə-dùu-kú

belly=TOP crack-INCIP-IPFV-CMPL

‘My stomach is **about to** burst (having eaten two plates of dumplings)!’ (DW, OLB5:158)

(461) *ḡunù allô nè ìitə rə əmdâk okkù...*

ḡunù allô = nè

ìi-tə-rə

ám-dàk

okə = kù

1.PL tomorrow=TMP.IRR.PUNC descend-INCIP-IRR say-COS ANAP.ABL=CMPL

‘So then, the next day when we were (**supposed**) to return...(we instead stayed and went fishing).’ (RmR, CC 048)

In examples like (460)-(461), the Incipient or “not-yet-realized” status of the event is relatively important to the information content, and can be translated with appropriately emphatic structures in English. However, in other cases, use of Incipient marking has a more subtle use and is best translated into English via alternate lexical forms rather than via overly emphatic or contrastive-seeming periphrastic expressions, or may be best left untranslated. In (462), in which the speaker is construing a character to be deciding among possible escape routes, use of Incipient-marking accords with the not-yet-realized nature of the marked events, but does not directly focus on the verge of event-realization. Note that the event depicted in the consequence clause *they may get us* is not construed as coincident with the moment of the conditional clause’s incipience, as an English translation with *be about to* would suggest; rather, it is construed as coincident with the event overall. Incipient marking in this case relates to *non-realization* vis à vis the construed time of speaking.

(462) *“hók întə booló, parə pə; ák întə booló,*

hokə ín-tà-boolo pá-rə pə akə ín-tà-boolo
 SPRX.ABL go-INCP-COND chop-IRR UCRT DST.ABL.SLEV go-INCP-COND
parə pə paadəmə.”

pá-rə pə paadám = əə

chop-IRR UCRT TRIBE=TOP

“‘If we **(were to)** go via this way, they may get us; if we **(were to)** go via that way, they may get us, the Paadam,’ (he said).’ (TB, OAM 256)

Similarly, use of Incipient *-tà* is very common in purposive adverbial

subordination, where its use on uninflected subordinate clauses distinguishes purposives from manner adverbials (schematically, *he went to see her* (incipient, not-yet realized event) versus *he went (while) looking at her* (simultaneous, realized event)). For further discussion and examples, see §16.5.3 (463).

(463) *bulù...attírə...munáa jò gəllèemə...*

bulù attír = əə munáa = jòə gə-lèe = əəm = əə = ́

3.PL group=TOP bag=and.such carry/wear-SSEQ=ACC.TSUB=TOP=NF1

immên tabə innəmə...bədaəm

ín-mèn-tà = bə ín-nam = əə bədaa = əəm

walk-AS/PLAY-INCP=SBRD go-NZR:RLS=TOP road=ACC

məəpâa kumá kaakú.

məə-pàa-kú-máa-káa-kú]

think-ATTN-CMPL-NEG-PF-CMPL]

‘Going for a walk all together, wearing packs and so on, they forgot the way.’ (lit., ‘going **in order to** go for a walk’) (IR, FA 009)

The focus of Incipient *-tà* on non-realization of an event differentiates it from markers of inception such as *-rəp* ‘INCEPTIVE’ (§11.2.3.3), which focus on the onset of a realized event. Accordingly, while the Inceptive may be used in imperatives, Incipient *-tà* cannot be so used (cf. (464)).

Finally, since Irrealis marking in *-rə* can also occur in most types of subordinate clause (and can co-occur with Incipient *-tà*), it is not possible to straightforwardly identify the Incipient marker *-tà* as an Irrealis marker proprietary to subordinate clauses. However, given its seeming obligatoriness in certain subordinate clause types (see §16.5.3), there are possibilities that it may be developing in this direction. More research on this topic is warranted.

11.2.3.3. Initiatives, Inceptives and Abortives *-kók*, *-rép*, *-kə* and *-níi...-náa*

The forms discussed in this subsection all focus on the onset of an event/state in different ways. *-kók* ‘INITIATIVE’ is a rare variant of Result derivation *-kók* ‘OPEN’ (§11.2.1) which occurs on activity verbs other than of manipulation, as in *ɲɛ-kók* ‘laugh-INIT’ ‘**start to** laugh’ and *mèn-kók* ‘speak-INIT’ ‘**start/initiate** a conversation’. *-rép* ‘INCEPTIVE’ is a relatively frequent variant of Result derivation *-rép* ‘UPRIGHT’ which occurs on activity verbs other than of position and manipulation. While use of *-kók* ‘INITIATIVE’ generally entails an implication of overcoming or removing obstacles in initiating an activity, or otherwise breaking with an enduring state, use of *-rép* is less marked, and is the most frequent indicator of event/state initiation (464).²¹⁶

(464) *əm opôəm tɪtə là, parép tokk^wá.*

əəm opòo = əəm tɪi-tó-là(a) pá-**rép**-tó-kú = káa

ANAP.ACC liquor=ACC imbibe-PFV-NF chop-**ICEP**-IPTV.ODIR-CMPL=HORT.ADVS
‘After drinking the liquor, **start** your killing.’ (TB, OAM 296)

-kə ‘ABORTIVE’ is infrequently-attested, and may be better considered a Manner derivation rather than an Aspect/Aktionsart derivation as such. Roughly speaking, it has the sense ‘make as though to’, as in *tú-kə* ‘kick-ABRT’ ‘**make as though to** kick (but in fact not kick)’. *-níi...-náa* ‘ABORTIVE INCEPTIVE’ has the form of a complex predicate derivation (§11.3), and motivates formation of a Multiword predicate (§10.5), although it does not fit comfortably into any of the subtypes of complex predicate derivation currently identified; neither of the two formatives appears to have any independent semantic/functional value, and the form of the alternation does not seem to fit into any patterns currently identified for Galo; therefore, it is discussed in this section. A relatively frequent derivation, *-níi...-náa* marks an event/state which is ‘just starting out’ but which has not yet reached a full or potent realization and retains the potential to be aborted (465).

²¹⁶ Note that use of Incipient *-tə* (§11.2.3.2) is not possible here.

(465) *jídóo onîi onâa dù.*

jídóo ò-**nîi** ò-**nâa**-dùu

rain fall-AINC.1 fall-AINC.2-IPFV

‘It’s drizzling/sprinkling (just starting to rain little by little, or in fits and starts).’

(RmR/BH, OL15:35)

11.2.3.4. Single-iterative *-káa*

-káa ‘SINGLE-ITERATIVE’ derives a construal of an event/state as a single, complete iteration, and appears to occur on all types of verb, but not on adjectives. It is homophonous with *-káa* ‘TENTATIVE’, and may be diachronically derivable from the same, ultimately lexical, source form *káa*- ‘look’. However, that they are clearly synchronically distinct (functions, at least, if not also forms) can be demonstrated by the facts that they co-occur in different morphological positions and contribute different functional values to the predicate stem (466).²¹⁷

(466) *apîk zapkáa zikáalà.*

apîi = go záp-káa-zí-**káa**-là(a)

bit=IND talk-TENT-BEN-SITR-IPTV.SDIR

‘Please give us a bit of a talk (on that topic).’ (lit., ‘talk for us **once**’) (MN, FYG 014)

-káa ‘SITR’ is frequently found in polite hortatives, possibly with the implication that the addressee need not trouble him/herself to perform an action several times or indefinitely.

11.2.3.5. Repetitive *-dǎ...-dǎ*

-dǎ...-dǎ ‘REPETITIVE’ has the form of a complex predicate derivation where the morphosyntax is concerned, in that it motivates formation of a Multiword predicate (§10.5). However, it is basically simplex in its structure, consisting only of a repetition of the same form across two verbal words. This form of repetition is not a widespread pattern, and is therefore not described as a subtype of complex predicate derivation in this grammar.

²¹⁷ *záp-zí-káa-là(a)* ‘talk-BEN-ITER-IPTV.SDIR’, representing the predicate in (466) with the Tentative marker removed, has the sense ‘please talk for us once’ (MN, B2:56).

Repetitive *-dɔ́...-dɔ́* seems to occur on all types of verbs, but not on adjectives; on inherently punctual verbs, such as *tú-* ‘kick’, the sense is straightforwardly of repetition, i.e. *tú-dɔ́ tú-dɔ́* ‘kick-REP.1 kick-REP.2’ ‘continuously/repetitively kick; kick and kick and kick’. In punctual verbs with a more diffused sense, such as *ò-* ‘fall (of rain)’, the sense is of multiple like iterations (i.e. raindrops falling) over an extended period of time; that is to say, the sense is somewhat closer to continuative. On more stative verbs, the sense is even closer to continuative or even persistive, as *rɔ́-dɔ́ rɔ́-dɔ́* ‘live/exist-REP.1 live/exist-REP.2’ ‘go on living’. The core sense seems to be one of an action being performed in the same way at various points, or at any given point, across a particular duration of time (467).

(467) *nɪzɪ̃ alóo-ajòbè mɔ́dɔ́ mɔ́dɔ́ lakù jù naî.*

nɪzɪ̃ *alóo-ajò = bá* *mɔ́dɔ́* *mɔ́dɔ́-là(a)-kú* *juu na = (ə)î*
man.old day-night=DAT think-REPT.1 think-REPT.2-NF-CMPL REPDECL=ETAG
‘They say the old man was **going on** thinking day and night, see?’ (TB, OAM 254)

The iconically repetitive form of *-dɔ́...-dɔ́* is suggestive, and may appear to imply derivation from a simplex form *-dɔ́*. Synchronically, no morpheme of the underlying form *-dɔ́* seems to exist in Galo; diachronically, there exists a chance that *-dɔ́...-dɔ́* represents an earlier reduction of *-dɔ́ɔ́* ‘ALL DAY LONG; CONTINUOUSLY’ (§11.2.1), however this cannot currently be demonstrated.

11.2.3.6. Gradual *-ləə*

-ləə ‘GRADUAL’ very frequently occurs on all types of verbs, but not on adjectives, and generally derives a construal of an event as *gradual*, or as occurring in cumulatively unfolding stages over a period of time. In (468), the speaker is describing how the plains peoples continuously copied out their writing onto different media – a cumulative event played out in stages – and thus gradually came to possess the overall knowledge of writing.

(468) *molê lakù, molê lakù...bûl cenlê lakù.*

mò-**lê**-là(a)-kú mò-**lê**-là(a)-kú bulù cèn-**lê**-là(a)-kú
 make-GRAD-NF-CMPL make-GRAD-NF-CMPL 3.PL know-GRAD-NF-CMPL
 ‘**Going on** doing that...they **gradually** came to understand (how to write).’ (MK, LW 028)

On stative verbs which cannot be graded, the effect is closer to continuative, as in (469); however, the overall sense remains one of cumulative unfolding of an event (rather than simply lack of interruption to an event, e.g.).

(469) *bêlêp bûlukê...bêdûu kú.*

bê-**lê**-là(a) bulù-kê = êm bê-dûu-kú
 carry/hold-GRAD-NF 3.PL-GEN=ACC carry/hold-IPFV-CMPL
 ‘Having kept it **continuously**, (they) still have their (writing system). (MK, LW 045)

The gradual or progressive²¹⁸ semantics of *-lê* render it useful in the context of Galo narrative continuity, as to express the passage of time. It may be found wherever actions are construed to *require* long periods of time and multiple steps or stages, as in (470).

(470) *caalêla, caalêla, caalêla dooní poolê mook tòl*

càa-**lê**-là(a) càa-**lê**-là(a) càa-**lê**-là(a) dooní-poolê mookó tòl
 ascend-GRAD-NF ascend-GRAD-NF ascend-GRAD-NF sun-moon place LOC.UP
caalên kunêmé...
 càa-lên-kú-nam = ê
 ascend-OUT-CMPL-NZR:RLS=TOP
 ‘He **kept on** going up, up, up, up until finally having reached the place of the Sun and Moon...” (NyPB, LAT 145)

Additionally, it may be employed simply to indicate the passage of time itself without regard to whatever events may occur therein, as in (471); note here the optional but highly iconic repetition of *-lê*, which recalls the obligatory repetition inherent in *-dê...-dê* ‘REPETITIVE’, and may provide some insight into how the latter form may have developed.

²¹⁸ It is possible that the colloquial sense of “progressive” would better capture the overall sense of this form than “gradual”; I have avoided the term “progressive” simply because its association with a particular type of aspectual *inflection* (i.e., marking time-unbounded processes) is strong in the literature (Comrie 1976); accordingly, its use here could introduce confusion.

- (471) *rílâə rílâə rílâə rílâə*
 rì-lâə rì-lâə rì-lâə rì-lâə
 do-GRAD do-GRAD do-GRAD do-GRAD
rílâə lakù iza...
 rì-lâə-là(a)-kú izzàa
 do-GRAD-NF-CMPL now
 ‘So, on and on and on and on (the time passed) up to now...’ (NyR, MDS 011)

11.2.3.7. Habitual -*bâə*

-*bâə* ‘Habitual’ occurs on any verb, but no adjective; it indicates that an event occurs ‘always’, ‘habitually’, ‘as a practice’ or ‘on any given occasion’ (472)-(473).

- (472) *takée-taləpəm puráa nín-túu-gəré là,*
 takée-taləp = əəm puráa nín-túu-gəré-là(a)
 ginger-onion.wild=ACC everything(<Asm) pinch-O.TO.PIECES-ACNC-NF
həm naazə bəəpə lagè.
 həmbə náa-zəə-bâə-pə lage
 SPRX.PADV throw-SCATTER.O-HAB-CTZR.OBLG NEC
 ‘(To ward away forest spirits), you should (as a general practice) break the garlic and ginger into small pieces and throw it all around.’ (RmR, CC 165)

- (473) *nók...çocér abnângo...tuulík namgó*
 nó-kə hocér àp-nam = go tùu-lík-nam = go
 2.SG-GEN deer shoot-NZR:RLS=IND push.with.force-APPL:INTO-NZR:RLS=IND
membâə dù, əgəm ĩzí kaató.
 mèn-bâə-dùu əgè-m ĩ-zí-káa-tó
 say-HAB-IPFV ANAP.IND-ACC narrate-BEN-SITR-IPTV.ODIR
 ‘Your...stag-shooting incident, your pushing it over (which) you’re **always** talking about, tell him about that a bit.’ (NyR, MDS 092)

-*bâə* ‘Habitual’ is less frequently attested on state verbs; if it does occur, it will indicate that the state is ‘always’ or ‘usually’ brought about, i.e. given some set of circumstances.

It is easy to mistake -*bâə* ‘Habitual’ for -*bəə* ‘Continuous (§11.2.3.8) due to their similarity in phonological form as well as semantic/functional values. However, they are clearly distinguished when following an underlyingly high toned verb root, as in the following minimal pair (474)-(475).

(474) *inbâə dù.*
 ín-**bâə**-dùu
 go-HAB-IPFV
 ‘always goes (as a practice)’

(475) *inbǎə dù.*
 ín-**bǎə**-dùu
 go-CTIN-IPFV
 ‘is **still** going (hasn’t terminated)’

It is possible that -*bâə* ‘Habitual’ and -*bǎə* ‘Continuous’ share a historical derivational relationship, and/or derive from derivationally-related lexical source forms (§2.4.2.5), however there is no synchronic evidence of an active relation.

11.2.3.8. Continuous -*bǎə*

Continuous -*bǎə* ‘CTIN’ is one of the most frequent of predicate derivations; it occurs on all types of verb root and has a restricted ability to occur on adjectival stems (§11.4). In most uses, its sense is of an event or state which began at an earlier time, and which continues or persists at the time of reference, as in (476)-(477). This sense is often translated via English ‘keep’, ‘still’, ‘remain’, and so on.

(476) *purnáə nám əgə dagbâə nà.*
 purnáə = əə námə əgə dàk-**bǎə**-nà = əə
 old.one(<Ind)=TOP house APRX.IND stand-CTIN-NZR:SUB=COP.IPFV
 ‘The old (shelving complex) is the one which has **always been** in that house (and which **remains** there now).’ (IRw, HC 026)

(477) *sāaŋ lò doobǎə dù.*
 saaŋ = lo dóo-**bǎə**-dùu
 bed(<Asm)=LOC lie.down-CTIN-IPFV
 ‘They **remained** lying on the bed.’ (IR, FA 062)

When it is clear that an event or state has been interrupted, -*bǎə* can be used with a resumptive sense, as in (478). This sense often translates English ‘resume’, ‘go back to’, and the resumptive sense of ‘continue’.

(478) *okkǎɔ bɯŋŋə mabǎə dũ.*

okkǎɔ bɯŋŋ = əə má-**bǎə**-dũu

SCNJ 3.DL=TOP search.for-CTIN-IPFV

‘And so they two **continued/resumed** the search.’ (TR, FS 023)

It seems that the ultimate lexical source of Continuous *-bǎə* is in the verb root *bǎə* ‘carry/hold’, although it is notable that the resumptive sense of the Continuous derivation is not obviously present in the lexical semantics of verbal *bǎə*.

11.2.3.9. Duratives *-kǎi*, *-jâr*, *-jáp* and *-jâp*

The forms discussed in this section all have the basic property of indicating that an event or state occurs or obtains ‘for a long duration’, although they are differentiated somewhat via their different interactions with certain types of verb. *-kǎi* ‘EXTENSIVE’ has the basic sense ‘extensively’, and can occur on any type of verb to indicate either that the predicated event/state occurs or is the case for a long duration, or that a wide range/variety of entities related to the predicate semantics are affected (thus, with a spatial overtone) (479). The lexical source of *-kǎi* ‘EXTENSIVE’ is quite possibly the verb root *kǎi* ‘repose’.

(479) *ohóo mookóm makǎi kǎ; ohóo mapâa má!*

ohóo mookó = əəm má-**kǎi**-káa ohóo má-pâa-máa

cane place=ACC search.for-EXT-PF cane search.for-ATTN-NEG

‘We looked **all over** the place where the cane should have been, (but) didn’t find any!’ (RmR, CC 038)

-jáp and *-jâp* are not well-attested, and could not be effectively differentiated as of this writing. It is possible that they represent a free variation *j̄ ~ j* in at least some dialects, although at least one of my consultants has insisted that they bear different underlying tones and are in complementary distribution with respect to certain verb roots; this remains a topic for further research. In attested cases, both have the rough sense ‘for a long and continuous, uninterrupted stretch of time’ (480).

(480) *bɛ̃ redioəm tajâp dù.*

bɛ̃ redioo = əəm tá-jâp-dùu

3.SG radio(<Eng)=ACC listen-DUR-IPFV

‘He **goes on and on** listening to the radio (without interruption).’ (IR, B3:25)

Finally, *-jâr* ‘Perpetual’ also has a durative sense ‘for a long time’ on state verbs; on activity verbs, it has a frequentative sense ‘often’.

(481) *igó bɛ̃k jimmám ingó jardù.*

igó bɛ̃-kè jímá = əəm ín-gó-jâr-dùu

NAME 3.SG-GEN wife=ACC go-COMT-PERP-IPFV

‘(Whenever he’s invited anywhere) Igo **constantly** brings his wife.’ (KN, OLB1:50)

Although it has no clear verb root cognate, Perpetual *-jâr* seems almost certainly cognate with nominal/adjectival root *-jâr* ‘long; length(wise)’, as in *ajâr* ‘length(wise)’ and *jarsòo* ‘lengthy; elongated’.

11.2.3.10. Intensifier/Frequentative *-bén*

-bén is basically an intensifier, and is one of the few adjectival root-combining derivations attested in Galo (§11.4). It has the basic sense ‘a lot’ or ‘too much’; on adjectival roots and property verbs such as *tór-* ‘be strong’, it is best translated as ‘very’. However, on intransitive verbs of activity, as well as on intransitive senses of S=A ambitransitive verbs, it has a Frequentative effect, as ‘often’ or ‘frequently’ (or indeed, ‘a lot’). The sense is usually of frequent, similar iterations of the same event, as in (482).

(482) *eksidentó rîbên dù.*

eksident = əə rî-bén-dùu

accident(<Eng)=TOP do-INTS-IPFV

‘Accidents **keep** happening (on that stretch of road).’ (IR, OLB4:40)

11.2.3.11. Terminative *-ròo*

Terminative *-ròo* is a complex morpheme with several apparent functions which may or may not be synchronically relatable. It occurs most frequently as a nominalizer

with the sense ‘point of completion’ (§11.2.4.1). On transitive verbs, it has a resultative sense ‘finish (off) O; affect O completely/without residue’ (§11.2.1). On intransitive verbs and adjectival stems, the sense is closer to a Mainland South-East Asian-style ‘perfect(ive)’, in the sense of ‘full realization’ of a state or property (483)-(484).

(483) *miəm jubrôo motê kulà...*

bɪ̃-əəm jùp-ròo-mò-tó-kú-là(a)

3.SG-ACC sleep-TERM-APPL:SSUB-PFV-CMPL-NF

tatík...pətúp arúu lokkè...nendû kulà...kekka kú.

tatík = əə pətúp arúu lokkè = əə nèn-dùu-kú-là(a) kéK-káa-kú

frog-TOP container hole ABL=TOP exit-IPFV-CMPL-NF flee-PF-CMPL

‘After he_i had been let to (**ultimately**) sleep...the frog_j got out of the container and escaped.’

(TR, FS 009-010)

(484) *kán rôom tokú là, bullè...duudêe kò*

kané-ròo-mò-tó-kú-là(a)

bulù = əə

dùu-dée-kò

be.dark-TERM-CAUS-PFV-CMPL-NF

3.PL=TOP

stay-UCRT-NZR:LOC/OBL

kaakú má.

káa-kú-máa

have/exist-CMPL-NEG

‘After it got (**completely**) dark, they...had no place where they could stay.’ (TR,

FA 004)

In addition, there are several likely lexical root cognates in *amròo* ‘post-harvest rice stalk’, *məròo* ‘yesterday’, and *roorìi* ‘dusk’, although these do not appear to be based on productive formations.

11.2.4. Class-changing predicate derivations

11.2.4.1. Nominalization

The syntax and subtype classification of nominalizations and nominalization-based constructions more generally is discussed in detail in §15. Here we limit the discussion to the semantics of what are described in §15 as “Secondary nominalizers”, and which appear to be analyzable as a subtype of predicate derivation. The forms attested to date are presented in Table 11.7, together with – where attested – a list of related forms in other areas of the grammar. On semantic grounds and for presentation

purposes, they will be divided and further described in terms of four types: *Concrete (non-spatial)* (§11.2.4.1.1), *Spatial* (§11.2.4.1.2), *Abstract (non-temporal)* (§11.2.4.1.3) and *Temporal* (§11.2.4.1.4). Note that this list is almost certainly not exhaustive, and is subject to expansion as additional data are collected. It is also entirely possible that additional data will motivate a different type of subclassification than that presented here.

| Cat. | Form | Meaning as NZR | Rel. form | Meaning |
|------|------|---|--------------------|-------------------------------|
| C | -zèn | ‘-mate’ | azèn | ‘friend’ |
| C | -jǎ | ‘Co-participant in’ | -jǎ | ‘AS COPYCAT’ |
| C | -mó | ‘Accompaniment in’ | -mó | ‘AS ACCOMPANIMENT’ |
| C | -túu | ‘Half of length resulting from’ | -túu | ‘BREAK S/O RESULT’ |
| C | -ŋóo | ‘Remainder of’ | -ŋóo | ‘AS PRACTICE/NATURE’ |
| C | -pén | ‘Unaffected subset of’ | -pèn | ‘MISS O RESULT’ |
| C | -zék | ‘Section resulting from’ | zék- | ‘CLF:SLICE’ |
| S | -rò | ‘Place of origin of’ | N/A | N/A |
| S | -lám | ‘Waypoint of (motion)’ | lampó | ‘mediator’ |
| S | -tùu | ‘Place of stopping of’ | -tùu | ‘STOP/DOWN S/O RESULT’ |
| S | -tár | ‘Spatial endpoint of’ | -tár | ‘REACH ENDPOINT RESULT’ |
| S | -dò | ‘Range of’ | N/A | N/A |
| S | -góo | ‘Area around/within which; Beginning point of (motion)’ | -góo | ‘AROUND O DIRECTIONAL’ |
| A | -mùr | ‘Mistake resulting from’ | -mùr | ‘MISTAKEN MANNER’ |
| A | -dín | ‘Reason to/for’ | N/A | N/A |
| A | -hóə | ‘Level of’ | N/A | N/A |
| A | -kór | ‘Manner of’ | -kór | ‘IMITATIVE MANNER’ |
| A | -pée | ‘Habit of’ | -pée | ‘HABITUALLY USE INST’ |
| A | -ráp | ‘Iteration of’ | -ráp | ‘INCEPTIVE’ |
| T | -dǐ | ‘Time of’ | N/A ²¹⁹ | N/A |
| T | -ráp | ‘Time of inception of’ | -ráp | ‘INCEPTIVE’ |
| T | -hùk | ‘Time of beginning of’ | -hùk | ‘PRESS FORWARD MANNER’ |
| T | -pìn | ‘Time of stopping of’ | -pìn | ‘STOP RESULT’ |
| T | -róo | ‘Time of completion of’ | -róo | ‘TERMINATIVE’ |
| T | -kùr | ‘Instance of returning as (motion)’ | -kùr | ‘BACKWARD/RETURN DIRECTIONAL’ |

Table 11.7 – Nominalizing predicate derivations; Categories: C = Concrete, S = Spatial, A = Abstract, T = Temporal (full attested set)

²¹⁹ -dǐ ‘Time of V’ has probable cognates in *dikǎ* ‘each/every (time)’ (§8.3) *digò* ‘summer’ and *dici* ‘winter’ (§5.2.2.16.1), however these do not appear to represent active formations.

11.2.4.1.1. Concrete nominalizers

Concrete nominalizers derive a semantically rich nominal denoting a concrete entity which is in some way relatable to the event denoted by the predicate – usually, but not necessarily, as a core participant under a particular semantic construal.

-zèn ‘NZR:MATE’ derives an animate ‘co-participant’ nominal with the sense ‘one with whom V is done, as a general practice’. It is similar in sense to the English derivational suffix *-mate*, although the latter of course typically occurs on nouns rather than verbs as in Galo. Examples are *dó-zèn* ‘eat-NZR:MATE’ ‘eating partner’ and *tí-jí-zèn* ‘imbibe-NZR:MATE’ ‘drinking partner’. It is clearly cognate with the root of *azèn* ‘friend’, and seems to occur on all manner of verb root; it has not been attested on adjectives. **-jí** ‘NZR:CO-PARTICIPANT’ also derives an agentive co-participant nominal, although it seems to refer to a specific, perfected event, as in (485).

(485) *márk, nôk tíjîjô jâə là?*

| | | | |
|------|----------|-------------------------------|----------|
| mark | nó-kə | tí-jí = əə | jâə = la |
| NAME | 2.SG-GEN | imbibe-NZR:CO-PARTICIPANT=TOP | who=CQ |

‘Mark, who was your drinking partner (~ who was the person with whom you were drinking)?’ (MN, B4:79)

-má ‘NZR:ACCOMPANIMENT’ derives a non-animate concrete nominal with the sense ‘thing with which V is done, as an accompaniment’; note that it does *not* derive an instrument nominal. An example is in (486).

(486) *okkáə, adîigəmə...âo gaddə...domá*

| | | | | |
|-------|-----------------|-------|-----------|-----------------------|
| okkáə | adîi = gə = əəm | aò | gadə = əə | dó-má |
| SCNJ | TRIBE=GEN=ACC | child | group=TOP | eat-NZR:ACCOMPANIMENT |

kaamá lêek^wəmə bâalə dokáa kú.

| | | |
|---------------------------------------|-----------|-------------|
| káa-máa-lèe-kú = əəm = əə | báa-là(a) | dó-káa-kú |
| have/exist-NEG-SSEQ-CMPL=ACC.TSUB=TOP | bake-NF | eat-PF-CMPL |

‘And, the Adi’s (writing), the children...because they didn’t have anything to eat (rice) with, roasted and ate it.’ (MK, LW 049)

-túu ‘NZR:HALF.LENGTH’ and **-jóo** ‘NZR:REMAINDER’ each derive concrete nominals based on a resultative sense of the derived verb, usually pertaining to transitive O. Both are relatively frequent in texts; examples are in (487)-(488).

(487) *ám êə gatú kainàm.*

áa-m êə **gá-túu** kaí-nà = əəm
DST.SLEV-ACC bamboo **pare-NZR:HALF.LENGTH** big-NZR:SUB=ACC
laakâa tokú dà.

làa-kâa-tó-kú da
take-TENT-IPTV.ODIR-CMPL CNTR

‘Go ahead and get the big **whittled-off hunk of bamboo** again.’ (IRW, MPO 047)

(488) *ám...paŋó gaddəm...*

əəm pá-ŋó gadə = əəm
ANAP.ACC chop-NZR:REMAINDER group=ACC
helík monəmə...

hè-lík-mò-nam = əə

pull-APPL:INTO-APPL:CAUS-NZR:RLS=TOP

‘Having had (the other villagers) pull the **remaining pieces of chopped** (wood) into (the river)..[it was said to have really floated well].’ (TB, OAM 250)

-*ŋóo* ‘NZR:REMAINDER’ also seems able to derive an abstract/event reading as *tú-ŋóo*

‘kick-NZR:REMAINDER’ ‘remainder of kicking left to be performed (as the remaining duration of or activity of a football game)’, although such uses are not yet well-attested.

-*pèn* ‘NZR:UNAFFECTED.SUBSET.OF’ derives a noun with the basic sense ‘subset of O/E left out from/unaffected by V’. It is used in cases in which a group of entities constitutes the O or E argument of a predicate, when some subset is somehow unaffected or ‘left out’; the nominalizer derives a nominal referring to such entities (489).

(489) *orpén kaamaabó orkáa kú.*

ór-pén káa-máa = bó ór-káa-kú
distribute-NZR:UNAFFECTED.SUBSET have/exist-NEG=SBRD distribute-PF-CMPL
‘We distributed (the fish) such that no-one (of the recipients) was left out.’ (lit., ‘such that there were no undistributed-to-entities’) (RmR, CC 114)

-*zék* ‘NZR:SECTION.RESULTING.FROM’ is seemingly cognate to classifier root *zék*- ‘CLF:SLICE’. It derives a nominal from verbs of manipulation or, especially, cutting, which is understood as a fragment or section of an entity (usually O) resulting from the effect of the predicate, as in *hír-zék* ‘strip.bark-NZR:SECTION’ ‘scraps resulting from bark-stripping’ and *pée-zék* ‘cut.with.knife-NZR:SECTION’ ‘section of an entity resulting from the action of cutting’.

11.2.4.1.2. Spatial Nominalizers

Spatial nominalizers derive spatial nouns. Most of these forms are not very frequent, although they all appear to be productive.

-rò ‘NZR:ORIGIN’ derives a nominal with the basic sense ‘place where V was originally done/done for the first time/done early in life’, as in *jùp-rò* ‘sleep-NZR:ORIGIN’ ‘place where one first slept’ or *rě-rò dùu-rò* ‘live/exist-NZR:ORIGIN stay-NZR:ORIGIN’ ‘scene of one’s youth; place of origin or birth’.

-lám ‘NZR:WAYPOINT’ seems to reflect PTs **lam* ‘road’ (ultimately < PTB **lam* ‘road’ (Matisoff 2003: 665)), and is reflected in other Tani languages in nouns meaning ‘road’, such as Mising *lambə* and Apatani *lenda*. It has no other corresponding forms in Galo. As a nominalizing derivation, **-lám** occurs on motion verbs only in my corpus, with the basic sense ‘waypoint (on a path of motion)’, as in *áa-lám* ‘come-NZR:WAYPOINT’ ‘entryway’ and *càa-lám* ‘ascend-NZR:WAYPOINT’ ‘waypoint on an ascending path’ (490).

(490) *taníi gə bədáa ín-lám bolò ɲó dóo-là(a)...*

taníi = gə bədáa **ín-lám** bolò ɲó dóo-là(a)
human=GEN road **walk-NZR:WAYPOINT** DST.LOC.DOWN 1.SG lie.down-NF
“Down on the **path** of man I’ll lie and...[when they approach, I’ll startle them].”
(MK, TT 210)

-tùu ‘NZR:PLACE OF STOPPING/DOWN’ is effectively a nominalizer variant of a homophonous result suffix **-tùu** ‘STOP/DOWN S/O RESULT’, although with predicate rather than S/O argument sensitivity (see §11.2.1), as in *ɲó-kə gók-tùu* ‘1.SG-GEN call-NZR:STOP/DOWN.PLACE’ ‘the place where I stopped calling you’. **-tər** ‘NZR:ENDPOINT.OF.V’ derives a place nominal with a similar sense, although without additional ‘down’ result semantics, as in (491).

(491) *higì cəəna ɲók hiktərě.*

higì cəə = na ɲók-kə hík-**tər** = əə
SPRX.IND PREC=DECL 1.SG-GEN track-NZR:ENDPOINT=COP.IPFV
‘This is exactly the **point where** I stopped tracking (because the trail disappeared).’ (MN, OLB5:79)

-dò ‘RANGE OF V’ derives a somewhat abstract nominal, to date also only attested on verbs of perception, describing the range or scope of a verb’s application. The resulting nominal cannot be individuated or treated as a concretely bounded location, in that it cannot be followed by Individuator or Locative enclitics *go* or *lo* respectively.

- (492) “*rílúu-nə̀mìkə̀, tâapə̀-nə̀mìkə̀...kə̀ə̀, mikkáa tó, ɣòkə̀*
 rílúu-nə̀mìk = ə̀ə̀ taapə̀-nə̀mìk = ə̀ə̀ kə̀ə̀ míK-káa-tó ɣó-kə̀
 maelstrom=TOP hurricane=TOP CNCS blow-APPL:AT/ON-IPTV.ODIR 1.SG-GEN
kâadə̀ hogò.”
 káa-dò hogò
 look-NZR:RANGE SPRX.LOC
 “Whatever powerful storm you can muster, fine; blow it at me, right **in front** of me (lit., ‘within **the range/scope** of my vision).” (NyPB, LAT 132)

Finally, **-góo** ‘NZR:AREA OF V’ is separately attested as an applicative/directional suffix with the sense ‘AROUND O’ (§11.2.2); as a nominalizer, it derives a spatial noun with the sense ‘area (around) encompassed by V’. To date, it has only been attested on verbs of perception, as in (493), in which the resulting nominal is used metonymically to denote all of the people *within* a given area.

- (493) *aaccô! kaagóo raagóəm...ə̀gə̀, góktó kulà...*
 accô! káa-góo ráa-góo = ə̀əm ə̀gə̀ gók-tó-kú-là(a)
 aha! look-NZR:AREA.OF.V RDUP-NZR:AREA.OF.V=ACC HEST call-PFV-CMPL-NF
 ‘All right, then! (Abo Tani) called everyone together (for a village council meeting).’ (lit. ‘all within the **area** of seeing and so on’) (NyPB, LAT 178)

11.2.4.1.3. Abstract nominalizers

Abstract nominalizers derive forms which are generally translated by periphrastic combinations of abstract noun plus some form of verbal modifier in English; interestingly, however, the Galo forms have no attested counterpart abstract noun forms. In effect, this means that it is not possible to refer to abstract concepts such as ‘time’ or ‘manner’ in Galo in absence of a corresponding event or state concept such as ‘of eating’ or ‘of going’. In the course of my research, I have noticed a distinct tendency for highly-educated speakers – of which there are many – to use Indo-European abstract nominals such as the Assamese-derived form *homói* ‘time’ together with Galo periphrastics, as in *dó-nàm homói* ‘eat-NZR:RLS time’ ‘dinner/eating time(<Asm)’, in preference to the fully native

system described here. Abstract nominalizers in a sense encompass Temporal nominalizers (the above remarks apply equally to them); for purpose of presentation they are treated in a separate subsection §11.2.4.1.4.

-mùr is poorly-attested as a nominalizer, although it occurs frequently as a manner derivation with the sense ‘mistake’. As a nominalizer, it derives a nominal with the sense ‘mistake made by way of V’, as in *éK-mùr* ‘write-NZR:MISTAKE’ ‘error in writing’ or the more general *rè-mùr* ‘do-NZR:MISTAKE’ ‘mistake’.

-dín ‘REASON FOR V’ is a relatively productive Abstract nominalizer deriving a reason nominal as in (494).

(494) *nôk əmbə mēdīnə jōowə là?*

nó-kə əmbə mēn-dín = əə jòo = əə laa
2.SG-GEN ANAP.PADV speak-NZR:REASON=TOP what=COP.IPFV CQ
‘What’s your **reason for** talking like that?’ (MN, OL19:1)

-həə ‘LEVEL OF V’ derives a nominal with the sense ‘level/standard of V’, as in (495).

(495) *həmbə doolúu lo rəhhə dūuhə məəpāa má.*

həmbə doolúu = lo rə-həə dūu-həə məə-pāa-máa
SPRX.PADV village=LOC live/exist-NZR:LEVEL stay-NZR:LEVEL think-ATTN-NEG
‘I never thought I’d be living in a village at such (low) **standards** (of comfort and wealth).’ (MN, T8:4)

-kór ‘MANNER OF V’ derives a nominal understood as the underlying subject’s manner of performing the action denoted by the marked verb, as in (496). It seems clearly relatable to the Manner derivation **-kór** ‘IMITATINGLY’ (§11.2.1).

(496) *bñk meŋkorə.*

bñ-kə mēn-kór = əə
3.SG-GEN say-NZR:MANNER=COP.IPFV
‘It’s (just) his way of talking.’ (IR, B5:8)

-pée ‘HABIT OF V’ derives a nominal understood as the underlying subject’s customary or habitual way of performing the action denoted by the marked verb, as in

rì-pée ‘do-NZR:HABIT’ ‘custom’ or *mèn-pée* ‘speak-NZR:HABIT’ ‘habitual way of speaking; things habitually said’.

-rəp ‘ITERATION OF V’ derives an iterative nominal as in (497). It seems relatable to the Aspect/Aktionsart derivation **-rəp** ‘INCEPTIVE’ discussed in §11.2.3.3, although since the semantics do not agree perfectly, it may be that one or the other form has shifted in its function.

(497) *inrəp kânə gò intó.*

ín-rəp kanə = go ín-tó
go-NZR:ITER seven=IND go-PFV
‘I’ve been (to Delhi) seven **times**.’ (MN, B2:24)

11.2.4.1.4. Temporal Nominalizers

Temporal Nominalizers derive nominals which are usually best translated by temporal adverbials or similar periphrastic structures in English. The most semantically general is **-dɛ/ɛ** ‘NZR:TIME OF V’, which derives a nominal broadly denoting the overall duration of time in which the marked event or state takes place, as in *dó-dɛ* (realized [dodɔ́]) ‘mealtime’ or *làa-dɛ* (realized [laadə]) ‘harvest time’. Due to the position in which it usually occurs, **-dɛ/ɛ** is almost always subject to regular final vowel weakening rules (§4.1.3.6), however its full specification is audible in foot-initial position, as in *gá-cí* *làa-cí dɛ* = ɔə ‘harvest-IN.TWO take-IN.TWO NZR:TIME=COP’ ‘It’s harvest time’ (TR, 14.83). An example is in (498).

(498) “*nôk indəgo kaaru duuku.*”

nó-kə ín-dɔ = go káa=rúu=dùu-kú
2..SG-GEN go-NZR:TIME=IND have/exist=CERT=IPFV-CMPL
“‘Your time to go is certainly now upon us,’ (they said).’ (NyPB, LAT 193)

-rəp ‘NZR:TIME OF INCEPTION OF V’ is separately described as an Upright directional (§11.2.2), an Inceptive aspect/aktionsart derivation (§11.2.3.3) and as an Abstract nominalizer with an Iterative sense (§11.2.4.1.3). In the sense described here, it derives a nominal with the sense ‘(temporal) starting point of V’, as in (499). A similar form is **-húk** ‘NZR:STARTING POINT OF V’, as in *tá-húk* ‘listen/ask-NZR:STARTING POINT’

‘point at which one is to start asking’, although this form has as yet been poorly researched.

(499) *ŋó âglo pooló looráp lokkè agér*

ŋó aglò pooló lóo-**rép** lokè = əə agér
1.SG month.first month pass.time-NZR:ICEP ABL=TOP work
rinnà...

rì-nà = əə

do-NZR:SUB=COP.IPFV

‘Working from **the beginning** of January...(I worked up to the end).’ (MN, 25:19)

-róo ‘NZR:TIME OF TERMINATION OF V’ is by far the most frequent Temporal nominalizer attested in my corpus, and indeed the most frequent of all nominalizing predicate derivations. It most often occurs in locative or dative-marked oblique noun phrases – often, followed by the relator noun *kookhì* ‘back’ (§8.1) – marking episodic succession in narrative discourse, i.e. ‘after doing x...’ (500). **-róo** also occurs as a Terminative aspect/aktionsart derivation (§11.2.3.11). **-pín** ‘NZR:TIME OF STOPPING OF V’ is a semantically similar but as yet poorly researched form, which also occurs as a result derivation with the sense ‘STOP’ (§11.2.1); (501) is the continuation of the sentence in (499).

(500) *əm dorôo kookhì bəkú...*

əm dó-**ròo** kookhì bó = kú
ANAP.ACC eat-NZR:TERM back DAT=CMPL

‘After finally **finishing** eating that...(they went to bed).’ (TR, FA 083)

(501) *âglo pooló loopín lobə agér rītò.*

aglò pooló lóo-**pín** lobə agér rì-tó
month.first month pass.time-NZR:STOP LMT work do-PFV
(Working from the beginning of January) I worked up to **the end**.’ (MN, 25:19)

Finally, an as yet poorly-attested form in **-kùr** is clearly relatable to the far more common Directional derivation **-kùr** ‘RETURN’ (§11.2.2); to date it has only been attested on motion verbs.

(502) *ŋók aakûr əəkú.*

ŋó-kà áa-kùr əə = kú
 1.SG-GEN come-NZR:RETURN.TIME COP.IPFV=CMPL
 ‘It’s time for me to go **back (home)**.’ (IR, OLB5:7)

11.2.4.2. Adjectivalization

Adjectivalization is an important and pervasive property of predicate derivations. Due to the sheer number of candidate morphemes, it has not been possible as of this writing to finally determine which among the very many attested predicate derivations have adjectivalizing capacity, to say nothing of subclassification. Here we can only describe the properties of the overall adjectivalization function itself in terms of the behaviour of those adjectivalizing structures which are relatively well-attested.

Most attested adjectivalizing morphemes are from the class of Manner Derivations (§11.2.1). It may be that adjectivalization is a defining property of Manner Derivations, although this cannot at present be said with full certainty. Adjectivalizing predicate derivations occur on verb roots only (they cannot occur on adjectives), and derive a form capable of standing as an adjectival in all of the senses described in §5.2.3; in particular, adjectivalized verbs may stand as Copula Complement (503) and may be derived by the adverbializing enclitic *bə* for use as adverbials (504).

(503) *mootûm tə rəkêñə, maazí dù!*

[mootûm tə]_{CS} [rə-kêñ]_{CC} [= əə]_{COP} maazí-dùu
 jungle DST.UP exist-AZR:GOOD/EASY=COP.IPFV very.much-IPFV
 ‘The jungle (up there) is **nice to** be in, it really is!’ (RmR, CC 118)

(504) *takêñbə meŋkà.*

[tá-kêñ = bə] [mèn-káa]
 listen/hear-AZR:GOOD/EASY=AVZR say-PF
 ‘**Well** spoken.’ (lit., ‘**nice-to**-hearingly said’) (BK, OL9:90)

Most attested Result derivations do not license this distribution. (505) illustrates the use of the result derivation *-kúp* ‘UPSIDE DOWN’ in a subordinated clause. (506) and (507) show that a predicate stem in *-kúp* cannot stand as a copula complement, and cannot be adverbialized.

(505) *tebúl əmcìn daakûp daalêk doobə.*

tebul əəm = cìn dāa-**kúp** dāa-lék-dó(o) = bə
 table(<Eng) ACC=ADD tumble-**UPSIDE.DOWN** tumble-RIGHTSIDE.UP-STAT=SBRD
 ‘The table was also overturned.’ (MN, FS 009)

(506) **tapkupə*

táp-**kúp** = əə
 overturn-**UPSIDE.DOWN**=COP.IPFV
 * ‘It’s turned over.’ (MN, B2:6)

(507) **tapkúp bə doodù*

táp-**kúp** = bə dóo-dùu
 overturn-**UPSIDE.DOWN**=AVZR lie.down-IPFV
 * ‘It’s lying there overturned.’ (MN, B2:6)

Instead, predicate stems in *-kúp* are subordinated by non-final suffix *-là(a)*, which is the usual pattern followed by subordinated verbal rather than adjectival predicates (§16.4.2) (508).

(508) *tapkúp là doodù*

táp-kúp-**là(a)** dóo-dùu
 overturn-**UPSIDE.DOWN-NF** lie.down-IPFV
 ‘It’s lying there overturned.’ (MN, B2:6)

Occasionally, it is possible for a given adjectivalizing predicate derivation to continue to license verb-like behaviour. In (509), what appears to be a Result derivation *-kúm* ‘SENSELESS RESULT’ licenses adverbial subordination in *bə* – a prototypically adjectival function – while in (510), the same form licenses subordination via the nonfinite marker *-là(a)* – a prototypically verbal function – with a semantic difference. This is not a common characteristic of predicate derivations, most of which can occur in only one or the other type of construction; it is also not a characteristic of lexical adjectives or verbs, which are categorically restricted to subordination in *bə* and *-là(a)* respectively. The easiest solution seems to be to identify a polyfunctionality to the set of terms which license this distribution; i.e., *-kúm* adjectivalizes in (509), but is simply a verbal derivation in (510).

(509) *bî tîkúm bô meŋkà.*

bî tî-kúm = **bô** mèn-káa

3.SG imbibe-SENSELESS.RESULT=AVZR say-PF

‘He talked as though he were drunk.’ (IR, B5:6-7)

(510) *bî tîkúmlə meŋkà.*

bî tî-kúm-là(a) mèn-káa

3.SG imbibe-senseless.result-NF say-PF

‘He spoke out of drunkenness.’ (IR, B5:6-7)

For additional discussion in the context of complex predication and manner adverbialization, see §16.5.1.

11.2.4.2.1. Adjectivalization and transitivity

Adjectivalizing predicate derivations have the effect of *detransitivizing* a transitive verb by restricting the caseframe to a single core argument S (generally understood as a semantic Undergoer). For example, it is possible to say *ŋó opòo = əəm tî-dùu* ‘1.SG liquor=ACC imbibe-IPFV’ ‘I’m drinking liquor’ – in which *opòo* ‘liquor’ is the accusative-marked O argument of the transitive verb *tî-* ‘imbibe’ – but not to say **ŋó opòo = əəm tî-kúm-dùu*, in which the verb root has been adjectivalized by *-kúm* ‘SENSELESS’, and can no longer take an O argument.

11.2.5. Argument-determining predicate derivations

The predicate derivations discussed in this section all function to in some way “determine” the arguments of a predicate, usually by changing valency or otherwise reconfiguring the argument structure of a predicate. A small number of the morphemes to be discussed here function to modify the referential scope of a predicate – for example, by forcing a dual or plural reading to S, A, or O – but do not change predicate valency or otherwise motivate syntactic reconfiguration (Table 11.8).

| Type | Form | Meaning | Ref. | Rel. form | Meaning |
|--------------------|---------------|-------------------|------------|-------------|------------------------|
| Benefactive | <i>-zí</i> | BEN | §11.2.5.2 | <i>zí-</i> | ‘give (VTE)’ |
| Causative | <i>-mò</i> | CAUS/SSUB | §11.2.5.3 | <i>mò-</i> | ‘make (VTE)’ |
| Comitative | <i>-gǝ</i> | COMT | §11.2.5.4 | <i>gǝ-</i> | ‘carry (VT)’ |
| Manner/ Result | <i>-rǝk</i> | MEET | §11.2.5.5 | N/A | N/A |
| | <i>-tóm</i> | SHOW | §11.2.5.5 | N/A | N/A |
| | <i>-jùp</i> | CAUSE.O.TO.SLEEP | §11.2.5.5 | <i>jùp-</i> | ‘sleep (VI)’ |
| | <i>-kàp</i> | CAUSE.O.TO.BE.WET | §11.2.5.5 | N/A | N/A |
| | <i>-ŋǝk</i> | EXTINGUISH.O | §11.2.5.5 | <i>ŋǝK-</i> | ‘be extinguished (VI)’ |
| | <i>-kǝa</i> | AT/ON | §11.2.5.6 | <i>kǝa-</i> | ‘see (VT)’ |
| Relational | <i>-góo</i> | AROUND | §11.2.5.6 | <i>-góo</i> | ‘AROUND DIRECTIONAL’ |
| | <i>-góo</i> | BEFORE | §11.2.5.6 | <i>-góo</i> | ‘NZR:ORIGIN’ |
| | <i>-tén</i> | ATOP | §11.2.5.6 | <i>tén-</i> | ‘suspend (VT)’ |
| | <i>-lǝk</i> | INTO | §11.2.5.6 | <i>lǝk-</i> | ‘insert (VTE)’ |
| | <i>-gǝə</i> | ONTO | §11.2.5.6 | N/A | N/A |
| Instrumental | <i>-na(a)</i> | INST | §11.2.5.7 | N/A | N/A |
| Argument-reversing | <i>-kò</i> | REV | §11.2.5.8 | N/A | N/A |
| Reflexive | <i>-hǝ</i> | REFL/RECP | §11.2.5.9 | N/A | N/A |
| Grouping | <i>-ŋám</i> | EXH | §11.2.5.10 | N/A | N/A |
| | <i>-bám</i> | PCOL | §11.2.5.10 | N/A | N/A |
| | <i>-bǝ</i> | DCOL | §11.2.5.10 | N/A | N/A |
| | <i>-mín</i> | JOIN (COMT, RECP) | §11.2.5.10 | N/A | N/A |
| Comparative | <i>-jàa</i> | COMP | §11.2.5.11 | N/A | N/A |

Table 11.8 – Argument-determining derivations (full attested set)

11.2.5.1. Definition of the applicative derivation

The term “applicative” (earlier described as “comitative” in the North Americanist tradition) has come to usually denote a type of derivational process which raises an oblique noun phrase to core argument status (usually to O), or more generally to indicate the “adding” of an obligatory argument of some type (which may or may not be a syntactic object) (Dixon and Aikhenvald 2000; Mithun 2001; Peterson 2007). The term has rarely been used in the Tibeto-Burman tradition, although Peterson (1998; 2007) has identified a large number of applicatives in Hakha Lai, a Kuki-Chin language of the

Bangladeshi Chittagong hill tracts and neighbouring Burma (both genetically and areally quite removed from Tani languages within reconstructible history), and presented an extensive account of their morphosyntax and discourse functions; given the by now robust attestation of applicative constructions in Kuki-Chin and Tani, it seems very likely that many more such constructions will eventually be identified for the Tibeto-Burman languages of the Eastern Himalaya, as well as possibly beyond.

The set of applicative derivations that will be described for Galo all function to add an obligatory argument, usually in O or E function. The semantic roles of the added arguments vary somewhat, but can usually be understood as a recipient, beneficiary, maleficiary, non-volitional (first or second) actor, instrument or goal. The marking of the added argument generally resembles that of clauses headed by verbs which inherently subcategorize for that particular type of argument – for example, goals added to a non-goal-subcategorized verb via an applicative derivation generally resemble the goal of a goal-oriented motion verb such as *ín-* ‘go’ (§5.2.4.2). Sometimes, the marking of an added argument resembles marking of a semantically relatable oblique NP (such as locative obliques in the case of an added goal). However, unlike oblique noun phrases, an argument added by an applicative derivation is always obligatory, and, furthermore, generally exhibits core argument properties which are not available to obliques (such as accessibility to non-subject nominalization; see §14.1.3.8). In the following subsections, it will not be possible to fully specify the syntactic status of the added argument in every case, since exhaustive testing has not yet been conducted; this will be an important aspect of future research.

11.2.5.2. Benefactive -*zĩ* ‘BEN’

-*zĩ* ‘BEN’ (< *zĩ-* ‘give’, PTs **bĩ*) is described for convenience as a ‘Benefactive’ applicative, although the argument it adds to a predicate caseframe is not always a semantic beneficiary (it may be a maleficiary, or may be in some sense “neutral”). Syntactically, it functions to add an E argument to a *transitive* or *extended transitive* caseframe only; its use with intransitives is not attested in my corpus, and has not been accepted by my consultants in elicitation. In (511), transitive verb of locution *ɦ-* ‘narrate’ – which is lexically subcategorized for an Actor A (the narrator) and a Patient O (the story), and does not permit a core argument Experiencer (the addressee) – is seen taking

an accusative-marked addressee argument *nunù* ‘2.PL’. (512) shows that the same sentence is ungrammatical when the Benefactive suffix does not occur on the predicate.

(511) *nunnèṁ ḡó doojḡḡ gò ḡziré dēi.*

[**nunù**=**əəm**]_E [ḡó]_A [doojḡḡ=go]_O [ḡḡ-**zí**-rḡ]_{PRED} dēi
2.PL=ACC 1.SG story=IND narrate-**BEN-IRR** EXHR
 ‘I’ll tell **y’all** a story, hey.’ (IR, FA 007)

(512) **nunnèṁ ḡó doojḡḡ gò ḡrḡ.*

nunù=**əəm** [ḡó]_A [doojḡḡ=go]_O [ḡḡ-rḡ]_{PRED}
2.PL=ACC 1.SG story=IND narrate-IRR

Although it is possible to express the addressee obliquely as a semantic Beneficiary by way of a dative relator noun construction (513) (cf. §8.1.4) the sense of the overall expression is not identical. The Benefactive sentence in (511) would be the unmarked way of expressing ‘I’ll tell you a story’ (a simple statement), while the more marked construction in (513) has the sense of profiling the speaker’s purpose (as in response to the question “why/for whose benefit will you tell a story?”).

(513) *ḡó nunûk lægâabə doojḡḡ gò ḡrḡ.*

[ḡó]_A [**nunù-kə** **lægâa**=**bḡ**]_{OBL} [doojḡḡ=go]_O [ḡḡ-rḡ]_{PRED}
 1.SG **2.PL-GEN** **reason=DAT** story=IND narrate-IRR
 ‘I’ll narrate a story **for you**.’ (lit., ‘**for your benefit**’)

Similarly, in (514), *nén-* ‘filter rice beer’ is underlyingly subcategorized for a Patient O (the filtered rice beer). The semantic Recipient/Beneficiary ‘the Paadam bunch’ cannot occur here in absence of the Benefactive predicate derivation.

(514) *opoðṁ, ḡizḡḡ namló...nénzī dū.*

[opoðṁ=**əəm**]_O [ḡizḡḡ=gə **namḡ**=lo]_{OBL} [**nén-zí**-dū]_{PRED}
 liquor=ACC man.old=GEN house=LOC filter.rice.beer-**BEN-IPFV**
paadám gaddṁ.
 [**paadám** **gadḡ**=**əəm**]_E
TRIBE **group=ACC**
 ‘In the old man’s house...they made beer **for them**. **For the Paadam bunch**.’ (TB, OAM 284)

Note that in (514), the sense of the predicate as translated includes a recipient, despite that the speaker initially *omits* the argument – then includes it as an afterthought.

This is characteristic of Galo applicatives; the “added” argument is *not* obligatorily expressed in the *syntax*, any more than is any other argument type which a speaker believes to be pragmatically retrievable and therefore ellipsible. However, use of the applicative derivation cements the added argument *semantically* into the predicate caseframe, whether or not it is overtly expressed in the syntax; therefore, such clauses must be translated by appropriate periphrastic structures such as *for them* in English, or the sense of the corresponding Galo expression is judged by speakers to be incomplete. In this sense, Galo applicatives have the capacity to serve pragmatically as a type of argument cross-referencing on the predicate, in the limited sense that they participate in the overall system of devices for maintaining referential continuity.

It was mentioned above that arguments added by *-zí* ‘BEN’ are not always semantic Beneficiaries. (515) is an example in which the added E argument is clearly malefactive. Note that although the E argument is not overt, it is understood; (516) is an elicited sentence on the same model in which all three arguments are represented – a grammatically correct but somewhat “overblown” sentence.

(515) *ərək doolúu lo aagó nammó,*

ərək doolúu = lo áa-gó-nam = əə
pig village LOC come-COMT-NZR:RLS=TOP

ikiè̃m ɲâɲkə ziká mane.

ikìi = əəm gàm-kə-zí-káa mane
dog=ACC bite-DEATH.RESULT-BEN-PF that's.to.say(<Asm)
'(He) having arrived with (his dog) at the pig village, (Abo Tani) got his dog bitten to death (by the pigs).' (NyPB, LAT 117)

(516) *ərək gaddə abó taníi nè bîk ikiè̃m*

[ərək gadə = əə]_A [abó-taníi = nè]_E [bîk-kə ikìi = əəm]_O
pig group=TOP father-mankind=NAGT3.SG-GENdog=ACC
ɲâɲkə ziká.

[gàm-kə-zí-káa]_{PRED}

bite-DEAD-BEN-PF

≡ 'The pigs bit Abo Tani_i's dog to death on him_i.'

11.2.5.3. Causative *-mò* ‘CAUS’

-mò ‘CAUS’ (< *mò*- ‘make’, no PT reconstruction) occurs as a *non-manipulative* causative derivation to an intransitive, transitive or extended-transitivity predicate. Its function is to add a non-volitional Actor E argument; simultaneously, it causes A to be

understood as a volitional Agent, who somehow causes the event, brings about the conditions whereby the event can take place, removes restrictions that might prevent the event from taking place, or otherwise “enables” a non-subject to perform the event (usually without necessarily forcing it).²²⁰ In (517), the subject of both clauses – the frog – is viewed as enabling or controlling the events coded by the predicates of both clauses. In the first clause headed by *bəə* ‘carry/hold’ – a transitive verb – the Causative applicative *-mò* adds an E argument which, although ellipsed, is coreferential with the added O of the second clause headed by *ín* ‘go’ – a lexically intransitive verb. Note also that although the frog is subject of both clauses, it is not the actor of the predicates.

(517) *ogò, áo nè...tatíkə, bəəm tokú là...(…)*

[ogò]_{OBL} [aò = nè]_O [tatík_i = əə]_A [Ø]_j_E [bəə-mò-tó-kú-là(a)]_{PRED}
 TMP.SEQ child=NAGT frog=TOP carry/hold-CAUS-PFV-CMPL-NF
buyəəm nè...allíbə ímmə tokú.
 [Ø]_i_S [buyə_j = əəm = nè]_O [allí = bə]_{ADV} [ín-mò-tó-kú]_{PRED}
 3.DL=ACC=NAGT well=AVZR go-CAUS-PFV-CMPL
 ‘Then, the frog_i had (them_j) take a baby (of the frog’s), and (...) (the frog_i) saw them_j off happily.’ (TR, FS 076)

More rarely, *-mò* may also be understood to function as a manipulative causative, i.e. ‘forcing’ or ‘making’ the causee participate in an event or state, although this sense is generally restricted to clauses in which the causee is inanimate, as in (518).

(518) *əg tuurəə bolò nòk peeləə ogò*

[əgə tuurəə bolo]_{TOP} [nó-kə peeləə ogò]_{OBL}
 APRX.IND end DST.LOC.DOWN 2.SG-GENside APRX.LOC
əyùp pāəm dōom toké, tuurəəm.
 [əyùppāa = əəm]_O [dóo-mò-tó = kée]_{PRED} [tuurəə = əəm]_O
 both.of.them=ACC lie.down-CAUS-IPTV.ODIR=HORT.POL end=ACC
 ‘As for the ends down there, make both of them face your side, the ends (of the rope).’ (IRw, MPO 100)

²²⁰ Another way of understanding this would be to say that the Causative adds an *A* argument (the Agent), demoting the underlying Actor *A* to *E*; this is the view taken by Dixon (2000). It seems to me that not much hinges on the distinction, since adjustment to *both* the overall argument structure *and* the semantic interpretation of argument roles (in Galo, that is; not necessarily in every language) must be understood under either analysis.

11.2.5.3.1. Switch-subject function of *-mò* ‘SSUB’

Intriguingly, it appears that Galo *-mò* has developed discourse-continuity functionality as a type of *switch-subject* operator. Consider the passage in (519).

- (519) *kohukà...kekkáa kú! kohukàm*
 [kohùk_i=əə]_S [kéK-káa-kú]_{PRED} [Ø]_i_S [kohùk_i=əəm]_O
dried.oko.leaf=TOP flee-PF-CMPL **dried.oko.leaf=ACC**
kêmmo tokú là, bî akó níim malà
 [kéK-mò-tó-kú-là(a)]_{PRED} [bî]_A [ako]_{ADV} [níimé]_O [má-là(a)]
 flee-SSUB-PFV-CMPL-NF **3.SG** again(<Asm) wife search.for-NF
malà...
 [má-là(a)]_{PRED}
 search.for-NF
 ‘The **dried-up leaf**_i...ran away! After **the dried-up leaf**_i ran away, **he**_j again searched and searched for a wife...’ (lit., ‘after he_j let/had the dried-up leaf_i run away, he_j...’ (NyPB, LAT 016-018)

(519) represents a passage from a narrative in which the speaker has been discussing various actions performed by a dried leaf, in which the leaf occurs as S or A of each clause; the last of these clauses is the first clause of (519). The following clause then serves as a transition in which the speaker shifts his perspective away from the dried *okò* leaf and back to Abo Tani, the main protagonist of the story (referenced here by a third person pronoun *bî*). Note that in the transitional clause, the dried-up leaf occurs as O despite being the semantic *actor* of the predicate *kéK*- ‘flee’; this distribution is licensed, in effect, by the Causative applicative *-mò*. However, unlike the sentences in (517)-(518), the transitional sentence in (519) *lacks causative semantics* of any kind, a fact about which my consultants are quite clear. Rather, the function of *-mò* here is – in the words of one of my consultants – to make the clause “about Abo Tani”, despite the fact that Abo Tani does not directly participate in the event denoted by the clause.

Although this seems to be a typologically unusual use of a causative form – in fact, I am not aware of a single parallel case – the evolution of such a use in Galo at least seems quite straightforwardly explained. Lacking manipulative semantics with respect to animate referents, a Galo causative can be employed with the sense *A let/had/allowed O to PRED*. Making good use of the ubiquitous Galo discourse-continuity strategy of

summarizing preceding episodes as a transitional introduction to a new episode, a structure thereby naturally emerges with the form schematized in Figure 11.2:

X does PRED. (Y) letting/allowing/having X to do PRED, Y then....(etc.)
S/A A O S/A

Figure 11.2 – Schematization of the switch-subject function of Causative -*mò*

When causative semantics are fully backgrounded, the construction is then exploited for its syntactic value alone, and can be used with predicate types for which a causative derivation has no possibility of a literal causative interpretation at all, as in (520); here, *-mò* functions simply to mark a subject-oriented thematic transition from ‘getting dark’ (a function of nature) to the actions performed by the subject in *bulù* ‘3.PL’.

(520) *kanó kaakú. kán rôom tokú là, bullà...*

kanó-káa-kú kanó-ròom-**mò**-tó-kú-là(a) bulù = əə
 be.dark-PF-CMPL be.dark-TERM-SSUB-PFV-CMPL-NF 3.PL=TOP

duudêe kò kaakú má.

dùu-dée-kò káa-kú-máa
 stay-PROS-NZR:LOC/OBL have/exist-CMPL-NEG

‘It got dark. After it got dark, they...had no place where they could stay.’ (lit., ‘after letting/having it get dark...’) (TR, FA 003-004)

11.2.5.4. Comitative -*gə* ‘COMT’

-gə ‘COMT’ is among the most frequent of Galo applicatives attested in my corpus.

In its simplest sense, it adds a non-subject argument to a transitive or intransitive predicate whose referent is understood as “brought along” to participate in the event as a non-volitional/non-controlling actor – an applicative function described here as *comitative*. This is most easily seen with intransitive predicates, as in the second clause of (521) (note that both clauses in (521) share the same set of arguments).

(521) *okkəə kú..hottúm əəkú attirə́m*

okkəə = kú [hottúm_i əə = kú]_A [attir_j = əəm]_O

SCNJ=CMPL bear TOP=CMPL **group=ACC**

iipôo dookú là...jûbgə ká.

[íi-pòo-dó(o)-kú-là(a)]_{PRED} [Ø]_{iA} [Ø]_{jO} [jùp-**gə́**-káa]_{PRED}

extend.hand-COVER.O-STAT-CMPL-NF

sleep-COMT-PF

‘And then finally...the bear, hugging the whole bunch of them, took (them) to bed.’ (IR, FA 105)

Thus although both Causative applicative *-mò* ‘CAUS’ and Comitative

applicative *-gə́* ‘COMT’ introduce a non-volitional Actor expressed as O, they differ in that while the A argument of a predicate in *-mò* is *not* understood to also be an active participant of the predicate – rather, A simply brings about the conditions for someone else’s participation – the A argument of a predicate in *-gə́* usually *is*; in fact, A is often understood to be ‘leading’ O’s participation in the predicated event or state, as in (522), in which the clause in *-gə́* describes an abduction.

(522) *máa! mîəm jôo kaapâa rənnà?*

máa = əə bî-əəm jôo káa-pâa-rə́-nà = əə

NEG=COP.IPFV 3.SG-ACC what look-ATTN-IRR-NZR:SUB=COP.IPFV

nóm zôolə inrə́,

[nó-m]_O [zôo-là(a)]_{PRED} [ín-rə́]_{PRED}

2.SG-ACC

lift-NF

go-IRR

door^ə bə́ ingərə́ nóm!

[doorə́ = bə́]_{OBL}

[ín-**gə́**-rə́]_{PRED}

[nó-m]_O

wind=DAT

go-COMT-IRR

2.SG-ACC

‘Are you joking! How can anyone see him (Japom, the chief forest demon)!? He’ll snatch you away [lit., ‘lift you and go’], **take you** away with the wind!’ (RmR, CC 161)

Inherently transitive predicates may also be extended in *-gə́* ‘COMT’; in this case, the underlying semantic roles of the predicate arguments (in most cases, where A is Agent and O is Patient) are retained intact together with their syntactic functions, while the non-volitional actor added by *-gə́* surfaces as E. (523) is an example in which all three arguments are overt; it was elicited on the basis of several parallel examples from a text in which one or more arguments were ellipsed, as is the pragmatic norm in Galo.

(523) *ηό ηοιјέμ νόμ dogό dù.*

[ηό]_A [ηοί=əəm]_O [νό-μ]_E [dó-gό-dùu]
 1.SG fish=ACC 2.SG=ACC eat-COMT-IPFV
 ‘I eat fish with you (providing it for you).’ (MN, T16:4)

Diachronically, -gό ‘COMT’ appears to derive from the transitive verb root gό ‘carry/wear’, although it is clear from examples such as (523) that the erstwhile lexical sense is strongly generalized in the applicative function. -gό ‘COMT’ has developed additional functionality in construction with -mín ‘APPLICATIVE: JOIN’ (§11.2.5.10) and, seemingly, as an Additive concessive clause-continuity operator following fusion with Irrealis suffix -rό (§16.4.4.3).

11.2.5.5. Manner and result applicatives

The forms discussed in this section add some manner or result information to the predicate, in addition to changing its core argument structure. In general, they are highly semantically particular and infrequent in usage, and it is likely that more will be discovered as our database increases.

-tóm ‘APPLICATIVE: SHOW’ may be described as a manner applicative. To date, it has only been attested on verbs in *mèn-* ‘say’ and *káa-* ‘look’ – intransitive and transitive verbs respectively – adding a sense that the predicated event amounts to an act of ‘showing’ someone something (as when teaching someone a skill). Syntactically, it adds an E argument – which may be marked in the Accusative/Non-agentive (like O) or else as Dative – whose referent is understood as the ‘showee’. Although one or more core arguments are ellipsed in all naturally-attested examples, (524) and (525) are elicited examples in which all core arguments are present, and which illustrate Non-agentive and Dative marking of the added E argument respectively. Note that the E argument is not licensed in absence of the applicative suffix in either example, irrespective of marking type.

(524) *jompáa bñk aoəm taníi nè kaatóm rό.*

[jompáa]_A [bñ-kò aò=əəm]_O [taníi=nè]_E [káa-tóm-rό]_{PRED}
 NAME 3.SG-GEN child=ACC NAME=NAGT look-SHOW-IRR
 ‘Jompa will **show Tani** his baby.’ (IR, B8:62)

(525) *jompáa bñk aoəm taníi bə kaatóm rə.*

[jompáa]_A [bñ-kə aə = əəm]_O [taníi = bə]_E [káa-tóm-rə]_{PRED}
 NAME 3.SG-GEN child=ACC NAME=DAT look-SHOW-IRR
 ‘Jompa will **show** his baby **to Tani.**’ (IR, B8:62)

-tóm has no apparently related forms elsewhere in Galo.

-rñk ‘**APPLICATIVE:MEET**’ has a core semantic value which is similar to English ‘meet’. When occurring on an intransitive predicate, it adds an O argument understood as a referent who is ‘met’, ‘encountered’ or ‘made contact with’ by way of some action, as in *dùu-rñk* ‘sit-MEET’ ‘sit and wait for someone’, *dàk-rñk* ‘stand-MEET’ ‘stand up next to someone/something’ or *gə-rñk* ‘be disposed-MEET’ ‘face someone/something’; in (526), the sentence is ungrammatical in absence of *-rñk*.

(526) *bulù jiijəm inrñk duukù.*

[bulù]_A [jii = əəm]_O [ín-rñk-dùu-kú]_{PRED}
 3.PL **person**=ACC go-MEET-IPFV-CMPL
 ‘Now they’re off to **meet the guy.**’ (IR, B8:46)

-rñk does not make changes to the caseframe of a transitive predicate; rather, the already-present O argument is instead understood as ‘met’ by way of the event, as in *káa-rñk* ‘look-MEET’ ‘meet someone’, *mèn-rñk* ‘speak-MEET’ ‘interact through talking; answer a question’ (527).

(527) *aadə là bulù...gokkáa nammə, jii gogrñk má.*

[áa-dó(o)-là(a)]_{PRED} [bulù]_A [gók-káa-nam = əə]_{BNZN} [jii]_O [gók-rñk-máa =]_{PRED}
 come-STAT-NF 3.PL call-TENT-NZR:RLS=TOP **person** call-MEET-NEG=FI
 ‘Having gone there, they...having called out, didn’t **reach anyone.**’ (IR, FA 017)

It is common for a predicate in *-rñk* to also take Reflexive *-hí*; in this case, the sense is usually *reciprocal*, as in *dák-rñk-hí-nam* ‘stand-MEET-REFL-NZR:RLS’ ‘to stand face-to-face; to size one another up’ or *pá-rñk-hí-nam* ‘chop-MEET-REFL-NZR:RLS’ ‘cut one another; fight using machetes’. *-rñk* ‘**APPLICATIVE: MEET**’ has no clearly related forms elsewhere in Galo and cannot itself stand as a predicate head; however, it is almost

certainly relatable to the Pagro Mising verb root *ɾík-* ‘meet’, and would presumably reconstruct to Proto-Tani as a verb with the latter sense.

-jùp ‘CAUSE.O.SLEEP’, *-kàp* ‘CAUSE.O.WET’ and *-ɳík* ‘CAUSE.O.EXTINGUISH’

similarly designate a *resulting state* pertaining to O, understood as caused by the actor A. On an intransitive verb, they each have the function of adding the referenced O; on a transitive verb, they have the function of assigning a resulting, caused state to the inherently projected O. All of the examples in (528)-(530) are based on intransitive verbs.

(528) *ɳó pipí nè doojûp ká.*

ɳó pipí = nè dóo-**jùp**-káa
 1.SG NAME=NAGT lie.down-CAUSE.O.SLEEP-PF
 ‘I made Pipi sleep (I also lied down, but did not sleep).’ (MN, T16:8)

(529) *issə ɳóm piikâp ká.*

isì = əə ɳó-m píi-**kâp**-káa
 water=TOP 1.SG-ACC spray-CAUSE.O.WET-PF
 ‘The water sprayed on me.’ (MN, B3:115)

(530) *ɳó kendəlóm miɳɳík ká.*

ɳó kendəl = əəm míK-**ɳík**-káa
 1.SG candle(<Eng)=ACC blow-CAUSE.O.EXTINGUISHED-PF
 ‘I blew out the candle.’ (KZ, 9:25)

Due to their semantic particularity, such forms tend to occur only with certain types of verb; however, their productivity seems high. The following sentence was overheard on a car ride across the upper Assam plains, via the copiously-potholed National Highway 51 (531); note that *ɛk-* ‘shake’ is an S=O ambitransitive verb, and that *-jùp* ‘CAUSE.O.SLEEP’ here references the inherently-subcategorized O.

(531) *garíə ɳóm əgjûp dù.*

garí = əə ɳó-m ɛk-**jùp**-dùu
 vehicle=TOP 1.SG-ACC shake-CAUSE.O.SLEEP-IPFV
 ‘The car is bouncing **me to sleep**.’ (IR, OLC1:117)

-jùp ‘CAUSE.O.TO.SLEEP’ and *-ɳík* ‘CAUSE.O.EXTINGUISHED’ appear clearly

relatable to the intransitive verbs *jùp-* ‘sleep’ and *ɳíK-* ‘be extinguished’ (*-K* and *-k* are regular Galo reflexes of PT **-tʰ* in phonological word-medial and final positions

respectively; see §2.4.3.5.1). *-kàp* is not directly relatable to any attested forms, although it may bear an earlier derivational relationship with *káp-* ‘cry; weep’ (§2.4.2.5).

11.2.5.6. Locational/Relational applicatives

The forms discussed in this section all function either to add an obligatory argument to the predicate, or cause an already-subcategorized argument to be understood differently. Semantically, they involve locational and/or relational meaning; their effects are usually best translated by adpositional phrases or serial verb constructions in other languages. The discussion of Locational/Relational applicatives in effect began in §11.2.2, in which they were mentioned in the context of Motion/Direction derivations. Although it is clear that there are certain Motion/Direction derivations which are *not* applicative, and certain Locational/Relational applicatives which are not (or not obviously) relatable to motion, it is at present unclear where a boundary between these two categories may be said to exist; this question remains for future research.

-káa ‘APPLICATIVE: AT/ON’ is most frequently attested as a transitivity derivation to intransitive verbs of activity such as *ár-* ‘glance’, *cóm-* ‘peek’, *mík-* ‘blow’, *ùm-* ‘grunt’, *kók-* ‘crow’, *zəə-* ‘shout’, *góp-* ‘measure by handspans’ and *ɲír-* ‘laugh’ (532). Its effect is to add a non-subject argument understood as an entity ‘at’, ‘on’ or ‘against’ whom the activity denoted by the predicate is directed. (532) is ungrammatical without *-káa*.

(532) *nó ɲóm ɲírkáa dũ lakà!*

nó **ɲó-m** ɲír-**káa**-dũ laka

2.SG 1.SG-ACC laugh-AT/ON-IPFV MIR

‘What the hell are you laughing **at me** for?’ (lit., ≡ ‘You’re unexpectedly/surprisingly laughing at me!’) (MN, OL23:107)

It is possible that *-káa* ‘APPLICATIVE:AT/ON’ relates to *káa-* ‘look’, although this is far from certain.

-tén ‘APPLICATIVE:ATOP’ is attested as a transitivity derivation to intransitive activity and transfer verbs such as *zəə-* ‘shout’ and *dũu-* ‘sit’; it introduces a non-subject argument whose referent is understood as affected ‘under’ the predicate semantics; another way of understanding this is that A is understood as performing an event

(533) *nêi nè zəətén toké!*

-tén is also attested on transitive verbs; in this case, *-tén* functions simply to expand the range of semantic types available to O, and/or to cause O to be understood more generally as a Location or Goal rather than a Patient or Experiencer (534).

hogò mèn-tén-jó = káa
 SPRX.LOC speak-OVER/ATOP-PROH=HORT.ADV
 ‘Don’t impose yourself/your conversation topic **over (our conversation) here!**’
 (ZR, OLC1:150)

The form *-góo* appears to have two senses, ‘**APPLICATIVE:AROUND**’ and ‘**APPLICATIVE:BEFORE**’, although the first sense is considerably more frequent in my corpus. My consultants have in general been able to effectively disambiguate these senses in interpretation, and they may have distinct lexical origins in the transitive verbs *góo* ‘enclose’ and *góo* ‘lead (animal)’ respectively, although this is entirely speculative. However, a clear motivation for treating *góo* as a single, polysemous form is even less obvious; for the present, I shall analyse two independent, homophonous forms.

533

(535) *bìəm...namíi-ɲaŋgóo là (...)*

[bì-əm]_O [Ø]_E [namíi-ɲám-**góo**-là(a)]_{PRED}

3.SG-ACC daughter.in.law.last-take.in.daughter.in.law-**AROUND**-NF

doolúəm ɲaŋgóo là...

[**doolúu** = əəm]_E [ɲám-**góo**-là(a)]_{PRED}

village=ACC take.in.daughter.in.law-**AROUND**-NF

‘They conducted her **through** the various rituals associated with becoming the last daughter-in-law...took her **around the village** doing that...’ (LN, TG 017)

When the E argument is ellipsed, *-góo* can have a vague *directional* sense

‘around’, as in English ‘walk around’; this is more or less the sense of the first clause in (535). However, it is always possible to make the location overt, as in the second clause of (535), indicating that the applicative function is indeed basic to the overall sense.

-góo ‘**APPLICATIVE:BEFORE**’ functions similarly to introduce a non-subject argument to a typically motion-oriented intransitive or transitive caseframe which is understood as ‘preceded’ or ‘gone before’; however it is much less frequently-attested.

(536) *ɲó nunnəm caagóo ká.*

ɲó **nunù** = əəm càa-**góo**-káa

1.SG **2.PL**=ACC ascend-**BEFORE**-PF

‘I went up **before y’all** did.’ (IR, 19:89)

-gəə ‘**APPLICATIVE:ONTO**’ has two probably relatable senses roughly translatable as ‘touch’ and ‘attach’; both senses introduce a non-subject argument to an intransitive verb whose referent is understood as ‘touched’, ‘attached-to’ or more generally moved ‘onto’. In attested cases, the same sense was applied to the inherent O of a transitive verb.

The ‘touch’ sense is more commonly found with transfer or motion verbs (537), while the ‘attached-to’ sense is more commonly found on stative verbs and adjectives (although it is also attested with motion verbs). Interestingly, in the case of stative verbs and adjectives, the sense is effectively causative, with the attributant of the property or the state undergoer surfacing as O (538).

(537) *hɛ́n annəm nɛ́, alakó nɛ́gəə là, əgdù.*

[hɛ́n **anè** = əəm = nɛ́]_O [alák = əə]_A [nɛ́-**gəə**-là(a) ók-dùu]_{PRED}

plant/tree stem=ACC=NAGT hand=TOP nudge-**ONTO**-NF shake-IPFV

‘He leaned **on the tree trunk**, pushing it with his hands, shaking it.’ (MN, FS 038)

(538) *biskutə ɲóm zɪ̯gə̯ə kaakú.*

biskút = əə ɲó-m zɪ̯-gə̯ə-káa-kú
 biscuit(<Eng)=TOP 1.SG-ACC be.fat-ONTO-PF-CMPL
 ‘Biscuits have made me fat.’ (lit., ‘have **fattened me**’) (MN, OLB2:123)

-gə̯ə has no clearly relatable Galo forms, although it seems likely to relate to PTs *grə̯ɲ ‘lean against’; no reflex of the latter form has been found among Galo lexemes.

11.2.5.7. Instrumental applicative -na(a)

Instrumental applicative -na(a) functions to *add* or to *highlight* an Instrument or, more rarely, Mediative or Accompaniment NP to an intransitive or transitive clause, understood as obligatorily present whether or not it is overtly represented in the syntax. In (539) and (540), the instrument or means is not overtly mentioned, but is clearly understood; note that -na(a) is subject to Phrase-medial truncation in (539), followed by Syncope, as discussed in §4.1.5.2 and §4.1.4.5 respectively.

(539) *əgə̯, korùmɡə̯ dooní bonə namməgə̯ nə.*

əgə̯ korùm = gə̯ dooní bó-na(a)-nam = əgə̯ nə
 ANAP.IND ancients=GEN sun invite-INST-NZR:RLS=ANAP.IND DECL
 ‘That’s how the sun was lured **with** (the gift of a child) in ancient times.’ (TB, OAM 120)

(540) *apinəm...acín domə nəan*

apìn = əəm acín dó-mə-na(a)-nə
 skin=ACC cooked.rice eat-AS.ACCOMPANIMENT-INST-NZR:SUB
kaamáa leemə̯, báal dokáa kú.
 káa-máa-lèe = əəm = əə báa-là(a) dó-káa-kú
 have/exist-NEG-SSEQ=ACC.TSUB=TOP bake-NF eat-PF-CMPL
 ‘(Their barking deer) skin...having nothing to eat with their rice, was roasted and eaten.’ (MK, LW 013)

If overt, the Instrument NP surfaces as an E argument, usually marked as a second topic (§14.2.2.1.2.1); in absence of the Instrumental derivation, (541) is ungrammatical.

(541) *ŋó ací nè sigarətə bonə ká.*

[ŋó]_A [ací = nè]_O [sigarət = əə]_E [bó-**na(a)**-káa]_{PRED}
 1.SG elder.brother=NAGT **cigarette**=TOP invite-INST-PF
 ‘I lured Elder Brother **using a cigarette**.’ (MN, T17:20 (elicitation based on (540)))

Extended transitive predicates which are already subcategorized for an E argument

Instrument sometimes exhibit additional predicate marking in Instrumental *-na(a)*. In this case, the effect is not to add an argument, but rather to profile the instrumentality of the E argument (542)-(543). Instrumental marking of an Instrument-subcategorized predicate seems more likely to be used in cases when the instrument NP referent is non-prototypical *as* an instrument.²²¹

(542) *hɪnəŋ ŋó boolə naatə*

[hɪnə = əəm]_O [ŋó]_A [bool = əə]_E [náa-tó]_{PRED}
 tree/plant=ACC 1.SG **ball**(<Eng)=TOP throw-PFV
 ‘I threw **the ball** at the tree.’ (IR, B8:54)

(543) *hɪnəŋ ŋó boolə naanə tó*

[hɪnə = əəm]_O [ŋó]_A [bool = əə]_E [náa-**na(a)**-tó]_{PRED}
 tree/plant=ACC 1.SG **ball**(<Eng)=TOP throw-INST-PFV
 ‘I threw (something) at the tree **using a ball**.’ (IR, B8:54)

The phonological resemblance between Instrumental applicative *-na(a)* and

Subject nominalizer *-nə* is suggestive, although no etymological relationship can at present be demonstrated.

11.2.5.8. Reversive *-kə*

Reversive *-kə* ‘REVS’ is perhaps one of the most intriguing morphemes in Galo, however its grammatical importance is belied by a very low text-frequency. In its basic use, *-kə* ‘REVS’ functions to *reverse* the semantic roles of the core arguments of a transitive verb; that is to say, where A and O are (in most cases) analyzable as Agent/Actor and Patient/Undergoer, predicate marking in *-kə* causes A to be understood

²²¹ For example, the Instrumental applicative would be unlikely to occur on the predicate of the sentence *I threw the stone at the pig*, but would be more likely to occur in *I threw the pig at the stone*.

as Patient/Undergoer and O as Agent/Actor (544); it is thus not valence-changing, but rather valence-*rearranging*, in the sense of Dixon and Aikhenvald (2000).

(544) *ogò...nunù...àc-accôob ulûul aaée ká.*

[ogò]_{ADV} [nunù]_i [àc-accò = bɔ́]_{ADV} [ulùu = lo]_E [áa-ée]_{PRED} = káa
 TMP.SEQ **2.PL** quiet.very=AVZR boat-LOC come-IPTV.AWAY=HORT.ADVS
àc-accôob níi kaapâa komàab ulûul
 [Ø]_i [àc-accò = bɔ́]_{ADV} [níi]_j [káa-pàa-kò-máa = bɔ́]_{PRED.SBRD} [ulùu = lo]_E
 quiet.very=AVZR **person** look-ATTN-REVS-NEG=SBRD boat=LOC
aaée ká.

[áa-ée]_{PRED} = káa

come/enter-IPTV.AWAY=HORT.ADVS

“Then, **you guys**; carefully sneak out to the boat. (Ø)_i go carefully to the boat without being seen **by anyone**.” (TB, OAM 287-288)

In an extended transitive caseframe, the role-reversal is usually between A and E. In (545), the Benefactive derivation first adds the E argument (*mò-* ‘make’ is a transitive root); the Reversive derivation then causes A to be understood as Beneficiary, while E is understood as Actor. Presumably, selectivity for E is related to the greater likelihood of E argument animacy/activity, although this remains to be fully-investigated.

(545) *nó mozí kòt ké!*

[nó]_i [Ø]_j [Ø]_k [mò-zí-kò-tó]_{PRED} = kée
 2.SG make-BEN-REVS-IPTV.ODIR=HORT.POL
 ‘Have someone else_j make it for you!’ (MN, OLB6:99)

The functional motivation for both operations seems evident, and quite similar to the motivation for a passive. Namely, in both (544) and (545), the speaker must maintain second person subject continuity, since imperative clauses of both types illustrated here obligatorily occur with second person subjects (§12.4.2.5). However, the speaker wishes at the same time to depict an event in which the subject referent – the addressee – is *not* construed as an Agent. Marking in *-kò* thus causes the semantic role of A to be exchanged with that of a non-subject argument, and subject referential continuity is thereby preserved. Importantly, however, *no syntactic reconfiguration* is required in order for this interpretation to take hold (hence this is *not* a syntactic “passive”); a semantic role “reversal” is all that takes place.

Due to the extreme infrequency of *-kò* ‘REVS’ in discourse and in texts – non-elicited attestations in my corpus are almost all imperatives – I have not been able to determine the functionality of *-kò* with respect to some argument types (particularly, those with differing degrees of animacy) and with some predicate types (such as sentential complement-taking verbs). What can be said at present is that *-kò* ‘REVS’ can occur on transitive and intransitive verbs, in both cases selecting for the most animate participants, but can *not* occur on intransitive verbs or adjectives.

At present, it is not possible either to trace *-kò* ‘REVS’ to any particular lexical or other grammatical source form, nor to argue for its reconstruction to any Pre-Proto Galo stage due to lack of supporting comparative data.

11.2.5.9. Reflexive *-hí*

In the strict sense, reflexivity denotes a marked condition of one of two kinds, both with respect to a transitive caseframe: (1) A and O are semantically and syntactically distinct, but coreferential or (2) A and O semantic roles (as projected by the predicate) are collapsed into a single core argument S, and O is suppressed. In type (1), clause transitivity is not reduced (or is not greatly reduced), but O reference is tightly constrained. In type (2), clause transitivity is reduced (Dixon and Aikhenvald 2000). Galo reflexives are basically of type (1).

Galo reflexive clauses exhibit obligatorily predicate marking in *-hí* ‘REFL’ (< PTs **ɕu* ‘Reflexive’); however, not all clauses with predicate heads marked in *-hí* are necessarily reflexive, in the sense defined above. In the below subsections, these different functions of *-hí* will be described separately; ultimately though, it would seem that *-hí* constitutes a semantically continuous form (this is certainly felt by my consultants to be the case); it will be consistently glossed ‘REFL’ accordingly.

In the below discussion, reflexive pronouns and nouns are discussed as supporting elements of a clause exhibiting reflexive predicate marking in *-hí* ‘REFL’; separate discussions of reflexive qualifying noun *a#* ‘body; self’ and the reflexive pronoun set may be found in §6.3.2/§8.3 and §7.2 respectively.

11.2.5.9.1. Subject autonomy

On intransitive predicates (with or without a supporting reflexive Referential qualifying expression) or transitive predicates (with an overt, non-reflexive O), *-hí* generally assigns a sense of *enhanced control, independence, isolation* and/or *autonomy* to the subject referent. Often, its use will occur in pragmatic circumstances in which it might otherwise be assumed that the referent lacks some ability to control the event (whether inherently or contextually), or is acting independently when he or she might have been expected to act with assistance or as a group. This sense is very similar to English *by/of him/her/itself*. In (546), the Reflexive derivation *-hí* occurs on an *intransitive* predicate. The speaker first tells his interlocutor to position two circles of sawn-off bamboo such that they sit upright; realizing that his interlocutor has not produced a sufficiently stable configuration, he then tells her to position the smaller one (the ‘wheel’) such that it can sit ‘by itself’, requiring no additional support; this sense is accomplished by the Reflexive derivation *-hí*, working together with the subject-reflexive RQE in *añ* ‘body; self’.

(546) *ám dùudə bə moʔkè, nəək peeləbə.*

əəm dùu-dó(o)=bə mò-tó=kée nəə-kə peeləə=bə
ANAP.ACC sit-STAT=SBRD make-IPTV.ODIR=HORT.POL 2.REFL-GEN side=DAT

(...) *má, pəgó allê/..añuə dúuhi doobə né.*

máa [pəgóo]_S [allê]_{ADV} [añ=əə]_{RQE} [dùu-**hí**-dó(o)=bə]_{PRED.SBRD} né
no wheel well **self=TOP** sit-REFL-STAT=SBRD ADM
‘Have them sit down, to your side. (...) No, the circle (should be positioned) properl...such that it’ll sit **by itself**.’ (IR, MPO 006-007)

In (547), the Reflexive derivation is used *without* a supporting Referential qualifying expression, again in an intransitive clause. Here, the sense of the Reflexive derivation is not necessarily of enhanced subject autonomy or control, but rather is closer to enhanced subject independence or isolation, as though to heighten the aimlessness of the activity depicted.

(547) *kán nammǝ mootùm lò izì bulù bǝdǝa*

kanǝ-nam = ǝǝ mootùm = lo izì bulù bǝdǝa

dark-NZR:RLS=TOP jungle=LOC now 3.PL road

pǝaku maalǝe lá...ǝǝ, ɪŋgóo hɪl rǝdù.

pǝa-kú-mǝa-lǝe-là(a) = ʼ ǝǝ ín-góo-**hɪ**-là(a) rǝ-dùu

get-CMPL-NEG-SSEQ-NF=NF1 HEST walk-AROUND-**REFL**-NF live/exist-IPFV

‘It having gotten dark, because now they couldn’t find the road anymore...they just walked (**themselves**) around.’ (IR, FA 012)

While use of a reflexive noun or pronoun in the subject function of an intransitive clause in *-hɪ* as in (546) and (547) is optional, the reverse is not the case: *if* an intransitive clause has a reflexive subject it *must* carry a reflexive derivation on its predicate. Thus, *ŋó (aɪ = ǝǝ) jùp-hɪ-tó* ‘1.SG (**self**=TOP) sleep-**REFL**-PFV’ ‘I slept by myself (alone and without being helped, as a precocious child)’ is acceptable but **ŋó aɪ = ǝǝ jùp-tó* is rejected by my consultants.

In (548), the Reflexive derivation now occurs on a *transitive* predicate, supported by a subject-reflexive RQE (the subject noun phrase is ellipsed). Note that the Reflexive derivation does *not* decrease transitivity in this case.

(548) *ogò...aɪɪuǝ amǝǝm ahɪ dù.*

[ogò]_{ADV} [aɪ = ǝǝ]_{RQE} [amǝǝ = ǝǝm]_O [á-**hɪ**-dùu]_{PRED}

TMP.SEQ **self**=TOP rice.flattened=ACC dry.fry-**REFL**-IPFV

‘Then...(we) dry-fry the flattened rice **ourselves**.’ (LN, GMW 012)

The sense of reflexive predicate marking in a transitive clause which *lacks* a subject-reflexive Referential qualifying expression is somewhat different (see next section).

11.2.5.9.2. Reflexivity

Reflexive readings (in the sense defined in §11.2.5.9) are obtained in transitive or extended transitive clauses only. To obtain a reflexive reading, the predicate is obligatorily marked in *-hɪ* ‘REFL’. Use of a reflexive nominal in O or E function (not in A function) is usually optional. In (549), A and O are coreferential, and O is realized by a reflexive pronoun. Note in this case that there is *no* sense of ‘enhanced independence/autonomy’ conferred on the subject referent, in the sense discussed in §11.2.5.9.1.

(549) *ŋó ŋəəm pahí rə.*

ŋó ŋəəm-m pá-hí-rə
 1.SG 1.REFL-ACC chop-REFL-IRR
 ‘I’m going to cut myself.’ (TR, 14:31)

In (550), the O argument is ellipsed; however, Reflexive predicate marking is sufficient to derive the reflexive sense of the clause.

(550) *bɛ̃...həkə má...pootúm himá.*

bɛ̃ həkə-máa pòo-túm-hí-máa
 3.SG whatever-NEG cover-CLOSED.S/O-REFL-NEG
 ‘He didn’t...you know...cover **himself** up.’ (TR, FA 057)

In (550), note also that the Result derivation *-túm* ‘CLOSED S/O’ normally makes reference to intransitive S or transitive O (not to transitive A). Under predicate marking in *-hí*, it appears initially as though *-túm* makes reference to the *subject*, which would seem to suggest analyzing the subject as S, and the clause as detransitivized. In fact, the Result derivation continues to refer to O – as would be expected – despite that the corresponding O argument noun phrase has been ellipsed; seeming reference to the subject is thus an artifact of Reflexive A-O coreferentiality.

In an extended transitive clause, Reflexive marking on the predicate selects for the E argument. This is most straightforwardly shown via a minimal pair as in (551)-(552). Note that in these two examples, the interpretations hold whether the E argument is syntactically overt or not.

(551) *jompáa bɛ̃ (biə̀m) apɛlɡó zirə.*

[jompáa_i bɛ̃_i]_A [bɛ̃_j-əəm]_E [apél = go]_O [zí-ɾə]_{PRED}
 NAME 3.SG 3.SG-ACC apple(<Eng)=IND give-IRR
 ‘Jompa will give him an apple.’ (TR, 14:60)

(552) *jompáa bɛ̃ (aɪiɪə́m) apɛlɡó zihí rə.*

[jompáa_i bɛ̃_i]_A [aɪi_j = əəm]_E [apél = go]_O [zí-hí-ɾə]_{PRED}
 NAME 3.SG self=ACC apple(<Eng)=IND give-REFL-IRR
 ‘Jompa will give **himself** an apple.’ (TR, 14:60)

11.2.5.9.3. Reciprocals 1: Reflexive reciprocals

Like reflexives, Galo reciprocals also exhibit obligatory predicate marking in *-hí*.

In a *Reflexive reciprocal* construction, the predicate is marked *only* in *-hí*, with an obligatorily plural subject. The resulting expression is often ambiguous between a simple *reflexive* (plural subject affects plural subject, viewed as a unit acting on itself (*they did it to themselves*)) and a *reflexive reciprocal* (plural subjects affect one another, viewed as a group of independent entities (*they did it to one another*)); context is seemingly sufficient to disambiguate in cases when the distinction is relevant. In (553), the ellipsed subject must be understood as plural due to use of the Hortative inclusive particle (with the sense ‘let’s’; see §13.3.1.2); the overall expression may have the sense ‘let’s live loving one another’ or ‘let’s live loving ourselves’, however it is quite clear from the context which sense is intended.

(553) *ajáa hilâ râlâ zù*

ajáa-hí-là(a) râl-là(a) = zù

love-REFL-NF live/exist-IPTV.SDIR=HORT.INCL

‘Let’s live in love/loving one another.’ (Marto Baasar, *Ngoke Kalirunam* (Galo popular song))

An unambiguous Reflexive reciprocal sense can be brought out via a plural subject-reflexive Referential qualifying expression in *akèn-akèn* ‘one another’ (lit., ‘one-one’; see §8.3) (554). Note that use of *akèn-akèn* ‘one another’ in *O function* would in this case give a *distributive* rather than reciprocal reading, with predicate reflexive marking then serving only to highlight subject autonomy, as ‘A affected each and every one of O by themselves’ (cf. §11.2.5.9.1).

(554) *akên-akenè gombêə gomjêə hitó.*

[*akèn-akèn = əə*]_{RQE} [gòm-báə gòm-jéə-hí-tó]_{PRED}

one.another=TOP hug-DUR hug-RDUP-REFL-PFV

‘(They all) were clutching **one another** (out of fear).’ (TR, FA 063)

11.2.5.9.4. Reciprocals 2: Marked reciprocals

A small set of predicate derivations exist which are used in construction with *-hí* ‘REFL’ in a marked reciprocal clause. When such derivations are used, the reciprocal

sense of the predicate is unambiguous (it can no longer denote a reflexive). In a marked reciprocal construction, the A and O argument referents may be coreferential, or they may not be; in either case, the understanding is of a group of entities independently affecting one another.

The first marked reciprocal is based on *-rîk* ‘APPLICATIVE: MEET’ (§11.2.5.5); the overall sense is of a direct or confrontational reciprocal, as *záp-rîk-hî-nam* ‘talk-MEET-REFL-NZR:RLS’ ‘converse face-to-face’. In (555), the ellipsed plural subject is understood as reciprocally ‘meeting/encountering’ the O argument referent.

(555) *hogo rənəmó, ogò...miriám...rîrîk hilà.*

hogò rə-nam = əə ogò mirí = əəm rî-rîk-hî-là(a)
 SPRX.LOC exist-NZR:RLS=TOP TMP.SEQ TRIBE=ACC do-MEET-REFL-NF
 ‘Having come to live here, we then **encountered/met with** the Mising (tribe).’
 (NyR, MDS 066)

The second and more common marked reciprocal is based on the grouping derivation *-mín* ‘APPLICATIVE: JOIN’ (§11.2.5.10). The sense is usually of a simple reciprocal ‘do to one another’ with a plural subject, as in (556).

(556) *bulù modîr minsí dù.*

bulù mò-dîr-mín-hî-dùu
 3.PL make-TO.EXHAUSTION-JOIN-REFL-IPFV
 ‘They are fighting **one another** to the bitter end.’ (TZ, OLB4:68)

When spanning a phonological word boundary, it is more common than not for the final nasal of *-mín* to irregularly delete, leaving the sequence *-mí-hí*. It is possible that this signifies fusion of a single ‘Reciprocal’ form; additional discussion may be found in §11.2.5.10.

11.2.5.10. Grouping derivations

Grouping derivations all function to in some way specify or elaborate the ‘grouped’ nature of the referents of one or more predicate arguments.

-ŋám ‘EXHAUSTIVE’ usually refers to S or O, and has different senses according to the grammatical number, as well as the mass/count status of the argument it references. When S or O is *plural*, the sense is of collective or exhaustive participation in the

predicated event/state (557); the same is true of a singular referent which is viewed as *composite* (558) or *gradable* (559).

(557) *ək pətáa-kobúə kaəŋám duutù!*

[əkə pətáa-kobúu = əə]_S [káa-**ŋám**-dùu]_{PRED} = tu
 IND.PL bird-rodent=TOP look-**EXH**-IPFV=AURV(<Asm)
 ‘The small animals **all** watched!’ (NyPB, LAT 212)

(558) *higəm tihám gər̀là, ɲó əpàgrə.*

[higè-m]_O [tíi-**ŋám**-gər̀ə-là(a)]_{PRED} ɲó əpàk-rə
 SPRX.IND imbibe-**EXH**-ACNC-NF 1.SG discard-IRR
 ‘After I **finish** smoking this (pack, i.e. each and every cigarette it contains), I’ll quit (smoking).’ (GS, OL11:103)

(559) *aloə looŋám tadúu kú.*

[alóo = əə]_S [láo-**ŋám**-tà-dúu-kú]_{PRED}
 day=TOP pass.time-**EXH**-INCP-IPFV-CMPL
 ‘The day is just about over with.’ (lit., ‘the day is about to be **completely** passed’)
 (MN, OLB7:45)

Less often, *-ŋám* may make reference to A. Thus, *bulù m̃i-əəm káa-ŋám-dùu.*

‘3.PL 3.SG-ACC look-EXH-IPFV’ can mean *either* ‘they are **all** looking at him’ *or* ‘they are looking him **all** over’. It may be that context helps to disambiguate, or there may be a hierarchy of preferred readings associated with *-ŋám* ‘EXH’; this is a topic for further research.

-bám ‘COLLECTIVE’ has the basic sense ‘together (with)’. On an *intransitive* predicate, it has an *applicative* function, adding a second, volitional co-actor which is expressed as O (560). On a *transitive* predicate, it functions to express A as plural or diffuse, and collectively affecting O (561).

(560) *biəm ɲó inbám tó.*

[bi-**əəm**]_O [ɲó]_A [ín-**bám**-tó]_{PRED}
 3.SG-ACC 1.SG go-COLL-PFV
 ‘I went with *him*.’ (IR, OLB8:60)

- (561) *ác-abbó là...ân-pamó...baakên*
 [ací-abó = əə laa anə-pamóə = əə_i]_s [baakèn
 elder.brother-father=TOP NCNJ mother-daughter.in.law=TOP unison
gobó indûu kú. #z#m mobâm dù.
 go = bá]_{OBL} [ín-dûu-kú]_{PRED} [Ø]_{iA} [z# = əəm]_O [mò-**bám**-dûu]_{PRED}
 IND=DAT go-IPFV-CMPL de-weeding=ACC make-COLL-IPFV
 ‘The elder men...and the elder women...go as a group/at the same time. (They) do
 the de-weeding **together**.’ (LN, GMW 032-033)

If a predicate in *-bám* ‘COLL’ is also marked in Reflexive *-hí* (§11.2.5.9), O (if available) can no longer be understood as a co-participant (i.e., the applicative reading is disallowed). In this case, the sense of *-bám* may be *either* one of collecting A *or* of collecting and affected O (562).

- (562) *dobám hikên maró.*
 dó-**bám**-hí-kèn-máa-ró
 eat-COLL-REFL-GOOD/EASY-NEG-IRR
 ‘It won’t be good to eat these things together.’ (attested sense; KN, OL20:129)
or ‘It won’t be good for us to eat together.’
but not * ‘It won’t be good for us to eat with them.’

-bì ‘DUAL COLLECTIVE’ references an obligatorily *dual subject*. Unlike *-bám* ‘COLL’, which only optionally takes reflexive marking, a predicate in *-bì* ‘DCOL’ is *obligatorily* marked in the reflexive. Note, however, that the effect is *not* reciprocal (563).

- (563) *bupnè...kirkíóm...lèkkôk paalà...*
 bupnè = əə kirkíi = əəm lèk-kók-pàa-là(a)
 3.DL=TOP window(<Asm)=ACC slide-OPEN-ATTN-NF
kaabôk bihitò.
 káa-bók-**bì**-hí-tó
 look-DOWN/SOUTH-DCOL-REFL-PFV
 ‘They two got the window open and looked down **as a pair**.’ (TR, FS 016)

The core sense of *-mín* ‘APPLICATIVE: JOIN’ is basically one of ‘joining’ or ‘going along with’ an activity, in the sense that one of the referenced participants is understood as a secondary actor who is joining a primary actor in bringing about the predicated event/state. However, a predicate in *-mín* ‘JOIN’ must be additionally marked in Reflexive

-*hí* ‘REFL’ (§11.2.5.9.4) (like Dual collective -*bì* ‘DCOL’), or else in Comitative -*gǝ* ‘COMT’ (§11.2.5.4); -*mín* ‘JOIN’ *cannot* mark a predicate independently.

Predicate marking in -*mín-hí* ‘-JOIN-REFL’ has a basically *reciprocal* sense as in *mò-mín-hí-nam* ‘make-JOIN-REFL-NZR:RLS’ ‘to quarrel/fight (**amongst one another**)’, *jó-mín-hí-nam* ‘fornicate-JOIN-REFL-NZR:RLS’ ‘to have sex (**with one another**)’ and *zí-mín-hí-nam* ‘give-JOIN-REFL-NZR:RLS’ ‘to exchange (give **to one another**)’ (§11.2.5.9.4). When occurring in a weak metrical position, it is typical for the final [n] of -*mín* to delete, in a highly irregular but persistent sound change which has good phonetic motivation, but which may also be indicative of fusion and/or grammaticalization as an independent Reciprocal construction, as in (564). In (564), although the subject is ellipsed, it is understood as obligatorily non-singular (dual or plural).

- (564) *roomî hilà, roomî hilà, roomî hilà*
 róo-**mín-hí**-là(a) róo-**mín-hí**-là(a) róo-**mín-hí**-là(a)
 scold-JOIN-REFL-NF scold-JOIN-REFL-NF scold-JOIN-REFL-NF
roomî hinəmə...pidín dorâa nə...
 róo-**mín-hí**-nam = əə pidín dó-râa-nà
 scold-JOIN-REFL-NZR:RLS=TOP human.flesh eat-ISOL-NZR:SUB
apí mumsìn əmtûu kunəmə nə.
 apí mumsì = nè óm-tùu-kú-nam = əə na
 elder.sister NAME=NAGT call-CONT-CMPL-NZR:RLS=COP DECL
 ‘They argued **amongst one another**, argued and argued and having argued...in the end, (Abo Tani) called Elder Sister Mumsi a cannibal.’ (NyPB, LAT 321)

Predicate marking in -*mín-gǝ* has an overall *comitative* sense; it has the syntactic function of demoting the underlying A to O (if intransitive) or E (if transitive), and adding a new A (a syntactic causative in the sense of Dixon (2000)). Semantically, the new A is understood as one *joining in* the event in which the erstwhile subject is already established as a participant, and which it is understood as principal controller. In (565), this takes on the character of a repetition. Although it is extremely rare for all of the relevant arguments to be overtly represented, elicited examples are given in transitive and extended transitive clauses in (566)-(567) respectively. In (567), note that there are *two* E arguments, either of which may be understood as principal controller.

(565) *hagî róm hagî mingó là.*

[hagî-ró = əəm]_{TSUB} [Ø]_{iA} [Ø]_{jO} hagî-**mín-gó**-là(a)
 sigh-IRR=ACC.TSUB sigh-**JOIN-COMT-NF**
ajjêə dá əmróm ajjêə dá əmmín gəlà.

ajjêə da óm-ró = əəm ajjêə da óm-**mín-gó**-là(a)
 IJEC CNTR tell-IRR=ACC.TSUB IJEC CNTR tell-**JOIN-COMT-NF**

‘When he sighs, it repeats his sigh [lit., ‘**it**_i joins **him**_j in sighing’]. And when he then says “aya,” it also then says “aya!”’ (NyPB, LAT 285-286)

(566) *ŋó biəm hobbém mamín gədù.*

[ŋó]_A [bî-əəm]_E [hobó = əəm]_O [má-**mín-gó**-dùu]_{PRED}
 1.SG 3.SG-ACC mithun=ACC search.for-**JOIN-COMT-IPFV**
 ‘I’m joining **him** in searching for the mithun.’ (IR, B8:73)

(567) *ŋó biəm igó nè rokcíkəm zimín gədù.*

[ŋó]_A [bî-əəm]_E [igó = nè]_E [rokcík = əəm]_O [zí-**mín-gó**-dùu]_{PRED}
 1.SG 3.SG-ACC NAME=NAGT knife=ACC give-**JOIN-COMT-IPFV**
 ‘I’m joining **him** in giving the knife to Igo.’ (preferred)
 ‘I’m joining **Igo** in giving the knife to him.’ (possible) (IR, B8:73)

11.2.5.11. Comparative -jàa

Comparative -jàa ‘COMP’ is an important form with several related functions. In its most basic sense, when marking an adjectival predicate, -jàa has an *intensifying* value, indicating that the marked property/condition is ‘very much’ true of the subject (568).

(568) *aî jaadù!*

[Ø]_S [aî-**jàa**-dùu]_{PRED}
 heavy-**COMP-IPFV**
 ‘(It’s) **quite** heavy!’ (Sili, OL9:133)

More often, -jàa has a *comparative* value.²²² In one sense of the comparative, -jàa may *imply* a comparand, with a sense not unlike English *relatively*; in this sense we find terms like *tə̀tə̀-jàa-nà* ‘in.majority-**COMP**-NZR:SUB’ ‘the majority/greater portion (of them)’ and

²²² The only true comparative constructions in Galo are comparatives of discrepancy, as are discussed in this section. Notional comparatives of equality take the form of a simple intransitive clause, headed by the adjective *lə́jî* ‘similar; same’. Notional comparator and notional comparand are expressed as coordinated NPs within the subject position (schematically, ‘x and y are similar/the same’).

kái-jàa-nà ‘big-COMP-NZR:SUB’ ‘the bulk (of it); most (of it)’ which are often used as anaphorically-referring Referential qualifying expressions (§6.3.2), as in (569).

(569) *ŋó aciném kaí jàanəm dotó.*

[ŋó]_A [acín = əəm]_O [kaí-jàa-nà = əəm]_{RQE} [dó-tó]_{PRED}
 1.SG cooked.rice=ACC big-COMP-NZR:SUB=ACC eat-PFV
 ‘I ate **most of** the rice.’ (lit., ‘I ate a **relatively** large (portion of) the rice’) (KZ, OL9:242)

The implied comparand may also take the sense of a lesser quality of the marked property, as in (570).

(570) *mîi hîdâa dâapi go laagərə ərəpəm*

bîi hîdâa dâa-ɲì = go làa-gərə əráp = əəm
 3.SG stick CLF:STICK-two=IND take-ACNC door=ACC
tuutûm ká, ɲɲíg addîi jaabə məəlà.
 tùu-túm-káa [ɲɲíi = go addîi-jàa = bó]_{ADV} [məəl-là(a)]_{PRED}
 push.with.force-CLOSED.S/O-PF bit=IND strong-COMP=AVZR think-NF
 ‘He took two sticks and propped the door closed, thinking it should be a bit stronger (than it currently was).’ (IR, FA 055)

A comparand may also be expressed overtly as O; in this sense, *-jàa* ‘COMP’ functions as an *adjectival applicative*, as in (571); note that in (571), the O argument is licensed by the Comparative derivation – in absence of the Comparative derivation, the sentence is ungrammatical.

(571) *horéə hodûm mîngə dù, mərə*

horè = əə hodûm mín-gə-dùu mərəa
 wildcat.variety=TOP barking.deer chase-COMT-IPFV HEST
takkém dôrtə jaadə naanà.
 [Ø]_A [také = əəm]_O [dór-tə-jàa-dó(o)]_{PRED}-nà = əə = na
squirrel=ACC CLF:HIGH.ANIMAL-big-COMP-STAT-NZR:SUB=COP.IPFV=DECL
 ‘*Horci* chase barking deer...you know, they’re bigger **than squirrels**, see?’ (RmR, CC 136)

A superlative sense ‘most (of all)’ results from combination with ‘Certainty’ adverbial particle *rúu ~ rûu* ‘CERT’ (§13.5.2.3). In this case, the *reference set* (i.e., the *all* in *most of all*) is generally implied; it may not be expressed as an argument (572). However, it may

be expressed obliquely as an (NP-internal) partitive modifier of a nominalized superlative adjective, as in (573)

(572) *bɛ̃ kaí jaarûu nà bəreì*

[bɛ̃]_{CS} [kaí-**jàa**≡**rûu**≡nà]_{CC}[= əə]_{COP} bəree = ì
 3.SG big-COMP≡CERT≡NZR:SUB = COP.IPFV CJEC=ETAG
 ‘He’s the **biggest** (among the brothers) I suppose?’

(573) *buppɛ̃ lòk ʔɛ̃nɛ́i jaarûuna...kənók zâab*

[[**buppɛ̃** **lokə̃**]_{GENP} [ʔɛ̃nɛ́i-**jàa**≡**rûu**≡nà]_{RELC} = əə]_S kənók≡zâa≡bó
all **PART** little-COMP≡CERT≡NZR:SUB=TOP enthusiastic≡REAL≡SBRD
jupkà.
 jùp-káa
 sleep-PF
 ‘The **smallest** one **of all of them**...was sleeping away enthusiastically.’ (TR, FA 074)

-*jàa* ‘COMP’ may also mark a *verbal* predicate, with the basic sense ‘rather; instead’, and with similarly different sub-senses or effects depending on the transitivity of the stem on which it occurs and/or the number of arguments which are overt or implied in the clause: on an intransitive verbal predicate, use of -*jàa* ‘COMP’ may indicate that the predicated event/state is brought about ‘rather than’ or ‘instead of’ any other (implied) event/state, as *jùp-jàa-tó = kée* ‘sleep-COMP-IPTV.ODIR=HORT.POL’ ‘sleep rather (than do what you’re proposing)’. On an extended intransitive or (extended) transitive predicate, the sense is more often of E or O being affected ‘rather than’ or ‘instead of’ any other potential referent, as in (574).

(574) *sâa tɛ̃jâa toké, opôo tət̃t̃ô!*

[hàa]_O [tɛ̃-**jàa**-tó = kée]_{PRED} opôo tət̃t̃ô
 tea imbibe-COMP-IPTV.ODIR=HORT.POL liquor nothing.but
 ‘Drink tea **instead**, you’re drinking nothing but liquor (recently)!’ (IRw, OLB3:142)

-*jàa* ‘COMP’ also functions as a verbal predicate applicative, adding a non-subject argument understood as a lesser participant (575)-(576).

(575) *tanú nóm incôo jaatò.*

[tanúu]_A [nó-m]_O [ín-còo-jàa-tó]_{PRED}

NAME 1.SG-ACC go-FIRST-COMP-PFV

‘Tanu left before I did (that’s why he arrived before me).’ (TR, OL14:106)

(576) *nó mojâa dè.*

[nó]_A [Ø]_E [mò-jâa-dèe]_{PRED}

1.SG make-COMP-PROP

‘Shall I do it **instead of** (you, since you’re fouling it up).’ (KTR, OL16:30)

Very rarely, *-jàa* has been observed to fully reduplicate within the predicate stem, generally with an intensifying, distributive or iterative function (577)-(578); for discussion of reduplication in a more general context, see §5.5.

(577) *aljàa duukù.*

aló-jâa-dùu-kú

good-COMP-IPFV-CMPL

‘It’s gotten better.’ (MN, B1:9 (elicitation based on (578)))

(578) *aló jaajâa duukù.*

aló-jâa-jâa-dùu-kú

good-COMP-COMP-IPFV-CMPL

‘It’s getting better (bit by bit).’ (MN, OLB1:9)

11.2.6. Modal predicate derivations

Modal predicate derivations express some aspect of the *speaker’s attitude* toward the information contained in the predicate or its arguments, including ideas of (relative) *certainty, need, possibility, ability, capacity, obligation, necessity, or desirability/desire*. None have cognate forms elsewhere in the language, so far as I can see. Forms attested to date are listed in Table 11.9.

| Form | Meaning | Ref. |
|---------------|--------------|-----------|
| <i>-dée</i> | PROSPECTIVE | §11.2.6.1 |
| <i>-là(a)</i> | ABILITY | §11.2.6.2 |
| <i>-làk</i> | CAPABILITY | §11.2.6.3 |
| <i>-lî</i> | DESIDERATIVE | §11.2.6.4 |
| <i>-kén</i> | OBLIGATIVE | §11.2.6.5 |

Table 11.9 – Modal predicate derivations (full attested set)

11.2.6.1. Prospective -*dée*

-*dée* ‘PROSPECTIVE’ marks an event or state as having a real *possibility of coming to pass*, in the sense of not being subject to any external constraints (579). In negative polarity clauses, the sense is opposite, i.e. of restriction, prohibition, or some other external constraint (580).

(579) *adâk deedò.*

adâk-**dée**-dó(o)=`

congested-PROS-STAT=FI

‘There was a **chance** of overcongestion (in that area).’ (TB, OAM 200)

(580) *jalûk dodée mâ. takó dodée mâ.*

jalûk dó-**dée**-máa=` takó dó-**dée**-máa=`

chili.pepper eat-PROS-NEG=FI squirrel eat-PROS-NEG=FI

‘You’re **prohibited** from eating chillies; you’re **prohibited** from eating squirrels (during the taboo period).’ (MN, T16:34)

In terms of frequency, -*dée* most often occurs in nominalizations, where its sense is often closer to future/irrealis; i.e., that the marked event/state will or is expected to come to pass (581). This may amount to a functional compensation for the relatively greater set of restrictions placed on occurrence of the Irrealis suffix -*rə* in nominalized clauses (cf. §15.3.2.2.2).

(581) *jəə là hîrûm acín modêe nà?*

jəə=la hîrûm acín mò-**dée**-nà=əə

who=CQ this.evening cooked.rice make-PROS-NZR:SUB=TOP

‘Who **will** be tonight’s cook (i.e., my wife or yours)?’ (MN, OL23:86)

-*dée* is also subject to a very unusual ordering constraint which suggests it may be in the process of a category shift, either to inflectional suffixal or some sort of modal auxiliary-like status. When occurring in a quadrisyllabic predicate structure, -*dée* has been observed to preferentially *follow* the negator, a property usually reserved for predicate inflections; compare (581) with (582).

(582) *əgə rímâa deenà agóm əî?*

əgə rì-máa-**dée**-nà agóm (ə)î
ANAP.IND happen-NEG-**PROS**-NZR:SUB speech COP.IPFV=ETAG
‘This was something that just **could** not happen, right?’ (NyPB, LAT 177)

When followed by certain types of clause-final particle (again in a quadrisyllabic structure) -*dée* appears to have a limited ability to license a final predication (583); again, this may be indicative of a category shift.

(583) *rìbúm dobúm deekó!*

rì-búm dó-búm-**dée** = kó
do-DUSTY eat-DUSTY-**PROS**=ADM
‘Don’t make the dust scatter (lit., ≅ ‘There’s a **possibility** of dust scattering as a result of your actions)!’ (TR, OL19:133)

11.2.6.2. Ability -*là(a)*

Ability -*là(a)* ‘ABIL’ refers to the subject’s ability to bring about the predicated event/state, in terms of skill, knowledge, technical facility, or some more general means (584); -*là(a)* ‘ABIL’ most often cross-translates English ‘can’.

(584) *izzà, adî tolçìn caalâ kumá!*

izzàa adî tolò = cìn càa-là(a)-kú-máa
now mountain LOC.UP=ADD ascend-**ABIL**-CMPL-NEG
‘Now, we **can**’t even go up to the Adi place anymore (because we’re old and infirm)!’ (NyR, MDS 051)

-*là(a)* ‘ABIL’ is subject to Phrase-medial truncation (§4.1.5.2) in which, when occurring as the third syllable in a quadrisyllabic (or larger) predicate, its rhyme is obligatorily truncated, as [la] (585).

(585) *nó əpâk larəî?*

nó əpâk-là(a)-rə = (ə)î
2.SG discard-**ABIL**-IRR=ETAG
‘Will you be **able** to quit (smoking)?’ (MN, OLB4:7)

Finally, *-là(a)* ‘ABIL’ is one of the very few predicate derivations capable of occurring with an ellipsed predicate head, albeit in strictly limited conditions. (586) is a possible rejoinder to questions such as (585).

(586) *m, larə.*

m **là(a)**-rə
 AFF ABIL-IRR
 ‘Sure I **will**.’ (lit., ‘sure, I **able**’) (MN, B4:7)

Note in (586) that Phrase-medial truncation applies, despite the fact that *-là(a)* ‘ABIL’ does not in this case occur in third syllable position. This underlines the seeming fact that a sentence like (586) can only be contextually derived from a sentence like (585); i.e., *-là(a)* ‘ABIL’ cannot be straightforwardly used as predicate head in a simple declarative clause. This topic is discussed in a more general context in §11.1.6.2.

11.2.6.3. Capability *-làk*

Cabaility *-làk* ‘CAP’ is indicative of the subject referent’s capacity or capability to bring about the predicated event/state, in terms of the subject referent’s inherent physical characteristics, some other natural characteristics, or more generally as a result of some necessary or unalterable conditions that obtain in a particular situation, as in (587).

(587) *ân-áb namló cín aakûr lakkù má, ilìè bièmm*

anè-abó namé = lo = cìn áa-kûr-**làk**-kú-máa ilìè = əə bìi-əəm
 mother-father house=LOC=ADD come-RET-CAP-CMPL-NEG stone=TOP 3.SG-ACC
geelûp kaakúí?
 gé-e-lûp-káa-kú = (ə)î
 seal-COVER.S/O-PF-CMPL=ETAG
 ‘She **couldn’t** return to her parents’ house either; the stone had completely submerged her.’ (LN, TG 072)

Although *-là(a)* ‘ABIL’ could also occur in the **bolded** position in (587), the speaker would then be heard as implying a relatively greater potential on the part of the subject referent to control the predicated event. Thus, for example, while *ŋó ín-là(a)-máa* ‘1.SG walk/go-ABIL-NEG’ ‘I **cannot** go’ might be used in a case when a prior social commitment prevents

one from going somewhere, *ḡó ín-làk-máa* ‘1.SG walk/go-CAP-NEG’ ‘I’m **unable to go**’ would imply that one’s legs are broken, one’s leg muscles are undeveloped (as a newborn baby), or that one suffered from some other unalterable incapacitating condition.

11.2.6.4. Desiderative -*lî*

Desiderative -*lî* ‘DESD’ most directly translates the desiderative modals found in a wide range of other languages, such as English *want*. It generally indicates of the clause subject referent a desire, wish or choice-based intent to bring about the predicated event/state (588)-(589).

(588) *bî anə akîngo dolîdu manè.*

bî anə akî = go dó-~~lî~~-dùu mane
 3.SG mother leaf.packet=IND eat-DESD-IPFV that’s.to.say(<Asm)
 ‘She **wanted** to eat one of her mother’s (prepared) meal packets, see.’ (NyPB, LAT 248)

(589) *bîk rîlî nammóm bî rîrə còm.*

bî-kə rî-~~lî~~-nam = əəm bî rî-rə com
 3.SG-GEN do-DESD-NZR:RLS=ACC 3.SG do-IRR GUES
 ‘She’ll do as she **pleases**, I suppose (despite whatever I may tell her).’ (MN, OL22:37)

In negative polarity clauses, -*lî* ‘DESD’ has a particularly strong connotation which is often best translated as English *hate* rather than *don’t want/like*, as *káa-lî-máa* ‘look-DESD-NEG’ ‘hate; despise (the sight of; lit., ‘don’t want to see’)’ or *dó-lî-máa* ‘eat-DESD-NEG’ ‘can’t stand (a food)’.

Rarely, -*lî* ‘DESD’ is capable of occurring with an ellipsed predicate head, typically as a rejoinder to a polar question, although not all of my consultants have agreed with the grammaticality/acceptability of this usage. For further discussion of this phenomenon, see §11.1.6.2.

11.2.6.5. Obligative -*kén*

Obligative -*kén* ‘OBLG’ is an extremely rare form, and appears to be on the verge of complete replacement by the Assamese-based modal of necessity/obligation in *lagí-* (§16.6.2.1). Unlike the modal of necessity in *lagí-*, -*kén* ‘OBLG’ does not require a marked construction but simply occurs directly on the predicate stem. Often, it follows a Certainty adverbial particle, as in (590).

(590) “*apí mumsì...nó inrúu kendûu kú.*”

apí mumsì nó ín=rúu=**kén**-dûu-kú

elder.sister NAME 2.SG go=DEF=OBLG-IPFV-CMPL

“‘Elder Sister Mumsi...(the council has decided that) you absolutely must go with him,’ (he said).’ (NyPB, LAT 186)

11.3. Complex predicate derivations

Complex predicate derivations are all disyllabic forms which are either synchronically or diachronically derived from one or more simplex predicate derivations. Complex predicate derivations are of three types:

- 1) discontinuous predicate derivations (§11.3.1)
- 2) expressive predicate derivations (§11.3.2)
- 3) fused predicate derivations (§11.3.3)

11.3.1. Discontinuous predicate derivations

Discontinuous predicate derivations are prototypically disyllabic constructions of two simplex, monosyllabic predicate derivations which are discontinuously bound to separate verb roots (591)-(592). Taken as a whole, the quadrisyllabic combination of a discontinuous predicate derivation and the verb roots which host them are described in this work as a *Multiword predicate*. Multiword predicates are discussed in detail in §10.5.

In the simplest case, a discontinuous predicate derivation is realized across a repetition of the same verb root, as in (591). More rarely, it may be realized across a Discontinuous compound verb (§5.3.2.3), as in (592).

(591) *əɾəpə́m...agûm akkə̀...jə̀ə bə̀re? jiiǰə́ cóm*

əɾáp = əəm agùm akə̀ = əə jə̀ə bə̀re jii = əə cóm
 door=ACC exterior DST.ABL.SLEV=TOP who CJE person=COP.IPFV GUES
jooə̀ cóm...cʰín cʰibə́ ká.

jòo = əə cóm cʰi-**nə́** cʰi-**bó**-káa
 what=COP.IPFV GUES slap-MOVE.1 slap-MOVE.2-PF
 ‘Someone...who could it be? Is it a person or what?...**knocked** on the door.’ (lit.,
 ‘slapped on the door **such that it moved**’) (IR, FA 034)

(592) *donám laanàm mûməm dopâa*

dó-nam làa-nam mûm = əəm dó-**pàa**
 eat-NZR:NSUB take-NZR:NSUB JUST=ACC eat-ATTN
laalâa là; əmbə́ rədù.

làa-**là(a)**-là(a) əmbə́ rə́-dùu
 take-ABIL-NF ANAP.PADV live/exist-IPFV
 ‘One way or another, (we) manage to put food on the table; (we) live like that.’
 (lit., ≡ ‘(we) just obtain **whatever** obtained-provisions **happen to be available**’)
 (NyR, MDS 029)

In some cases, both elements of a discontinuous predicate derivation have fully functional simplex predicate derivations to which they appear to be related, whether synchronically or diachronically; in (592), the discontinuous derivation *-pàa...-là(a)* ‘WHATEVER’S AVAILABLE’ appears to derive from simplex predicate derivations *-pàa* ‘ATTN’ (§11.2.1.3) and *-là(a)* ‘ABIL’ (§11.2.6.2). Similarly, simplex Result derivations *-bín* ‘CLEAR S/O’ and *-kák* ‘CLEAN/SHINING S/O’ give rise to the discontinuous predicate derivation *-bín...-kák* ‘VERY CLEAN S/O’.

On the other hand, one or both elements of a discontinuous predicate derivation may lack independent functionality in modern Galo. For example, the final element of the discontinuous predicate derivation *-nə́...-bó* ‘MOVEMENT RESULT’ *-bó* (591) occurs independently as a simplex Result derivation with the sense ‘SHAKE S/O’ (§11.2.1); however, I have not been able to attest a simplex usage of the initial element *-nə́* ‘MOVE.1’, and my consultants inform me that a predicate stem in *-nə́* has no independent sense. Or, consider *-lî...-pàk* ‘LOVE TO’, in which the initial element *-lî* ‘DESIDERATIVE’ occurs elsewhere as a simplex predicate derivation, while the final element does not appear to occur as a simplex predicate derivation (although it may be ultimately relatable to verb root *pák*- ‘care about something’). Finally, in the Aspect/Aktionsart derivation *-níi...-náa*

‘ABORTIVE INCEPTIVE’ (§11.2.3.3), neither element appears to have independent functionality.

Whether or not the elements of a discontinuous predicate derivation do or did occur as simplex derivations in Galo, it is quite clear that the whole of a discontinuous derivation is never exhaustively analyzable as the sum of both parts. At the very least, it would appear that discontinuous predicate derivations have an *emphatic* value; for example, *-bín...-kák* ‘VERY CLEAN S/O’ is probably describable in terms of the semantics of both simplex formatives as identified above (this section); however, the result is not simply ‘x plus y’, but is rather something more like (in this case) ‘quite/very x and y’. Sometimes, there may be greater semantic discontinuity between discontinuous derivations and their simplex formatives. For example, although the simplex Manner derivation *-kèn* ‘GOOD/EASY’ (§11.2.1) can be applied when an S argument referent is construed *either* as having the property ‘good’ *or* the property ‘easy’ (or both), in the discontinuous derivation *-kèn...-pàa* ‘EASILY DONE’ – in which the initial element seems clearly relatable to *-kèn* ‘GOOD/EASY’ – the ‘good’ sense can no longer be found.²²³ Finally, there are a few predicate derivations – probably, a small minority – which are difficult to fully describe in terms of the functions of their apparent simplex source forms; *-pàa...-là(a)* ‘WHATEVER’S AVAILABLE’ – which appears to be basically a Manner derivation basically with the sense ‘affect whatever O happens to be available’ – seems semantically quite unlike the apparent source forms *-pàa* ‘ATTN’ (§11.2.1.3) and *-là(a)* ‘ABIL’ (§11.2.6.2).

Most discontinuous predicate derivations appear to be describable as Manner (593) or Result (594) derivations, although at least one has been described elsewhere in this work as an Aspect/Aktionsart derivation (*-níí....-náa* ‘ABORTIVE INCEPTIVE’, §11.2.3.3).

(593) *mekên mempâa má.*

| | |
|--|-----------------------|
| mèn- kèn | mèn- pàa -máa |
| say-EASILY.DONE.1 | say-EASILY.DONE.2-NEG |
| ‘It’s not easy to say.’ (KN, OLB2:45) | |

²²³ For example, while *dó-kèn* ‘eat-GOOD/EASY’ can mean either ‘easy to eat (not too hard, fibrous, etc.)’ *or* ‘good to eat (tasty/delicious)’, *dó-kèn dó-pàa* ‘eat-EASILY DONE.1 eat-EASILY DONE.2’ can *only* mean ‘easy to eat’. The final *-pàa* element appears to relate to *-pàa* ‘ATTN’ (§11.2.1.3).

(594) *mozîn-motâa toké!*

mò-**zîn** mò-**tâa**-tó = kée
make-STRETCH/FLATTEN.1 make-STRETCH/FLATTEN.2-IPTV.ODIR=HORT.POL
'**Flatten** it out!' (MN, OLB7:15)

At least some discontinuous predicate derivations have the capacity to adjectivalize, as in (595).

(595) *tahûp-tajâpè!*

tá-**hûp** tá-**jâp** = əə
listen-BEYOND.REASONABLE.LMT.1 listen-BEYOND.REASONABLE.LMT.2=COP.IPFV
'Shut up already!' (lit., ≡ 'Your noise is being heard **beyond any reasonable limit.**') (IR, OLB1:15)

Finally, a small number of discontinuous predicate derivations have been found with what may be best described as Argument determining functions; for example, *-kò...-pék* 'IN.ALTERNATION' may have a Reciprocal function in at least some uses (596). Such forms have yet to be exhaustively researched.

(596) *duukô duupêk lazù.*

dùu-**kò** dùu-**pék**-là(a) = zù
sit-IN.ALTERNATION.1 sit-IN.ALTERNATION.2-IPTV.SDIR=HORT.INCL
'Let's **switch** seats.' (KN, OL17:51)

The discontinuous predicate derivations attested to date are in Table 11.10. Due to the somewhat whimsical, idiosyncratic nature of many discontinuous derivations, it is extremely difficult to elicit them or their meanings straightforwardly. However, at least one new form has been discovered in almost every text transcribed to date, and I therefore expect that many more will eventually be found.

| Form | Meaning | Form1 | Meaning | Form2 | Meaning |
|---------------------------|---------------------------|-------|--------------------------|--------|----------------------|
| -zík...-ák | ‘IMPEDE S/A’ | -zík | ‘DISTURB S/O’ | -ák | N/A ²²⁴ |
| -bín...-kák | ‘VERY CLEAN S/O’ | -bín | ‘CLEAR S/O’ | -kák | ‘CLEAN S/O’ |
| -tó...-kə | ‘FOR FIRST TIME’ | -tó | ‘FOR FIRST TIME’ | -kə | ‘ABORTIVE’ |
| -tər...-gáa | ‘REPEATEDLY IN VAIN’ | -tər | ‘REACHING ENDPOINT’ | -gáa | ‘TO/AT WRONG TARGET’ |
| -jĩ...-có | ‘MIND/OBJECT’ | -jĩ | ‘BADLY S/A’ | -có | N/A |
| -zìn...-tàa | ‘STRETCH OUT/FLATTEN O’ | -zìn | ‘STRETCH/STRAIGHTEN S/O’ | -tàa | N/A |
| -pàa...-là(a) | ‘WHATEVER’S AVAILABLE’ | -pàa | ‘ATTAINMENT’ | -là(a) | ‘ABILITY’ |
| -kèn...-pàa | ‘EASILY DONE’ | -kèn | ‘GOOD/EASY’ | -pàa | ‘ATTAINMENT’ |
| -lĩ...-pàk | ‘LOVE TO’ | -lĩ | ‘DESIDERATIVE’ | -pàk | N/A ²²⁵ |
| -kò...-pék | ‘IN ALTERNATION’ | -kò | ‘REVERSE’ | -pék | ‘ALONG THE WAY’ |
| -nə ²²⁶ ...-bó | ‘MOVE’ | -nə | N/A | -bó | ‘SHAKE S/O’ |
| -cĩ...-bək | ‘STABLE’ | -cĩ | ‘KEEPING/CARINGLY’ | -bək | ‘CLEARLY’ |
| -hùp...-jàp | ‘BEYOND REASONABLE LIMIT’ | -hùp | ‘DISORDERLY’ | -jàp | ‘DURATIVE’ |
| -púk...-rée | ‘CARELESSLY’ | -púk | N/A ²²⁷ | -rée | N/A |
| -kùu...-rə | ‘BRITTLE’ | -kùu | ‘BEND S/O’ | -rə | N/A |
| -kúp...-lék | ‘HELTER SKELTER’ | -kúp | ‘UPSIDE DOWN S/O’ | -lék | ‘RIGHTSIDE UP S/O’ |
| -rĩ...-jóo | ‘NZR:BRIEFLY’ | -rĩ | N/A | -jóo | N/A |
| -jùu...-jəð | ‘FLEX S/O’ | -jùu | N/A ²²⁸ | -jəð | N/A |

Table 11.10 – Discontinuous predicate derivations (full attested set)

²²⁴ Unattested as predicate derivation, but possibly related to verbal root *ák*- ‘hook something’.

²²⁵ Unattested as predicate derivation; possibly distantly related to verbal root *pák*- ‘care about something’, but tones have been confirmed as non-corresponding.

²²⁶ A few consultants have been heard uttering this form in [nĩ], which – if accurate – would presumably represent the PG form predating Word-final weakening (§2.4.4.5). However, most Lare speakers appear to realize [nə]; confirmation of the PG form awaits clear attestation in non-Lare dialects.

²²⁷ Consultants did not identify an independent meaning, however may relate to the verb root *púk*- ‘pop’.

²²⁸ Although simplex predicate derivational uses are unattested, it is likely that these forms relate to the verb roots *jùu*- ‘flex’ and *-jəð* ‘keel’ respectively.

11.3.2. Expressive predicate derivations

Expressive predicate derivations have the same basic morphosyntactic status and functional characteristics as discontinuous predicate derivations. They differ formally in that while discontinuous predicate derivations appear to derive from a combination of two etymologically distinct and phonologically unrelated simplex predicate derivations, expressive predicate derivations consist of a monosyllabic simplex form (the *base*) followed by a monosyllabic *semi-reduplication* of the base. In a semi-reduplication, the rhyme of the base is retained intact while the initial is usually changed to one of the sonorants *m-*, *j-*, *l-* or *r-* (or, less often, in *c-*, *Ø-* or in a changed nuclear vowel) (597).

(597) *gulái tolò opôo gò ʔɲíík tʰítʰ reelà...*

gulai tolò opôo = go ʔɲíík = go tʰí-tó-rée-là(a)

PLACE LOC.UP liquor=IND bit=IND imbibe-PFV-PSEQ-NF

rəəzər rəəmər là molôo kunəm

rəə-**zér** rəə-**mér**-là(a) mò-lòo-kú-nam = əə

keel-JERKINGLY.1 keel-JERKINGLY.2-NF make-DESC-CMPL-NZR:RLS=COP.IPFV

nà!

na

DECL

‘Up at Gulai, after having a little liquor, we **zig-zagged** back on down!’ (RmR, CC 053)

The form of an expressive predicate derivation is similar to that of an expressive two-term compound (§5.3.1.4.2.3), and many of the roots involved are evidently relatable; for example, the expressive predicate derivation *-ɲàa...-ràa* ‘NULL RESULT’ seems to reflect the final, semi-reduplicated root found in the expressive compounds *jaɲàa-jaràa* ‘clever but useless woman’ and *taɲàa-taràa* ‘clever but useless man’.²²⁹

Semantically, the difference between simple and expressive predicate derivations seems most often to have to do with degree of emphasis, with an expressive predicate derivation often having a *more intense*, *more complete*, or *more widely distributed* sense than the corresponding simplex form. Thus, while *móə-kìn-nam* ‘think-MUDDLED-NZR:RLS’ means ‘to be puzzled’, *móə-kìn móə-mìn-nam* ‘think-MUDDLED think-RDUP-

²²⁹ Such forms are of course closely similar to the “expressive reduplications” commonly found in many Mainland South-East Asian languages, as described by Matisoff (1988: 39), among others, and probably form part of the same overall genetic and areal typology.

NZR:RLS’ means something closer to ‘to be quite puzzled’ or ‘to be certainly/absolutely puzzled’. Similarly, while *-kòp* alone usually indicates a ‘dented’ result on S/O, the sense of *-kòp...-ròp* is usually closer to ‘dented all over’, whether in the sense of multiple dents on a single entity or of multiple dents on multiple entities.

In a few cases, the base of an expressive derivation is almost never actually uttered in simplex form, but is almost invariably semi-reduplicated. In fact, *-kìn* ‘MUDDLED’ in *-kìn...-mìn* ‘UTTERLY MUDDLED’ is such an example. In this case, all natural attestations are of the expressive type, while the simplex form has only been obtained in direct elicitation. Thus, although we may safely maintain that a sort of “non-emphatic – emphatic” relation holds between simplex and expressive predicate derivations, it does not at the same time follow that the simplex form is “less marked” than the expressive form overall. Despite its relatively emphatic value, *-kìn...-mìn* ‘UTTERLY MUDDLED’ seems to be the relatively less marked form in terms of usage.

The Expressive derivations attested to date are given in Table 11.11.

| SIM | RDUP | SIM meaning | Overall meaning | SIM Alt. | RDUP Alt. |
|------|---------------------|----------------------|-----------------------|----------|-----------|
| -kèe | -èe | N/A | ‘HERE AND THERE’ | k- | Ø- |
| -kék | -ék | ‘INDISCRIMINATELY’ | ‘COPIOUSLY’ | k- | Ø- |
| -rák | -cák | ‘HOARDINGLY’ | ‘OUT-OF-CONTROL’ | r- | c- |
| -mák | -mák | ‘MINUTE RESULT’ | ‘INTO MILLION PIECES’ | -i- | -a- |
| -jék | -jék ²³⁰ | ‘LEAVE NO REMAINDER’ | ‘LEAVE NO REMAINDER’ | -i- | -e- |
| -kìn | -mìn | ‘MUDDLED’ | ‘UTTERLY MUDDLED’ | k- | m- |
| -zík | -mík | ‘DISTURB S/O’ | ‘IMPEDE S/O’ | z- | m- |
| -zìk | -mìk | ‘HAPHAZARDLY’ | ‘LEISURELY’ | z- | m- |
| -zór | -mór | N/A | ‘JERKINGLY’ | z- | m- |
| -dír | -mír | ‘EXHAUSTED’ | ‘TOTALLY EXHAUSTED’ | d- | m- |
| -jék | -mék | N/A | ‘TO LAST DETAIL’ | j- | m- |
| -cák | -jék | ‘SPREAD’ | ‘SCATTER S/O’ | c- | j- |
| -gáa | -jáa | ‘AT/TO WRONG TARGET’ | ‘AFFECT EVERYTHING’ | g- | j- |
| -dík | -jék | ‘HASSLE’ | ‘REALLY HASSLE’ | d- | j- |
| -zòk | -jòk | ‘SLOPPILY’ | ‘VERY SLOPPILY’ | z- | j- |
| -kíi | -ríi | ‘EFFECTIVELY’ | ‘EXPERTLY’ | k- | r- |
| -kùm | -rùm | ‘GATHER’ | ‘GATHER HAPHAZARDLY’ | k- | r- |
| -kòp | -ròp | ‘DENT S/O’ | ‘DENT S/O ALL OVER’ | k- | r- |
| -kák | -rák | N/A | ‘FULL COVERAGE’ | k- | r- |
| -cáo | -ráo | ‘SEPARATELY’ | ‘AS CONTRARIAN’ | c- | r- |
| -cák | -rák | ‘FREELY’ | ‘BOLDLY’ | c- | r- |
| -tík | -rík | N/A | ‘FLAILINGLY’ | t- | r- |
| -dàm | -ràam | ‘STRAIGHT(EN)’ | ‘TINKER’ | d- | r- |
| -dén | -rén | ‘SHAKINGLY’ | ‘CONVULSIVELY’ | d- | r- |
| -dén | -rén | ‘EXHAUST’ | ‘EXHAUST COMPLETELY’ | d- | r- |
| -bàk | -ràk | ‘CLEAR’ | ‘UNCLEAR’ | b- | r- |
| -gàa | -ràa | ‘NO RESULT’ | ‘NO RESULT AT ALL’ | g- | r- |
| -kák | -lák | ‘CLEAN S/O’ | ‘REVEAL S/O’ | k- | l- |
| -kóo | -lóo | ‘IMPRECISELY’ | ‘ROUGHLY’ | k- | l- |
| -kòo | -lòo | ‘MAKE HOLE’ | ‘MAKE HOLES’ | k- | l- |
| -bìk | -lìk | ‘WITHOUT INJURY’ | ‘WITHOUT FINESSE’ | b- | l- |
| -bée | -lée | ‘HALFHEARTEDLY’ | ‘NEGLECTFULLY’ | b- | l- |

Table 11.11 – Expressive predicate derivations (SIM = Simplex form, RDUP = Semi-reduplication) (full attested set)

Although Table 11.11 has been organized according to the initial consonants of the base and semi-reduplicated forms, it is clear that the initial of the semi-reduplication

²³⁰ It is possible that both *-jék* and *-jék* elements are originally meaningful (cf. the semantically similar *-jék...-mék* ‘TO LAST DETAIL’, in which *-jék* stands as the simplex, non-reduplicated form. This possibility has not yet been fully explored.

cannot be predicted from the base (since *k*-initial bases occur in *Ø*-, *m*-, *r*- and *l*- semi-reduplications and *d*-initial bases occur in *j*-, *r*- and *l*- semi-reduplications). It is equally impossible to predict the semi-reduplication initial from the base final, as all semi-reduplication initials have correspondences with bases in *-k*. Although it may be that a more nuanced phonological analysis than I have been able to conduct as of this writing would discover a means of generating the semi-reduplication from the base, my belief is that the underlying difference between forms in *m*-, *r*-, *j*- and *l*- (and potentially other forms) is more likely to be *semantic*, and that – although they may be subtly distinguished – semantic minimal pairs will eventually be able to be adduced to show this. Unfortunately, due to the sparseness and (so far) unpredictability of expressive derivational usage in discourse, such research will have to be conducted on a larger database than that which is currently available to me.

11.3.3. Fused/polysyllabic predicate derivations

A very small number of predicate derivations can be seen to have *fused*, usually as (obligatorily continuous) disyllabic sequences, and are no longer analyzable in terms of the functions of their erstwhile constituents. Only two clear instances have been attested to date, although it is quite possible that the list will eventually be expanded (cf. the discussion of the Comitative/Reciprocal derivation *-mín* ‘JOIN’ in §11.2.5.9.4 and also §11.2.5.10).

11.3.3.1. *-kaahí* ‘Aplenty’

-kaahí ‘APLENTY’ appears to derive from a fusion of simplex predicate derivations *-kǎa* ‘TENTATIVE’ (§11.2.3.1) and *-hí* ‘REFLEXIVE’ (§11.2.5.9). From the original combination, a sense of ‘competition’ may be obtained, as *ník-kǎa-hí-nam* ‘punch-TENT-REFL-NZR:RLS’ ‘to box (lit., ‘to try to hit one another’) and *pá-kǎa-hí-dùu* ‘chop-TENT-REFL-IPFV’ ‘competing in chopping’. When occurring on locative/existential predicates, however, an extended sense of ‘aplenty’ is found, often with an overtone of ‘business’, ‘crowdedness’ or ‘competing for space’, as in (598).

(598) *adók-adóknè tuunó kaakáa hidù.*

adók-adók-nà tuun = əə káa-**kaahí**-dùu
different-different-NZR:SUB tune(<Eng)=TOP have/exist-**APLENTY**-IPFV
‘There are many different (kinds of Galo) accents.’ (LN, OLB8:43)

11.3.3.2. -*ḡoohí* ‘Procedural’

-*ḡoohí* ‘Procedural’ seems to derive from a fusion of simplex derivations -*ḡoo*

‘HABITUALLY’ and -*hí* ‘REFLEXIVE’; it has the basic sense ‘(in the) process of PRED’.

When marking the predicate of a simple declarative clause, it casts an event as a process, and may be translated by ‘on the way’, ‘in the process (of)’ or French *en train de* (599).

Often, though, it occurs on dependent clauses, in which it usually casts the marked event as one ‘as’, ‘while’ or ‘during’ which the event depicted in the main clause occurs (600).

(599) *caḡô hidù nanà.*

càa-**ḡoohí**-dùu-nà = əə na
ascend-**PROC**-IPFV-NZR:SUB=COP.IPFV DECL
‘I’m **on my way** up [as we speak], you see.’ (IR, OLC1:116)

(600) *ḡó taniigó hobbám paḡôo hidâk ogò, inḡíí tó.*

ḡó taníi = gə hobá = əəm pá-**ḡoohí**-dàk ogò ín-ḡíí-tó
1.SG NAME=GEN mithun=ACC chop-**CCUR**-COS ANAP.TMP go-DEPART-PFV
‘I left **as** Tani was killing the mithun.’ (IR, 22:26)

11.4. Adjectival predicate derivations

In above sections, we have noted in passing some of the relatively rare cases in which a predicate derivation may combine directly with an adjectival predicate stem (for example, the comparative in -*jàa* (§11.2.5.11)). The overall greater tendency is for processes of adjectival derivation to take proprietary forms or constructions. All of the forms described below are true *adjectival* derivations, inasmuch as they can derive adjectives which occur *either* as head of a predicative clause *or* in CC function (the cardinal attribute of all true Galo adjectivals; see §5.1.2). Most of the forms to be discussed below have semantic values which are usually translated into other languages as *adverbs*. It is important to note, however, that in Galo they are *not* syntactic adverbials, inasmuch as they cannot occur outside an adjectival predicate word. True adverbial modification of adjectives is accomplished via derived adverbials, as discussed in §16.5.2.

11.4.1. Incremental *-gamgám*

Incremental *-gamgám* derives a sense that a state, property or condition is ‘gradually’ or ‘incrementally’ reached, and/or is becomes the case *little by little*. Although it almost certainly derives from an iconic repetition of a simplex form *-gám*, simplex iterations are regarded as odd by my consultants, and have never been naturally-attested (601)-(602).

(601) *bɛ̃ kanôo gamgám dú jú kɔ́!*

bɛ̃ kanôo-**gamgám**-dùu juu kɔ́?
 3.SG hungry-**INCR**-IPFV REP CTRY
 ‘Oi, he said he’s getting a bit hungry!’ (JK/YN, OL13:19)

(602) *ŋó kanôo gamgám ɛ̃.*

ŋó kanôo-**gamgám** = ɛ̃
 1.SG hungry-**INCR**=COP.IPFV
 ‘I’m getting a little bit hungry.’ (MN, B2:105; elicitation based on (601))

11.4.2. Adjectival intensifier *-totíi*

Although the most common means of predicate intensification is via a derived adverbial *maazí = bɔ́* ‘very.much=AVZR’, *-totíi* is a proprietary adjectival intensifier with the basic sense ‘utterly; completely’ (603)-(604).

(603) *horíi totíi bó*

horíi-**totíi** = bó
 straight-**INTS**=AVZR
 ‘(Keep going) **utterly** straight (don’t turn off into any of the side lanes).’ (BR, OLxx)

(604) *namlíi totíi*

nam-líi-**totíi** = ɛ̃
 CLF:HOUSE-new-**INTS**=COP.IPFV
 ‘It’s a **very** new house.’ (TR, OL6:135)

11.5. Summary and directions for further research

Throughout the above sections, I have maintained the principle that predicate derivations are not themselves capable of heading any syntactic term (cf. §11.1.6.2). However, it must be acknowledged that the occurrence of predicate derivations or (usually disyllabic) clusters of predicate derivations as phonologically independent “words” potentially leaves them open to reanalysis as grammatically independent terms. And, there are a few indications that certain predicate derivations which occur frequently as predicate-internal phonological word heads have been reanalysed as auxiliary-like grammatical word heads, albeit in strictly limited conditions). For example, in §11.2.6.2, the capacity of *-lâ(a)* ‘ABILITY’ for limited occurrence as a “light” predicate head in responses to polar questions was discussed.

Such cases are, perhaps surprisingly, very rare; however, it is easy to imagine such a structure spreading in Galo, or being more widespread in another Tani language; since a productive construction of this type would have profound implications for the analysis of Galo predicate grammar, additional signs of this or any similar type of construction should be carefully watched-for. As discussed in a more general context in §2.3, it seems very likely that what I have described in this chapter as types of bound, grammatical-word-internal formatives originated diachronically as types of more or less syntactically independent terms (probably, as types of serial verb). In this sense, the history of the Galo predicate grammar can be viewed as one of increasing grammatical amalgamation. It would be very interesting indeed if signs of its later de-composition could also be discovered.

Finally, I should point out that although this forms the largest chapter by far in the present work, I have only really scratched the surface by outlining what I see as the general properties of predicate derivations and listing just a few of the particular properties of some of the more functionally important predicate derivations identified to date. A complete analysis will require several years of in-depth research and a far larger overall presentation, given the sheer number of forms involved. I certainly have hopes that this larger study will be able to be conducted.

12. Predicate inflections

This chapter discusses predicate inflections. §12.1 is an overview, and discusses inflectional subclasses, obligatoriness, order and co-occurrence possibilities and restrictions. Subsequent sections discuss the major functional classes of predicate inflections in this order: negation (§12.2), aspect (§12.3) (comprising two subsections on primary (§12.3.2) and secondary (§12.3.3) aspectual subtypes) and modality (§12.4). In §12.5, the functionally limited conjunct/disjunct pattern is discussed.

12.1. Overview

Predicate inflections occur as suffixes to a predicate stem (§10.2). The prototypical site of predicate inflection is the head of a main (= final) predicative clause; the full range of forms described in this chapter may occur in that environment. A subset of the forms described below may also occur on the predicate of a dependent (= nominalized, non-final or adverbially subordinated) clause; these possibilities are discussed in the context of dependent clauses in §15 and §16, and are not discussed at any length in this chapter.

Predicate inflection in a main predicative clause is to a great extent obligatory in Galo. Although it is sometimes possible in casual speech to hear a final predicate which consists only of a derived predicate stem (with the inflection seemingly ellipsed), such utterances are extremely rare in my corpus; the overwhelming majority (> 99%) are overtly inflected (see also §10.3).

The majority of predicate inflections occur alone (i.e., they do not co-occur with other predicate inflections), and license a final predicate. Predicate inflections which are capable of licensing a final predicate are described as *Primary* predicate inflections in this work. Examples are in (605)-(606).

- (605) *bɛ̃ caarə*
bɛ̃ càa-rɔ̃
3.SG ascend-IRR
'He or she'll go up.'

- (606) *bhî caamà*
 bhî càa-**máa**
 3.SG ascend-NEG
 ‘He or she **doesn’t/didn’t** go up.’

Primary predicate inflections which are able to co-occur generally belong to different functional subclasses; for example, Irrealis *-rə*, a modality suffix, may co-occur with Negator *-máa*, a polarity suffix (607). In this case, ordering is fixed, not free (608).

- (607) *bhî caamâa rə*
 bhî càa-**máa-rə**
 3.SG ascend-NEG-IRR
 ‘He or she **won’t** go up.’

- (608) **bhî câarə má*
 bhî càa-**rə-máa**
 3.SG ascend-IRR-NEG

A relatively small number of forms have basically inflectional status, but can only occur together with other predicate inflections; they cannot themselves license a final predicate. Such forms are described as *Secondary* predicate inflections. The most commonly-used Secondary predicate inflection by far is Completive aspectual suffix *-kú* ‘CMPL’ (609)-(610).

- (609) *bhî câarə kú*
 bhî càa-**rə-kú**
 3.SG ascend-IRR-CMPL
 ‘He or she’ll **finally** go up.’

- (610) **bhî caakù*
 bhî càa-**kú**
 3.SG ascend-CMPL

Secondary predicate inflections sometimes exhibit unusual ordering. For example, although Completive suffix *-kú* always *follows* the Irrealis suffix *-rə*, as in (609), it *precedes* the Negator *-máa* (611).

- (611) *bĥi cáaku má.*
 bĥi cáa-**kú-máa**
 3.SG ascend-CMPL-NEG
 ‘He or she **doesn’t** go up **anymore**.’

The ability of *-kú* to precede some primary predicate inflections and follow others leads to different ordering possibilities when those primary inflections co-occur – and corresponding differences in Completive aspectual scope (612)-(613).

- (612) *bĥi caakù maadù.*
 bĥi cáa-**kú-máa-ró**
 3.SG ascend-CMPL-NEG-IRR
 ‘He or she **won’t** go up **anymore** (his or her going up will cease).’

- (613) *bĥi caamâa rækú.*
 bĥi cáa-**máa-ró-kú**
 3.SG ascend-NEG-IRR-CMPL
 ‘He or she’ll **come to no longer** go up (his or her state of not-going-up will come to pass).’

A rough schematic of the predicate inflectional position classes is given in Figure 12.1.

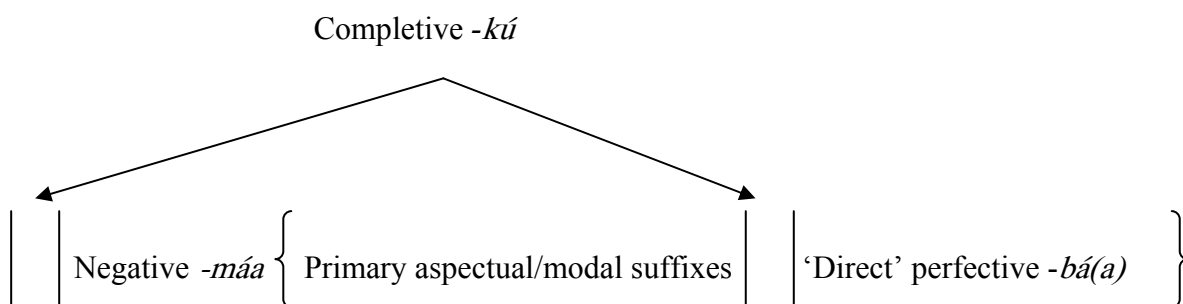


Figure 12.1 – Predicate inflectional paradigm

12.2. Negation *-máa*

Final predicates in negative polarity are obligatorily suffixed in *-máa* (< PTs **man* ‘not (have)’). Negator *-máa* is obviously relatable to Copula negator *máa* (§9.3.3) as well as to Negative interjection *máa* (§13.7.3) and Disjunctive coordinator *máa* (§6.2.5.2).

Negator *-máa* is treated as a distinct form inasmuch as it may license a final predicate by

suffixing to a bound verb root, whereas the identified cognate forms are grammatical words.

Semantically, a predicate in *-máa* is inherently unspecified for any temporal/aspectual value, unless it is further marked by an aspectual suffix of some kind (cf. (606)-(607) above). In a discourse context, the aspectual value of a clause marked only in *-máa* is inherited from a previous aspectually-specified clause, or else is inferred based on temporal expressions or other contextual factors. In (614), the inferred perfective value of the negated predicate in *káa-* ‘have/exist’ is derived from the preceding, thematically-related clause which is marked in Perfective *-tó*.

(614) *kocarí əkə akên-əni gò rətó. níi kəbə kaamá.*

| | | | | | | |
|---------|---------|---------------|----------------|--------|-------|-----------------|
| kachari | əkə | akên-əni = go | ró-tó | níi | kəbə | káa- máa |
| TRIBE | IDEF.PL | one-two=IND | live/exist-PFV | person | other | have/exist-NEG |

‘One or two Kacharis were here. There **wasn’t** anyone else.’ (NyR, MDS 009-010)

Although unspecified for an aspectual value, clauses in *-máa* tend to have a default *realis* interpretation. In a clause describing some hypothetical or potential future negative state of affairs, an irrealis marker is most often present, as in (615).

(615) *píhík-pəgaám, nún cenmâa rə.*

| | | |
|---|------|--------------------|
| píhík-pəgáa = əəm | nunù | cèn- máa-rə |
| hornbill.rufousnecked-hornbill.great.pied=ACC | 2.PL | know-NEG-IRR |

‘You folks wouldn’t know about hornbills.’ (RmR, CC 153)

-máa is not used to construct negative imperatives, for which the distinct Prohibitive suffix *-jó* exists (§12.4.2.2).

12.3. Aspect

12.3.1. Tense or aspect?

Nearly all published descriptions of Tani grammar, whether early or modern and whether produced by local or international scholars, refer to markers of “present tense”, “past tense”, “future” and so on (Das Gupta 1963; Simon 1972, and many others). However, use of the term “tense” in the description of Tani grammar has been criticized

by Sun (2003), who claimed on the basis of data from Mising and Na (Bangni) – representing the Eastern and Western branches of Tani respectively – that what is referenced by Tani verbal inflections are not tense values at all, but rather *aspectual* values. My own Mising and Galo data are fully consistent with Sun’s (2003) analysis. With reliable supporting data from each major branch of Tani languages, it would seem that an aspectual system of some kind should be reconstructible to Proto-Tani. Furthermore, it would seem that the existence of a true tense system in a modern Tani language is of extremely low probability. I briefly substantiate these arguments here with respect to the system found in Galo.

Tense and *aspect* are both generally understood as systems for referencing or encoding the temporal structure of a clause, usually by way of some sort of clause-level inflectional operator, or else by direct marking on the predicate head (Bybee and Dahl 1989). By *tense* is generally meant a system organized around a given *temporal reference point* (usually, the “present”), and in which *any* reported event or state is obligatorily marked as temporally *prior to* or *at* the reference point (or some similar configuration) (Comrie 1985). By *aspect* (in the narrowest and most precise sense) is meant a system for referencing the *internal temporal structure* of an event or state from an often large number of possible viewpoints, but almost always including whether it is construed as *finished* or *not finished*. Often, aspectual systems make use of a temporal reference point of some kind (such as the time of speaking) but do not obligatorily do so and/or may freely set temporal reference points which are distant from the present (Comrie 1976).

Very frequently – perhaps over 90% of the time, although I have not actually counted – *imperfective* marking in Galo occurs on the predicate head of a clause with *present time reference*, and *perfect* or *perfective* marking occurs on the predicate of a clause with *past time reference* (with perfective clauses sometimes felt by consultants to be “further in the past” than perfect clauses). However, it is neither necessary that a clause with present or past time reference has its predicate marked imperfective or perfective, nor that a predicate marked imperfective or perfective has present or past time reference, respectively. For example, compare the Galo sentences in (616) with their English translations. In these sentences, the speaker unmistakably sets his temporal reference point in the past, precisely at the time when he and his group migrated from the highland village of *daarɿ* down to their present location at *hilɿ* village – exactly forty-two years prior to the time of speaking. However, the speaker’s construal of most of the events he reports lacks a specific point of termination (because he still lives in *hilɿ* at the time of speaking); the corresponding clauses are accordingly marked in the imperfective. By

contrast, it is impossible to represent the same temporal structure in English without using past-tensed verbs.

(616) *ḡunûk iidâk rūogò...ciḡgóo-doogóo ḡá horrá kulà*

ḡunû = kà ìi-dâk rūu = ogò ciḡgóo-doogóo = ḡá horá = əə kú = laa
1.PL=GEN descend-COS CERT=TMP.RLS whole.world=GEN boar=TOP CMPL=NCNJ

hottâə kú...rîkû nammá... əḡ, ḡûnu abnâməm

hotà = əə kú rî-kú-nam = əə əḡə ḡunû àp-nam = əəm
elephant=TOP CMPL do-CMPL-NZR:RLS=TOP HEST 1.PL shoot-NZR:NSUB=ACC

abdù, panəmám padù... donəmám dodûu kú...

àp-**dùu** pá-nam = əəm pá-**dùu** dó-nam = əəm dó-**dùu**-kú
shoot-**IPFV** chop-NZR:NSUB=ACC chop-**IPFV** eat-NZR:NSUB=ACC eat-**IPFV**-CMPL
minnəmám mīḡá duukù!

mín-nam = əəm mín-ḡá-**dùu**-kú
chase-NZR:NSUB=ACC chase-COMT-**IPFV**-CMPL

‘Right when we got down (here)...every bloody animal on the face of the earth...having done all that they did (to halt our progress)...then, we did some hunting, we did some killing... we ate a fair bit...we did a fair bit of (animal-)chasing!’ (NyR, MDS 122-124)

Furthermore, as noted in §12.2 (see also (606)), it is common for negative polarity clauses in Galo to lack temporal-aspectual marking of any kind. The prevailing temporal structure of the discourse is generally inherited by such clauses, which are not generally found by Galo speakers to be ambiguous or uninterpretable.²³¹

12.3.2. Primary aspectual suffixes

Table 12.1 presents the primary aspectual suffixes currently identified for Galo. Table 12.2 presents a minimal set of brief sentence examples illustrating their core semantic values.

²³¹ One remarkable aspect of my experience of working with Galo speakers was the precision with which many were able to represent the temporal structure of texts using English and Assamese translations – in which nearly all predicative sentences must be marked for tense – despite the lack of overt temporal marking in many of the original Galo source sentences.

| Form | Meaning | Marks | Ref. |
|---------------|----------------------|---|-----------|
| <i>-dùu</i> | Imperfective | unfinished events/states, generally construed | §12.3.2.1 |
| <i>-dó(o)</i> | Stative | unfinished events/states which hold as a general condition or state of affairs | §12.3.2.2 |
| <i>-dàk</i> | Change of state | current/new state, generally in explicit context with an earlier state of affairs | §12.3.2.3 |
| <i>-tó</i> | Perfective | completed events (or more rarely states), viewed as a “rolled-up” whole, lacking internal structure, and leaving no event-residue (usually having occurred in distant past) | §12.3.2.4 |
| <i>-káa</i> | Perfect | completed events/states whose outcomes have bearing on some present state of affairs, or whose relatively recent completions result in a state which remains ongoing | §12.3.2.5 |
| <i>-tùu</i> | Continuative | ongoing states which are the outcome of completed events, or which began at some earlier time and are not yet complete | §12.3.2.6 |
| <i>-bée</i> | Experiential perfect | events/states which have occurred at least once previously, viewed as a complete and unstructured iteration | §12.3.2.7 |

Table 12.1 – Primary aspectual suffixes

| | | |
|------|--------------------|--|
| IPFV | <i>bhì càa-dùu</i> | ‘He’s going up (now, as we speak).’ |
| STAT | <i>bhì càa-dóo</i> | ‘He goes up (on a regular basis/as a practice).’ |
| COS | <i>bhì càa-dàk</i> | ‘He’s now going up (he hadn’t been before).’ |
| PFV | <i>bhì càa-tó</i> | ‘He went up (and returned).’ |
| PF | <i>bhì càa-káa</i> | ‘He went up (and he’s still there).’ |
| CONT | <i>bhì càa-tùu</i> | ‘He has gone up (and he’s still on route).’ |
| EPF | <i>bhì càa-bée</i> | ‘He has been up (at some point in his life).’ |

Table 12.2 – Minimal set illustrating effect of various aspectual suffixes on predicate in *càa* ‘ascend’

12.3.2.1. Imperfective *-dùu*

Imperfective -dùu ‘IPFV’ is among the most frequently-occurring forms in the language, and might be described as the functionally unmarked Galo aspectual suffix. Predicates denoting an event or state which is generally construed as *unfinished* as of a given temporal reference point (usually, the time of speaking) may be marked in *-dùu*, whether they are construed as of long (617), medium (618) or short duration (619). *-dùu* also very commonly marks adjectival predicates (620).

(617) *ŋoiǰə həpə̃m gò rədù pə̃i.*

ŋoi = əə həpə̃m = go rə-dùu pə̃ = (ə)i
 fish=TOP large.amount=IND live/exist-IPFV UCRT=PQ
 ‘I suppose there are plenty of fish, eh?’ (RmR, CC 094)

(618) *mokên kaapâa bə̃ modù.*

mò-kèn káa-pàa = bə̃ mò-dùu
 make-GOOD/EASY look-ATTN=SBRD make-IPFV
 ‘They make it look easy.’ (of itinerant mattress-makers remaking a futon) (KZ, OL10:125)

(619) *azên gə̃ jasĩ tɪ̃dùu lakà!*

azèn = gə̃ jasĩ tɪ̃-dùu la(a)ka
 friend=GEN urine imbibe-IPFV MIR
 ‘(The pig) is drinking his friend’s urine, of all things!’ (TZ, OL15:17)

(620) *loumɡó dooból ɲɲíɡ tiisír dú*

lóo-úm = go dóo-boolo ɲɲí = go tiihír-dùu = ́
 CLF:DAY-three=IND EXIS.LOC.INAN-COND bit=IND sweet-IPFV=NFII
 ‘If it (fermenting rice) sits for three days, it sweetens a bit. (lit., ≡ ‘it is sweet (in such cases as) when it has sat for three days)’ (LN, OPO 036)

-dùu ‘IPFV’ is widely attested in all manner of discourse genre, although it is of course more common in non-narrative discourse, and more generally when describing currently-unfolding rather than already-completed events. The historical source of imperfective -dùu appears to be PTs *duŋ ‘sit’ (cf. Lare dùu- ‘sit’ and dùu- ‘exist (in sitting position)’ (§5.2.4.4)), possibly via an intermediate stage as an uninflecting verbal auxiliary.

12.3.2.2. Stative -dó(o)

Predicates denoting general states of affairs, events which occur regularly as a feature of the world or human society, or states which are otherwise construed as stable, durable, and unlikely to foreseeably end, may be marked by Stative -dó(o) ‘STAT’ (621)-(623). Predicates in -dó(o) ‘STAT’ may be either verbally (621)-(622) or adjectivally-headed (623).

(621) *nikám-horám nízí-hokám ədə, âm bugdò*

nikám-horám nízí-hokám əə = da amə-bùk-**dó(o)**
 wizened.old.woman wizened.old.man TOP=CNTR hair.body-burst-STAT
benpò...

ben = no

EVID=CEXP

‘The mature leeches though, it seems they actually have hairs on them.’ (RmR, CC 073)

(622) *kaapâa maadó*

kâa-pâa-mâa-**dó(o)**

look-ATTN-NEG-STAT

‘It’s difficult to see ~ One can’t make it out (of an image on a TV screen).’ (TR, OL6:42)

(623) *nunù ardə maadó əmlâacin tazí kumá!*

nunù ardə-mâa-**dó(o)** əm-la(a)cìn tazí-kú-mâa

2.PL clever-NEG-STAT say-CONC believe-CMPL-NEG

‘You guys aren’t so clever, and yet you don’t believe us!’ (NyR, MDS 113)

Clauses in *-dó(o)* ‘STAT’ are far less common than clauses in *-dùu* ‘IPFV’; most naturally attested clauses in *-dó(o)* ‘STAT’ are subordinated, non-final, or nominalized (624). It is not entirely clear as yet why dependent clauses should prefer non-perfective aspectual marking in Stative *-dó(o)* rather than general Imperfective *-dùu*, but the preference is statistically quite robust. In (624), note also that *-dó(o)* ‘STAT’ is subject to the irregular process of Phrase-medial truncation (§4.1.5.2), appearing with a short rhyme (usually reduced to [ə]) in second-syllable position within a non-phrase-final phonological word.

(624) *əm dūudə bə moʔkè, nəək peeləə bə.*

əm dùu-**dó(o)** = bə mò-tó = kée nəə-kə peeləə = bə

ANAP.ACC sit-STAT=SBRD make-IPTV.ODIR=HORT.POL 2.REFL-GEN side=DAT

(...) *má, pəgó allê/..aíuqə dūuhi doobə né.*

mâa pəgóo allê aí = əə dùu-hí-**dó(o)** = bə né

no wheel well self=TOP sit-REFL-STAT=SBRD ADM

‘Have them sit down, to your side. (...) No, the circle (should be positioned) proper!...so it’ll sit by itself.’ (IR, MPO 006-007)

Among younger speakers in high Assamese contact areas, Stative *-dó(o)* has seemingly begun to specialize as a Polar interrogative suffix in Imperfective aspect, and is no longer generally used in main declarative clauses (see §9.5.1.1). Time will tell whether this seemingly quite recent change continues to proliferate.

The historical source of *-dó(o)* ‘STAT’ appears to be PTs **doŋ* ‘lie down’ (cf. Lare *dóo-* ‘lie down’ and also *dóo-* ‘exist (in lying position)’ (§5.2.4.4)), possibly via an intermediate stage as an uninflecting auxiliary.

12.3.2.3. Change-of-state *-dàk*

Predicates denoting a current/new state – particularly one viewed as contrasting with an earlier state of affairs – are marked in Change-of-state *-dàk* ‘COS’. In (625), the speaker has just returned from a dusty motorcycle ride, which has resulted in his current thirst. In (626), the speakers are discussing the instability of the weather, which has given rise to repeated recent changes-of-state leading up to the present. In (627), the speaker is explicitly contrasting the current, relatively cosmopolitan state of the heavily-populated foothills area with his earlier description of its previous lack of population and consequent proliferation of jungle and wild animals.

(625) *sáa ŋó tiiłi dāk!*

háa ŋó tii-łi-**dāk**

tea 1.SG imbibe-DESD-COS

‘I could really use some tea!’ (MN, OL23:75)

(626) *taló tē...mārá dūubə rīmā dagzè.*

talóə tēə mārāa-dūu = bó rì-māa-**dāk** zee

sky HDST.UP whatever-IPFV=SBRD do-NEG-COS REAS(<Asm)

‘Because we can’t, you know (predict) what that sky up there will do.’ (IR, HC 014)

(627) *nunnəm bupphəm kaarík hinəmóm paadāk kú...*

nunū = əm bupph̃ = əm káa-rík-hí-nam = əm páa-**dāk**-kú

2.PL=ACC all=ACC see-APPL:MEET-REFL-NZR:RLS=ACC get-COS-CMPL

‘We now have (the chance) to meet together with all of you people (which had been lacking in the past).’ (NyR, MDS 012)

-dàk ‘COS’ also commonly marks adjectival predicates. In this case, the property or condition denoted by the adjective is generally construed as immediate or transitory rather than inherent. In (628), marking in *-dàk* ‘COS’ reflects the speaker’s concurrent experience of spiciness. The sentence is unacceptable as a description of the inherent spiciness of a given dish, generally construed, or of a particular variety of chili pepper.

(628) *aré! audàk!*

are aú-**dàk**
SURP(<Ind) spicy-COS
‘Wah! It’s hot!’ (TR, OL6:35)

In addition to main clause uses, *-dàk* ‘COS’ is very commonly found in *realis temporal subordinations*; the first sentence of (616) above contains such an example, and see also §16.4.3. Finally, a final clause in *-dàk* ‘COS’ is very commonly marked in ‘Disjunct imperfective’ *-ée* ‘IPFV.DISJ’ (§12.5.2.3). The overall effect is to form a “Stative imperfective” clause reporting a *non-perfected state* which is no longer within the speaker’s immediate frame of experience. This is the most frequent means in Galo of referencing states which are located in immediate or relatively recent past times, and whose effects may still be felt (629).

(629) *irgâa dagè, ohôo pinnəmè!*

irgâa-**dàk**-ée ohóo-pìn-nam = əə
interesting-COS-IPFV.DISJ cane-harvest.cane-NZR:RLS=TOP
‘It was really fun, that rope-making (trip)!’ (RmR, CC 054)

The historical source of *-dàk* ‘COS’ appears to be PTs **dak* ‘stand’ (cf. Lare *dàk*- ‘stand’ and also *dàk*- ‘exist (in upright position)’ (§5.2.4.4), possibly via an intermediate stage as an uninflecting auxiliary.

12.3.2.4. Perfective *-tó*

Perfective *-tó* marks a predicate describing an event or state which has been completed, and which is construed as a punctual, self-contained occurrence with few or no lingering effects, which does not obviously result in a particular state, and/or with little

or no immediate bearing on any subsequent events or states. Some consultants report clauses in *-tó* to have a feeling of “abruptness” or “matter-of-factness”, or to have a particularly high assertive value on main declarative clauses. Other consultants have reported feeling that clauses in *-tó* ‘PFV’ were likely to have occurred in a distant, inaccessible past, and to not be appropriate for events in recent experience.

In (630), a typical introduction to a folktale, the existence of two brothers is presented as a “rolled-up” fact about the past whose effects are not felt at the time of speaking. (631), which is from a picture book-based narrative, gives a sequence of two final clauses marked in *-tó*; marking in *-tó* here conveys a sense of self-containedness to each event, and a lack of explicit thematic relationship between them, as though they simply “happened” to occur in this sequence. In (632), a speaker is describing modern life in her village; most of her clauses are accordingly in *-dùu-kú* ‘IPFV-CMPL’, which marks a finally-arrived-at and still ongoing state. However, she provides some contrasting background information via a clause in *-tó*.

(630) *korûm ogò...acc’ó ânigò kaatóî.*

korûm ogò ací = əə ɔ̀nì = go káa-tó = (ə)î
 ancients DST.LOC elder.brother=TOP two=IND have/exist-PFV=ETAG
 ‘Once upon a time...there were two brothers.’ (LN, TG 006)

(631) *akên nà da êm iijâk hilà duutò.*

akên = na da əmè-íi-ŋàk-hí-là(a) dùu-tó
 one=SLCT CNTR fire-bask-INTENSELY-REFL-NF sit-PFV

ôk kookhî bə bulù...aumə...jùptə bə

okè kookhî = bəbulù aúm = əə jùp-tà = bə
 ANAP.ABL back=DAT 3.PL three=TOP sleep-INCP=SBRD

aapôm tokú.

áa-póm-tó-kú]

come-AS.CLUSTER-PFV-CMPL

‘And then one of them was sitting and warming himself intently. After that the three of them came together to sleep.’ (TR, FA 022-023)

(632) *háalə ɡínám bó...rídúu kú, ísì-ríkkóm...ísì-ríkó lokə*

haal ɡì-nam = bó rì-dùu-kú isì-ríkó = əəm isì-ríkó lokə
 plow(<Ind) plow-NZR:RLS=DAT do-IPFV-CMPL water-field=ACC water-field ABL
rídúu kú. m̩ə̀rə-kenlù əmbə zâa ísì-ríkó rímâa toî.
 rì-dùu-kú m̩ə̀rə-kenlùu əmbə zâa isì-ríkó rì-mâa-tó = (ə)î
 do-IPFV-CMPL long.ago ANAP.PADV REAL water-field do-NEG-PFV=ETAG
 ‘We’re starting to do it...by ploughing; we’ve come to cultivate wet fields, using
 wet fields. In the old days, wet fields weren’t used so much, eh!’ (LN, GMW 050-
 051)

Examples (630)-(632) illustrate marking by perfective *-tó* on verbal predicates. It is very rare to find final adjectival predicates marked in *-tó*. Although (633) was accepted by a consultant in elicitation, the usual means of representing an adjectival property or state which is not being directly experienced at the time of speaking – but whose effects may well still be felt – is via a Stative imperfective construction in *-dāk-ée* ‘-COS-IPFV.DISJ’ (§12.3.2.3). This seems to relate to the typical durability/time-stability of adjectival properties (§5.2.3), and the relatively low likelihood of their construal as punctual, self-contained and non-enduring features of the past.

(633) *hilòo maazíb agotó.*

hilòo maazí = bó agó-tó
 today very.much=AVZR warm/hot-PFV
 ‘Today was really hot (spoken in the evening after it has cooled down).’ (BK, 9:102)

Although *-tó* ‘PFV’ in most cases marks final predicates denoting events which are construed to have occurred in the (usually distant) past, it is important to note that past time reference is *not* in fact semantically entailed in *-tó*, and is not obligatory in Perfective contexts. For example, one very common use of *-tó* is in marking event-sequentiality in non-final *clause chains* (§16.4.2.2), which may have any imaginable temporal reference (as dictated by the temporal/aspectual specification of the final clause, as well as by intervening temporal phrases and adverbials). As a seeming extension of this use, non-final/coordinated adjectives are also very often marked in *-tó* ‘PFV’; in this case, very little evidence of semantic perfectivity can be found (unlike in final adjectival predicates such as in (633)); it may be that *-tó-là(a)* ‘PFV-NF’ is in the process of fusing as a simple coordinator in this function (see for example §6.2.4.4 ex. (137)).

-tó ‘PFV’ (or its cognate forms) also occurs in the ‘Conjunct’ perfective (§12.5), as well as the ‘Other-directed’ (non-speaker-directed) imperative in *-tó* (§12.4.2.1). In both of these functions, selection of *-tó* is paradigmatically sensitive to the person of the clause subject. Historically, subject person-sensitivity may have been a property of the simple Perfective, but this is not the case in modern Galo. (634) simply illustrates this fact.

(634) *ḡó/nó/bḡ dotó.*

ḡó/nó/bḡ *dó-tó*
1.SG/2.SG/3.SG eat-PFV
 ‘I/you/he/she/it ate.’ (TR, 6:125)

The historical source of *-tó* ‘PFV’ is uncertain. It seems not to occur throughout Tani languages (although it is widespread) and thus may or may not reconstruct to PT. There is at present no perfectly-corresponding Galo lexeme which could point to a potential source, the closest potential candidate may be in *tò-* ‘leave; drop; discard’.

12.3.2.5. Perfect *-káa*

Perfect suffix *-káa* ‘PF’ marks a predicate encoding a finished event or state which (unlike Perfective *-tó*) is construed to result in a subsequent or ongoing state, whose effects are felt following its completion, or which otherwise has bearing on subsequent events or states, those often being or relating to the prevalent discourse-topic or some other current state-of-affairs. In (635), a speaker is narrating a picture story in which a boy and a dog have fallen from a cliff into a pond. Marking in *-káa* signals to listeners that they remain in the pond thereafter; marking in perfective *-tó* in this context would indicate – contrary to what is shown in the picture – that they were thrown into the pond, but left the pond prior to the onset of the next event. In (636), a speaker is asking his mother to describe the changes that have occurred in their village since when she was young. The initial clause in *-káa* is interpreted as a perfected state which is thematically connected to or has a result that bears on the following imperfective clause. Marking in *-tó* is unacceptable in this context. Note also that the clauses in (636) are headed by adjectival predicates.

(635) *hibûu goló olǵ nammé, ikîi əəcìn olǵk ká...*

hibûu go = lo ò-lìk-nam = əə ikîi əə = cìn ò-lìk-**káa**
 river IND=LOC fall-INTO-NZR:RLS=TOP dog TOP=ADD fall-INTO-**PF**
okkó omée əəcìn olǵk ká.

okkó omée əə = cìn ò-lìk-**káa**

SCNJ kid TOP=ADD fall-INTO-**PF**

‘Having fallen into a river, the dog fell in and the boy also fell in.’ (TR, FS 065)

(636) *A: mərəaná! hilôo-mərò, korûm ogtù*

mərəáa = na hilôo-mərò korûm ogò = tu
 whatever=DECL today-yesterday ancients TMP.RLS=FOC(<Asm)

adók kaí? rənám-duunəmə. B: mm.

adók-**káa** = (ə)î rə-nam dùu-nam = əə mm
 different-**PF**=ETAG live/exist-NZR:RLS stay-NZR:RLS=TOP yeah

A: hilôo-mərò gə rənám-duunəmə

hilôo- mərò = gə rə-nam dùu-nam = əə
 today-yesterday=GEN live/exist-NZR:RLS stay-NZR:RLS=TOP

əpík adók duukù î.

əpíi = go adók-dùu-kú (ə)î

bit=IND different-IPFV-CMPL ETAG

‘So look...in the old times, it was different from nowadays, right? The way of life. The lifestyle of nowadays has become a bit different, eh.’ (LN, FYG 002-005)

As discussed in §12.3.2.4, while Perfective *-tó* very often occurs in clause chains, clauses in *-káa* ‘PF’ cannot be marked as non-final in *-lâ(a)* ‘NF’. Despite this restricted functionality, *-káa* ‘PF’ is a very frequently-occurring suffix, occurring about half as often as Perfective *-tó* in narrative texts, and overwhelmingly more frequently than *-tó* in everyday conversation.

The historical source of Perfect *-káa* is uncertain, but it may have a cognate in Lare *káa*- ‘have/exist’. It is important to note, though, that forms cognate with Lare *káa*- ‘have/exist’ have *short* rhymes in numerous Tani languages (including Pugo Galo and Pagro Mising), and the verb may also reconstruct to Proto-Tani with a short rhyme (Post forthcoming 2008). The underlying length of the Perfect suffix in other Tani languages cannot be confidently discerned from the extant sources.

12.3.2.6. Continuative -*tùu*

Continuative -*tùu* marks a predicate denoting an event or, more often, a state whose *onset* occurred prior to a temporal reference point (usually, the time of speaking), and which either itself remains ongoing or has directly resulted in some other state which is ongoing. Although such senses are often given in the (present) perfect in other languages, Continuative and Perfect are quite distinct in Galo. For example, *oròk = go bǎǎ-káa* ‘machete=IND carry/hold-PF’ ‘I (had) brought a machete’ might be used in a case in which one were describing a past occurrence with bearing on subsequent events *at that time*. *oròk = go bǎǎ-tùu* ‘machete=IND carry/hold-CONT’ ‘I’ve brought a machete’ would, by contrast, indicate that the machete remained in one’s possession at the time of speaking.

The following examples further illustrate use of the Continuative. In (637), a speaker is trying to recollect the number of years he and his group have been living in the West Siang foothills, where he was still living at the time the text was recorded. Marking in Perfective -*tó* or Perfect -*káa* is inappropriate here, as these would indicate that the speaker no longer lives in the same area. Marking in Imperfective -*dùu* is also inappropriate here, since it would not entail reference to the *perfected* portion of the event (i.e., the onset of the speaker’s arrival). In (638), a speaker is describing having seen a man passing his house at a distance, whose arm was clearly bleeding; marking in -*tùu* ‘CONT’ indicates that the state of injury had its cause or onset prior to the time of seeing, and was ongoing at the time of seeing. In (639), marking of the adjectival predicate in -*tùu* ‘CONT’ similarly indicates the speaker’s belief that the cause or onset of his addressee’s drunkenness began prior to the time of speaking, but was still clearly ongoing; marking in the Imperfective here, while grammatically acceptable, makes no reference to any past component of the event, as though the addressee had somehow magically gotten drunk or has always been drunk (perhaps since birth). Marking in Perfective -*tó* would indicate that the addressee is no longer drunk. Marking in Perfect -*káa* is closely similar here to marking in -*tùu* ‘CONT’, but has more of a feel of reference to the addressee’s presumed past act of having gotten drunk than to his ongoing state of drunkenness.

(637) *jâd bosorgó...rətûu dî*

jadî bosor = go rə-tûu dii
 how.much/many year(<Asm)=IND live/exist-CONT WOND
 ‘How many years do you reckon we’ve been living (here)?’ (NyR, MDS 035)

(638) *ŋó kaanəmə bîk aləkəm motəə hitûu ben.*

ŋó káa-nam = əə bi = kə alá = əəm mō-təə-hi-tûu ben
 1.SG look-NZR=TOP 3.SG=GEN hand/arm=ACC make-HURT-REFL-CONT EVID
 ‘To me it looked as though he had injured his arm (which could be seen still
 bleeding).’ (KZ, 9:45)

(639) *nó tîkûm tû əî?*

nó tî-kúm-tûu (ə)î
 2.SG imbibe-SENSELESS-CONT ETAG
 ‘You’re drunk, aren’t you?’ (CN, OL6:91)

The historical source of Continuative *-tûu* ‘CONT’ is uncertain, and potential cognates are not often found in the published Tani sources. This may however relate to its relative infrequency; future comparative work is needed.

12.3.2.7. Experiential perfect *-bée*

Experiential perfect *-bée* ‘EPF’ marks a predicate denoting an event or state which began and ended at least once (and possibly occurred more than once) at some unspecified time prior to a temporal reference point (usually, the time of speaking). Like Perfective *-tô* but unlike Perfect *-káa* and Continuative *-tûu*, an event or state in *-bée* ‘EPF’ is viewed as punctual and self-contained, and does not result in any enduring or ongoing state. However, unlike Perfective *-tô*, clauses in *-bée* ‘EPF’ have a direct relevance to some later state of affairs. Clauses in *-bée* ‘EPF’ frequently translate English Past habitual or clauses with *ever/never* or *used to*. In (640), in which a speaker is asking my Galo brother about the extent of my experience in the region, the S argument referent is not and cannot be in Along at the time of speaking; marking in *-káa* ‘PF’ here would incorrectly indicate the speaker’s belief that the S argument referent is actually *in* Along at the time of speaking. In (641), the speaker has been recounting several of the adventures of his youth to some younger listeners, who it seems do not have many such experiences themselves. Note that marking in *-bée* ‘EPF’ here gives a sense of focus on experiences

such as those he has described having truly happened at one point or another in his life; the focus is not on any particular set of experiences (events) per se. In (641), note also that *-bée* ‘EPF’ is subject to the irregular process of Initial gemination (§4.1.5.1).

(640) *bɛ̃ aalóo tolò caakâa beeré?*

bɛ̃ aalóo tolò càa-kâa-**bée**=ree
 3.SG PLACE DST.LOC.UP ascend-TENT-EPF=PQ
 ‘Has he ever been up to Along?’ (MN, OL20:15)

(641) *əgəm, iza...ɲunnəm...jaamée gaddə, mēzi lacìn*

əgə = əəm izzàa ɲunù = əəm jaamée gadə = əə mēn-zí-la(a)cìn
 ANAP.IND=ACC now 1.PL=ACC boy group=TOP say-BEN-CONC
mənə garɛ̃ bəɪ tadâk kú.

mə-nà garɛ̃ = bə = (ə)í tá-dâk-kú
 lie-NZR:SUB resemble=SBRD=EMPH listen/hear-COS-CMPL
korùm gə rɪnəmə əmbə rɪbbêe kó!

korùm = gə rɪ-nam = əə əmbə rɪ-**bée** kó
 ancients=GEN do-NZR:RLS=TOP ANAP.PADV do-EPF CTRY
 ‘Nowadays, even if we tell about this sort of thing, young people listen to it just as though we were liars. The things that happened in the old days actually *did* happen like that!’ (NyR, MDS 111-112)

The historical source of *-bée* ‘EPF’ is unknown.

12.3.3. Secondary aspectual suffixes

Secondary aspectual suffixes cannot themselves license a final predicate, but instead must co-occur with one or more other predicate inflections (§12.1). According to subtype, they may precede other predicate inflections, or follow them.

12.3.3.1. Completive *-kú*

Completive *-kú* ‘CMPL’ is one of the most frequently-occurring Galo morphemes; it cannot itself license a final predicate, but must co-occur with another predicate inflection (usually, a primary predicate inflection), which licenses the final predication. *-kú* may co-occur with all other predicate inflections.

Semantically, *-kú* ‘CMPL’ marks an event or state as a *point of completion*, as the *final stage* of an episode or state of affairs, as a *transition point* between two contrasting states of affairs, or as the *onset of a state* which contrasts explicitly with some prior state of affairs (which is thereby viewed as complete). Often, it entails a telic sense that an anticipated point of state-onset or event-termination has been reached. Typical English translations for the sense of *-kú* ‘CMPL’ in different contexts include ‘yet’ (in the negative, as in *not yet arrived*), ‘now’, ‘have become’, ‘finally’, ‘after all’, ‘in the end’, ‘at last’, ‘anymore’ (in the negative) or ‘already’. Interestingly, *-kú* ‘CMPL’ also has a related sense ‘back’ in the sense of ‘return to original position’, as when a predicate refers to a state of affairs that is ordinarily true of the subject referent, but from which it had departed for some duration; examples of this sense would include ‘went (back) home’ or ‘opened his eyes (which were temporarily closed)’. Again, this usage refers to the completion of an episode, in this case one entailing an excursion from normality.

The following examples illustrate various uses of Completive *-kú*. In (642), which is repeated from (636) above, Completive *-kú* marks a new state as contrasting with a previous state, to which it is also thematically related. Failure to mark the Imperfective predicate in *-kú* would give the clause the feel of happenstance, as though the speaker were simply making a general observation which had no explicit relevance to the preceding context.

(642) *hilôo-məròo gə rənám duunəmə ɸnɪk*

| | | | |
|---------------------|--------------------|------------------|-----------|
| hilôo-məròo = gə | rə-nam | dùu-nam = əə | ɸnɪí = go |
| today-yesterday=GEN | live/exist-NZR:RLS | stay-NZR:RLS=TOP | bit=IND |

adók duukù í.

adók-dùu-**kú** (ə)í

different-IPFV-CMPLETAG

‘The lifestyle of nowadays has become a bit different, eh?’ (MN, FYG 005)

In (643), *-kú* co-occurs with Change-of-state suffix *-dàk* ‘COS’. The senses of Completive *-kú* and Change-of-state *-dàk* are closely aligned, and is it very common for them to co-occur. The overall sense of changed state is basically accomplished in (643) by *-dàk*, additional marking in *-kú* entails a sense that a final state has been reached, and

that no residue from the preceding state is remaining; failure to mark in *-kú* could imply that further, different states could be subsequently mentioned or come to obtain.

(643) *nunnəm buppəm kaarík hinəmóm paadâk kú...*

nunù = əm bupp̃ = əm káa-rík-hí-nam = əm páa-dâk-**kú**
 2.PL=ACC all=ACC see-APPL:MEET-REFL-NZR:RLS=ACC get-COS-CMPL
 ‘We now have (the chance) to meet together with all of you people (which had been lacking in the past).’ (NyR, MDS 012)

In (644), *-kú* co-occurs with Perfect aspectual suffix *-káa*; in this case, the sense is of a final state of darkness having been reached; failure to mark in *-kú* in this example would leave open the possibility that it could at any moment become light again.

(644) *inlênla, inP inP innəmó...kanó kaakù.*

ín-lên-là(a) ín-là(a) ín-là(a) ín-nam = əə kanó-káa-**kú**
 walk-OUT-NF walk-NF walk-NF walk-NZR:RLS=TOP dark-PF-CMPL
 ‘They went out, and they walked and walked and (thus) it got dark.’ (TR, FA 003)

Unlike most other types of predicate inflection, Completive *-kú* has the ability to co-occur with Modality suffixes, as in an Imperative clause. The explanation here seems straightforward; since Imperative suffixes derive historically from primary predicate inflections, and since Completive *-kú* co-occurs with primary predicate inflections (whereas most primary predicate inflections do not co-occur with one another), the historically prior patterning is retained by the later forms (645).

(645) *ám əə gatú kainàm.*

áa-m əə gá-túu kaí-nà = əm
 DST.SLEV-ACC bamboo pare-NZR:PART big-NZR:SUB=ACC
laakâa tokú dâ.
 làa-káa-tó-**kú** da
 take-TENT-IPTV.ODIR-CMPL CNTR
 ‘Go ahead and get the big whittled-off hunk of bamboo again.’ (IRW, MPO 047)

In the preceding examples (642)-(645), *-kú* has been shown *following* primary aspectual suffixes and their derivatives. As is also discussed and exemplified in §12.1, *-kú* also

precedes certain predicate inflections, including Negator *-máa* ‘NEG’ and Experiential perfect *-béé* ‘EPF’. This leads to the establishment of *two* predicate suffixal positions for Completive *-kú*, with different semantic scope effects as exemplified in §12.1 ex. (612)-(613), repeated below for convenience as (646)-(647). Note that *-kú* may not freely occur in either position; the early position in (646) is licensed by the presence of Negator *-máa*; if *-máa* were not present, the resulting predicate **càa-kú-ró* ‘ascend-CMPL-IRR’ is ungrammatical. The same applies in (647); in absence of the Irrealis suffix, we cannot have **càa-máa-kú* ‘ascend-NEG-CMPL’. However, when both positions are licensed, it is in fact possible to find *two* iterations of the Completive suffix on the same predicate word; in (648), note that the first *-kú* iteration is licensed by the Negator *-máa*, while the second iteration is licensed by Perfect *-káa*.

(646) *bhî câaku maaró*

bhî càa-**kú-máa-ró**

3.SG ascend-CMPL-NEG-IRR

‘He or she **won’t** go up **anymore** (his or her going up will cease).’

(647) *bhî caamâa rækú*

bhî cáa-**máa-ró-kú**

3.SG ascend-NEG-IRR-CMPL

‘He or she **’ll come to no longer** go up (his or her state of not-going-up will come to pass).’

(648) *bulù...attíró...munáa jò gəllèemé...*

bulù attír = əə munáa = jòo gə-lèe = əəm = əə = ́

3.PL group=TOP bag=and/or.such carry/wear-SSEQ=ACC.TSUB=COP.IPFV=NFII

immên tabè innəmé...bədaám

ín-mèn-tà = bó ín-nam = əə bədáa = əəm

walk-AS/PLAY-INCP=SBRD go-NZR:RLS=TOP road=ACC

məəpâa kumá kaakú.

məə-pàa-**kú-máa-káa-kú**

think-ATTN-CMPL-NEG-PF-CMPL

‘Going for a walk all together, wearing packs and so on, they forgot the way.’ (lit., ‘they **came to** not remember the way **anymore**’) (IR, FA 009)

In light of examples like (648), it might be tempting to analyse *two* suffixes with the phonological value *-kú*, with *two* different semantic values – perhaps (a) *contrast* with

an earlier event/state and (b) *completion* of an event/state. However, this would not ultimately seem to be a tenable analysis. As was noted above, the position of *-kú* – and the attendant differences in scope effects (which may be responsible for the notionally “different” semantic values (a) and (b)) – are determined structurally, in terms of co-occurrence with particular predicate inflections. When only one position is licensed, only one iteration of *-kú* is licensed – however, according to the context of utterance, either of the semantic values (a) and (b) may be brought out (649).

(649) *ŋo inla kuma.*

ŋó ín-làa-**kú**-máa

1.SG go-ABIL-CMPL-NEG

‘I can’t go **anymore** (I used to be able to, but now am prevented)’

or ‘I can’t go **after all/in the end** (I wanted/expected to be able to, but it turns out I can’t).’ (MN/IR, T8:12)

Finally, as is also discussed in §13.2.2.1, *-kú* is homophonous with, and is clearly semantically relatable to, a particle *kú* which occurs as a noun phrase or copula enclitic; in (650), note that phonological dependence of *kú* on noun phrase-final article *go* ‘IND’ – which cannot be analysed as its grammatical head – shows that *kú* is not a structural suffix in this usage.

(650) *əgə...h̃in gakcə əgə...h̃in gokú*

[əgə h̃inə gakcə əgə]_{CS} [h̃inə go = **kú**]_{CC}

ANAP.IND plant graspable.protrusion ANAP.IND plant IND=CMPL

moé ni

[mo = ee ni]_{COP}

NEG.COP=COP.PFV DISC

‘That tree branch it seems was not actually a tree.’ (TR, FS 055)

Given these facts, together with the seeming ubiquity of *-kú* cognates throughout Tani languages, it seems very likely that *(-)**kú* will reconstruct – probably with the same phonological value – as a highly versatile, free syntactic particle at the Proto-Tani stage. As different areas of Galo grammar developed in different ways – notably, as the predicate phrase syntax seemingly coalesced into a single grammatical word with suffixal dependents while the noun phrase retained syntactic compositionality (cf. §2.1) – the

Completive particle was eventually reified in various structural positions. Thus on a *structural* basis a clitic/suffix allomorphy is motivated – even if the underlying semantics may remain essentially unaffected.

12.3.3.2. ‘Direct’ perfective *-bá(a)*

‘Direct’ perfective *-bá(a)* ‘PFV.DRCT’ is a relatively infrequent suffix indicating *direct experience* of the event depicted in a clause. In declarative sentences, marking in *-bá(a)* entails an assertion that the *speaker* directly experienced the depicted event; in interrogative sentences, it entails an assumption of the speaker’s that the *addressee* may have directly experienced the event. Marking in *-bá(a)* ‘PFV.DRCT’ also interacts with ‘conjunct/disjunct’ marking, which is discussed in more general terms in the separate section §12.5; here we focus only on the specific properties of *-bá(a)*.

In terms of distribution, *-bá(a)* ‘PFV.DRCT’ is basically unique among predicate derivations. It cannot directly license a final predicate; **ŋó dó-bá(a)* ‘1.SG eat-PFV.DRCT’ is unacceptable in Lare.²³² However, it appears to license a final predicate when occurring together with Completive suffix *-kú* ‘CMPL’, as well as with Disjunct suffixes *-géé* and *-éé* – none of which are able to license a final predicate themselves (§12.3.3.1; §12.5) (651)-(652).

(651) “*roksín olôo eekú bá, ŋeekú bá.*”

| | | |
|--|-----------------------------------|-----------------------|
| roksín = əə | ò-lôo- éé-kú-bá(a) | ŋéé-kú-bá(a) |
| chicken.liver=TOP | fall-DESC-IPFV.DISJ-CMPL-PFV.DRCT | be.lost-CMPL-PFV.DRCT |
| “(I experienced that) the chicken liver fell; (I experienced that) it got lost.” (NyPB, LAT 338) | | |

²³² I have overheard Pugo speakers uttering such sentences, but have not yet managed to investigate the matter fully.

(652) *app̃əm ménz duukù, “apí mumsí*

app̃h̃ = əəm mèn-zí-dùu-kú apí mumsì
all=ACC say-BEN-IPFV-CMPL sister.elderNAME
gumbôk eebá!”

gùm-bók-ée-bá(a)

lean-DOWN/SOUTHWARD-IPFV.DISJ-PFV.DRCT

‘They told everyone, “Elder Sister Mumsi (**we saw that** the flames) burned to the south!”’ (NyPB, LAT 214)

As mentioned above, the basic function of *-bá(a)* ‘PFV.DRCT’ is to mark direct experience of an event. In (651), characters in a folktale are describing the loss of a chicken liver which was to be used in a divining ritual. In (652), from the same folktale, characters are reporting having seen a ritual fire burning to the south. In both cases, although the clauses have third person subjects, use of *-bá(a)* ‘PFV.DRCT’ marks the clause as having been directly experienced by the speakers themselves.

An interesting outcome of use of *-bá(a)* ‘PFV.DRCT’ in narratives is that it frees the speaker from having to directly mark the source of speech. Although no speech verb occurs in (651), the fact that it is quite clear that the narrator himself could not have experienced the depicted event ensures that the clause is understood as being in the voice of his characters. Similarly, (653) must be interpreted as the voice of a character wondering about the location where a particular river ends up, and cannot be understood as the voice of the narrator; note that although the character in whose voice the narrator is speaking is viewed here as having not *yet* experienced the endpoint of the river’s flow, he is viewing the event *hypothetically* as one that would be directly experienced by him. In (653), note also that *-bá(a)* is subject to the irregular process of Phrase-medial truncation (§4.1.5.2).

(653) *“hók îhi-abú rûu hokè, hikáa-hijáa abúu hók iibôo lò...*

hokè isì-abúu rûu hokè hikáa-hijáa abúu hokè ìi-boolo
SPRX.ABL water-riverCERT SPRX.ABL NAME river SPRX.ABL descend-
COND

bê jôolo bittár eebó dî?”

bê jòo = lo bíK-tár-ée-bá(a) dîi

DST.DOWN what=LOC flow-TO.LIMIT-IPFV.DISJ-PFV.DRCT WOND

“‘If we actually use this river, this Hika-Hija River to go down...where might (**we find**) it to peter out?’” (TB, OAM 257-258)

The reader may have noticed that in most of the above clauses, ‘Imperfective disjunct’ suffix *-ée* ‘IPFV.DISJ’ occurs together with ‘Perfective direct’ suffix *-bá(a)* ‘PFV.DRCT’, and wonder what might explain the mismatch in perfectivity. In fact, the aspectual values of both suffixes are not yet well-understood. However, to the extent that an explanation can be drawn at this point it would appear that the Imperfective disjunct suffix references the lack of endpoint to an *event* (or unfinished nature of a state resulting from an event), while the Direct perfective suffix marks the *speaker’s* full or complete experience of it. Future research may reveal a more precise means of characterizing the interplay between event structure and the structure of experience in these constructions; however, this is as much as can be said at present.

The historical source of *-bá(a)* ‘PFV.DRCT’ is not yet known, although given its somewhat idiosyncratic distribution, as well as its association with conjunct/disjunct marking (which is argued in §12.5 to probably be a relatively old and decaying system in Galo), the natural expectation would be that *-bá(a)* ‘PFV.DRCT’ is itself a relatively old suffix. Future comparative work on Tani languages will be brought to bear on this question.

12.3.3.3. Second perfective *-pà ~ -pə*

Predicate inflection *-pà ~ -pə* is very rarely attested in Galo; it seems in most attested uses to have a perfective aspect of some kind, but this cannot at present be declared with any certainty. If accurate, it may be cognate with other Tani “perfective” forms in *-pV* such as those reported by Sun (2003) in his own Western Tani data from Bokar (ex. 11) and Bangni (ex. 19), as well as in the Nyishi data (also Western Tani) of Chhangte (1990:4, Sun’s (2003) example 18). In the Eastern branch, a similar form is found in Pailibo (Badu 1994: 19). It may then be that this is an old Tani aspect-marker which is well-represented in some modern languages, but which has largely obsolesced in Galo.²³³

In my Lare data, *-pà* (for short) is sometimes attested in a semi-idiomatic impersonal construction with an emphatic overtone, limited in my corpus to occurrence

²³³ Ultimately, there is a chance that *-pà* – in Galo and/or in other Tani languages – may represent a reflex of PTB nominalizer **pa*, which is otherwise poorly-attested in Tani (cf. also §16.6.2).

with verbs of perception (654). In this construction, usually used when reacting to some unfolding event, the aspectual value of the *-pà* suffix is indeterminate.

(654) *donék kaapà əí!*

dó-nèk káa-**pà** (ə)î

eat-BAD look-**PFV2** ETAG

‘Looks (like it tastes) disgusting, eh?’ (KZ, OL9:95)

-pà sometimes occurs with a basically perfective sense, on both final and nominalized clauses. Again, such clauses are generally subjectless; they are also very rare, and not employed by all speakers (655)-(656).

(655) *zebbò pootûml apà.*

zebò = əə pòo-túm-là(a) á-**pà**

tunic=TOP cover-CLOSED-NF keep-**PFV2**

‘It (a package supposedly containing Abo Tani’s mother) was found wrapped in a tunic.’ (MK, TT 081)

(656) *“akûm bó nó níktó ká” êmpə nammó*

akûm = bó nó ník-tó = káa óm-**pà**-nam = əə

forceful=AVZR 2.SG punch-IPTV.ODIR=HORT.ADV be.said-**PFV2**-NZR:RLS=COP.IPFV
nà.

na

DECL

‘“You should poke her forcefully,” (Abo Tani) had said.’ (MK, TT 087)

When data from more northerly Galo dialects are made available, it may become possible to shed more light on the origin and functions of this suffix.

12.3.3.4. Achievement *-dǎa*

Achievement *-dǎa* is a seemingly quite old and versatile form which is not well-attested as a final predicate suffix. Depending on its position and the overall construction in which it appears, it may be analysed as having a basically contrastive, repetitive, recursive, or achievement-oriented sense, and may in fact be able to be analysed in terms of more than one distinct form. A seemingly cognate particle or particles with similar functionality is described in §13.2.2.4-§13.2.2.5.

As a final predicate inflection, *-dǎa* seems to occur alone only in appositive, semi-idiomatic constructions. The overheard utterance in (657) was later judged by my consultants to be “not good grammar”, but possible in a poetic or idiomatic sense.

(657) *əŋŋigó mentômdá, əŋŋigó cendà.*

əŋŋíi = go mèn-tóm-**dǎa** əŋŋíi = go cèn-**dǎa**
 bit=IND speak-APPL:SHOW-ACHV bit=IND know-ACHV
 ‘(If you) teach a little, (you) learn a little.’ (MN, OL15:144)

In negative polarity predicates, *-dǎa* has a more clearly achievement-oriented sense ‘yet’

(658).²³⁴

(658) *bɛ̃ inmáa da.*

bɛ̃ ín-máa-**dǎa**
 3.SG go-NEG-ACHV
 ‘He hasn’t gone/left **yet**.’ (TR, 9:173)

When following the Completive suffix *-kú*, the sense is closer to *repetitive* (659). Note that the initial [d] geminates in this position, following the irregular process of Initial gemination (§4.1.5.1); the sense and behaviour here closely recall that of the Repetitive particle §13.2.2.4, however note that in preceding the Negator we can clearly identify this usage as suffixal.

(659) *tə mərá... jôœ bəré? məəpâa kuddá má.*

tə məráa jòœ = ee bəre = ʔ móə-pâa-kú-**dǎa**-máa
 DST.UP HEST what=COP.PFV CJEC=EMPH think-ATTN-CMPL-ACHV-NEG
 ‘Up there...now what was it (called)? I’ve forgotten **yet again**.’ (TB, OAM 218)

Finally, it is possible to find apposed clauses – possibly in an expansion of the construction type illustrated in (657) – in which *two* *-dǎa* mentions occur, with the overall sense ‘once/as soon as x, y’. It is at present not possible to discern whether the

²³⁴ In the speech of some (mainly younger) Galo, the Achievement suffix may be freely ordered before or after the Negator, with the same overall sense. However, this mode of speech was repeatedly criticized by some of my most astute consultants, who viewed this usage as an incorrect reanalysis of the basically homophonous Manner predicate derivation *-dǎa* ‘SWIFTLY’; i.e., the sense of a differently-ordered (658) should be ‘he isn’t going/didn’t go swiftly (but he is going/did go)’. I have treated the reanalysed use as marginal speech in this grammar, however attention should clearly be paid to whether the use continues to spread, or not.

second *-dǎa* mention represents a second iteration of the Achievement suffix or an iteration of the seemingly cognate Repetitive particle described in §13.2.2.4; what is certain is that this is a construction-dependent use. It is not possible to utter either of the first or second clauses in the appositive pairs in (660)-(661) independently.

(660) *âowə hogò..hogò goodǎa kudǎ...*

aò = əə hogò hogò gòo-**dǎa**-kú = **dǎa**

child=TOP SPRX.LOC SPRX.LOC rise-ACHV-CMPL=REPT

paadəmə aalà...papâk daakú dà.

paadám = əə áa-là(a) pá-pâk-**dǎa**-kú = **dǎa** = _

TRIBE=TOP come-NF chop-OFF/AWAY-ACHV-CMPL=REPT=FI

‘Once a child grew up to...up to here...the Paadam would **again** come and just kill him flat out.’ (TB, OAM 235-236)

(661) *mingə daakudǎ, caadǎa kuddǎ,*

mín-gə-**dǎa**-kú = **dǎa**

chase-COMT-ACHV-CMP=-REPT

mingə daakudǎ caakûr daakudǎ.

mín-gə-**dǎa**-kú = **dǎa**

chase-COMT-ACHV-CMPL=REPT

‘Chase them away, back they come, chase them again, and right on back again they come.’ (TB, OAM 320)

càa-**dǎa**-kú = **dǎa**

ascend-ACHV-CMPL=REPT

càa-kûr-**dǎa**-kú = **dǎa**

ascend-RETURN-ACHV-CMPL=REPT

12.4. Modality

All of the forms described in this section are *primary* predicate inflections, and are capable of occurring alone on a predicate stem, licensing the grammatical predicate head of a final clause.

12.4.1. Irrealis *-rə*

Irrealis²³⁵ suffix *-rə* ‘IRR’ marks a predicate depicting an event or state construed as non-real, pending, hypothetical, or – more generally – *not-yet-begun*. Most frequently, it is found on clauses describing events which are predicted to occur in future time, and is the normal means of referring to future events in Galo (662).

²³⁵ “Irrealis” is traditionally described as a modality, and it is for that reason alone included in this section. On Galo-internal structural grounds alone, there would seem to be no reason not to consider Irrealis *-rə* to be a primary *aspectual* suffix.

(662) *tîko loeí goorè!*

tîi-kò lo = eí gòo-ró
imbibe-NZR:LOC/OBL LOC=HEMP pass.time-IRR
'(The time) **will** be spent only on drinking!' (MN, OLC2:45)

However, it is not necessary that clauses in -rɔ́ 'IRR' have future time reference. In

(663), the speaker is outlining the daily routines of Galo men and women, construed as a generic set of practices; in this case, the clauses in -rɔ́ 'IRR' can *only* be interpreted as referring to events at *indefinite* times, given some particular circumstances. They *cannot* be interpreted in this context as predictions concerning definite events in future time.²³⁶

(663) *ôg uugé rəlè acín moré...(…)*

ogò úu-gərɔ́-là(a) acín mò-rɔ́
ANAP.TMP awake-ACNC-NF cooked.rice make-IRR
arròm...həkú-haagó tîrɔ́? (...)

arò = əəm həkú-háa = go tîi-rɔ́ = (ə)î
morning=ACC tea.and.such=IND imbibe-IRR=ETAG
ôk kookîlo hêkə rəkú...

oká kookîi = lo həkə-rɔ́-kú = ́
LOC.ABL back=LOC whatever-IRR-CMPL=NF1
acínjo doré kú...

acín = jòo dó-rɔ́-kú = ́
cooked.rice=and/or.such eat-IRR-CMPL=NF1
'Then after getting up we'll prepare food...[2 lines] In the morning...we'll have some tea and suchlike, right? [1 line] After that, what will happen? We'll eat rice and so on...' (LN, GMW 014-018)

Clauses in -rɔ́ 'IRR' can also be cast in a *past* time-frame, either via inclusion of time expressions with past time reference, by virtue of appearance in a series of clauses referring to completed events, or by temporal subordination in realis temporal postpositions such as *ogò* 'TMP.RLS'. In this case, the predicate in -rɔ́ 'IRR' denotes an event which was *about to* occur, but whose ultimate realization was somehow averted, often at the precise moment of onset (664)-(665). (664) is from a narrative cast almost

²³⁶ Later on in the same text, the speaker switches from irrealis -rɔ́ to imperfective -dîu when describing how traditional daily life as she had been outlining it has changed much in recent years since the integration of their community into mainstream India and the subsequent availability of inexpensive itinerant labour. Thus most actual realizations of the events the speaker casts in -rɔ́ as generic and recurring would have in fact occurred in *past* time.

entirely in perfect or perfective aspects, in which a speaker describes a cane-harvesting trip which took place some weeks prior to the time of speaking. (665) was volunteered by a consultant during elicitation on an unrelated grammatical topic.

(664) *əmbə ɲunù allò nè ìitə rə əmdāk*

əmbə ɲunù allò = nè ìi-tà-**rə** əm-dāk
ANAP.PADV 1.PL tomorrow=TMP.IRR.PUNC descend-INCP-**IRR** say-COS
okkû, ɲunù...laɲjək

okə = kù ɲunù laɲji = əkə
ANAP.ABL=CMPL 1.PL fishing.net(<Asm)=IND.PL

patí gərə́ kulà, ɲojjək, aɲɲíg laalâa kú.

patíi-gərə́-kú-là(a) ɲoí = əkə aɲɲíi = go làa-là(a)-kú
set(<Asm)-ACNC-CMPL-NF fish=DST.PL bit=IND take-NF-CMPL
'Thus the next day when we were supposed²³⁷ to return, instead we set some fish traps and caught a few fish.' (RmR, CC 048)

(665) *mərò, b̥ɪk nám akkə bədaaló nenrə́,*

məròo b̥ɪ = kə nám akə = əə bədaa = lo nèn-**rə́** =
yesterday 3.SG=GEN house DST.ABL.SLEV=TOP road=LOC exit-**IRR**=NF1
garió tupká.

gaaríi = əə túp-káa
vehicle(<Ind)=TOP head.butt-PF

'Yesterday, he was *just* stepping out of his house onto the road when a car hit him.' (MN, 19:20)

The historical source of Irrealis -*rə́* 'IRR' may be PTp **ɾjə́/é* 'live/exist' (cf. Lare *rə́* and Pagro Mising *je-* 'live/exist'), possibly via an intermediate stage as an uninflecting auxiliary.

12.4.2. Speech acts: imperatives, hortatives and suggestives

This section discusses speech act markers, which function as primary predicate inflections in Galo. There is in addition a set of hortative particles which frequently – but not obligatorily – co-occur with several of the forms discussed below, but which are not themselves predicate inflections; they are discussed in §13.3.1.

²³⁷ The sense of 'supposed to' derives from the verb *əm-* 'say; tell', which has a functional use here as a purposive. For similar examples and discussion of this function of *əm-*, see §16.7.

12.4.2.1. General imperatives *-tó* and *-là(a)*

The most general Galo imperative is in *-tó*, a form which appears to derive historically from Perfective suffix *-tó* (§12.3.2.4). Most often, imperative predicates in *-tó* are either subsequently marked by an appropriate hortative or tag particle (667), or else exhibit stem derivation in Tentative *-káa* (basically with the distancing sense ‘try to’; see §11.2.3.1) (666). Imperatives in *-tó* obligatorily have a *second person subject* (singular, dual or plural), which may be overt or, far more often, is ellipsed.

(666) *əm...əə, əm laakâa tó, kainə, kozzúu gə.*

əəm əə əəm làa-káa-tó kaí-nà kozzúu = gə
ANAP.ACC bamboo ACC take-TENT-IPTV.ODIR big-NZR:SUB awhile.ago-GEN
‘Go ahead/try and get that bamboo, the big one from just before.’ (IR, MPO 003)

(667) *əəəə...títóí? okkəə kudá...*

əə = əəm tí-tó = (ə)î okə = əə = kú = da
bamboo=ACC touch-IPTV.ODIR=ETAG ANAP.ABL=TOP=CMPL=CNTR
əp̄p̄ín əmcîn laatəkè.
əp̄p̄íi-nà əəm = cîn làa-tó = kée
little-NZR:SUB ACC=ADD take-IPTV.ODIR=HORT.POL
‘Get the bamboo, yeah? After that, get the small one also.’ (IR, MPO 005)

Imperative *-tó* only very rarely occurs alone, with speakers possibly preferring additional hortative marking to avoid confusion with the homophonous Perfective suffix. However, in high-context situations (as when giving an extended set of directions), such uses are possible (668). It is also possible – like the Perfective suffix – to find an imperative in *-tó* marked by Non-final suffix *-là(a)* ‘NF’, and forming an element of an (all-imperative) clause chain (669). Such uses appear to have given rise to a ‘light’ imperative with the form of a non-final marked perfective predicate; an imperative in *-tó-là(a)* ‘IPTV.ODIR-NF’ is used in friendly, reassuring moods, similar to American English *y’ all (x) now, y’hear?* (670).

(668) *okká, bə əə...patúu kainəbə...ləpàa*

okkáə bə əə pá-túu kaí-nà = bə ləpàa
 SCNJ DST.DN bamboo chop-NZR:HALF.LENGTH big-NZR:SUB=DST.DN middle
bolò...arúu bolò tɛ-lɛk-là(a) á-tó

bolò arúu bolò tɛ-lɛk-là(a) á-tó
 DST.LOC.DOWN hole DST.LOC.DOWN put-INTO-NF keep-IPTV.ODIR
 ‘And that bamboo down there (nearby to where we are sitting)...the big cut-off (one)...put (the rope) into the middle of (the bamboo’s) hole down there.’ (IRw, MPO 103)

(669) *ŋóm, əgə bəətəlà hīgùm...*

ŋó-m əgə = əə bəə-tó-là(a) hīgì-m
 1.SG-ACC axe.head=TOP carry/hold-IPTV.ODIR-NF SPRX.IND-ACC
kopkàa rúu lakk^w à î

kóp-kàa=rúu=là(a)-kú = kàa (ə)î
 hack-TENT-CERT-IPTV.SDIR-CMPL=ADVS ETAG
 ‘Take an axe and chop me out of here for goodness sake!’ (LN, TG 067)

(670) *jòmbə ridâkkom îto là dēi!*

joombə rì-dakkòm ìi-tó-là(a) dēi
 how do-CONC descend-IPTV.ODIR-NF EXHR
 ‘By any means, please come down (for a visit)!’ (MN, OL10:92)

An imperative in *-tó* is used in cases when the commanded activity *does not* directly affect or benefit the speaker; it is ‘other-directed’. When the speaker is construed as directly benefiting from or as being otherwise affected by an activity commanded of a second person subject, the predicate is marked in ‘self-directed’ imperative *-là(a)* – possibly a derivative of the Non-final suffix *-là(a)* ‘NF’ (§16.4.2). The difference is most clearly expressed in a minimal pair (671)-(672); in (672), note also that Self-directed imperative *-là(a)* exhibits Phrase-medial truncation (§4.1.5.2), surfacing with a short rhyme:

(671) *aminóm mēnzi toké!*

amín = əəm mèn-zí-tó = kée
 name=ACC say-BEN-IPTV.ODIR=HORT.POL
 ‘Tell **him/her/it** (*me) your name!’ (IR, 22:13)

(672) *aminóm mênzi lakè!*

amín = əm mèn-zí-là(a) = kée
 name=ACC say-BEN-IPTV.SDIR=HORT.POL
 ‘Tell **me** (*him/her/it) your name!’ (IR, 22:13)

Imperatives in *-tó* may be formed upon any verb stem, but may *not* be formed on adjectival stems. Imperatives in *-là(a)* may only be formed on transitive and extended intransitive/transitive stems. In a transitive imperative in *-là(a)*, the O argument referent must be speaker-coreferential (673). In an extended intransitive/transitive imperative, the speaker-coreferential argument is E (672).

(673) *ḡóm nìglâa ké.*

ḡó-m ník-là(a) = kée
 1.SG-ACC punch-IPTV.SDIR=HORT.POL
 ‘Please hit me!’ (KTR, 16:16)

Inclusive hortatives (*let’s/shall we/why don’t we*) are also formed in ‘self-directed’ imperative *-là(a)*. In this case, marking in the Inclusive hortative particle *zù* is obligatory (see also §13.3.1.2), and the subject is obligatorily first person non-singular (dual or plural) (674).

(674) *hôg dolâa zù.*

hogò dó-là(a) = zù
 SPRX.LOC eat-IPTV.SDIR=HORT.INCL
 ‘**Let’s (us)** eat here.’ (LN, TG 028)

12.4.2.2. Prohibitive *-jó*

Prohibitive *-jó* ‘PROH’ forms a negative imperative with the basic sense *don’t do* (PRED); subjects of a prohibitive imperative are obligatorily second person (any number), and may be overt or, more often, are ellipsed (675)-(676). The origin of *-jó* ‘PROH’ is currently unknown.

(675) *menjò dê*
 mèn-jó dê
 speak-PROH EXHR
 ‘Don’t tell her, got it?’ (KN, OLxx)

(676) *ḡóm dèn abbóm pajó ká.*
 ḡó-m den abó = əəm pá-jó = káa
 1.SG-ACC ICMP father=ACC chop-PROH=HORT.ADVS
 ‘But me on the other hand, being a father, **don’t** kill me.’ (TB, OAM 298)

12.4.2.3. Concessive imperative -*gée*

Concessive imperative -*gée* has the basic sense *go ahead and* (PRED). It is generally used in cases when the speaker knows or believes that the addressee (occurring obligatorily as a second person subject) wishes to perform the action denoted by the predicate, or anticipates that the addressee may believe there to be some obstacle to performing an action, and is reassuring him or her that in fact there is not (677)-(678). In (678), note that -*gée* is subject to the irregular process of Initial gemination (§4.1.5.1).

(677) *ôg arúu ogò ohôo bàm piibúu gé.*
 ogò arúu = ogò ohóo bàm píi-búu-**gée**
 APRX.LOC hole=APRX.LOC rope DST.DOWN-ACC prick-OUTSIDE.IN-IPTV.CONC
 ‘Go ahead and string that rope down there through the hole.’ (IRw, MPO 109)

(678) *doggé ké!*
 dó-**gée** = kée
 eat-IPTV.CONC=HORT.POL
 ‘Go ahead and eat it (no need to stand on ceremony)!’

The etymology of Concessive imperative -*gée* is unknown, but it may relate historically to Disjunct perfective -*gée*, described in §12.5.

12.4.2.4. Motion modal -*tà(a)*

Motion modal -*tà(a)* ‘MOT’ usually forms a second person imperative with the sense that the addressee must physically *move* from his or her current location in order to perform the commanded event (679)-(680). Note in (680) that this does not entail

movement away from the speech situation itself; rather, movement is simply from the precise location where the addressee happens to be.

(679) *ŋók tokè ezigò lâazi takè!*

ŋó-kè tokè ezè = go làa-zí-tà(a) = kée
 1.SG-GENDST.ABL.UP clothing=IND take-BEN-MOT=HORT.POL
 ‘Go get my clothes from up there!’ (LN, TG 002)

(680) *anè, hôg duutàk.*

anè hogò dùu-tà(a) = k
 mother SPRX.LOC sit-MOT=HORT.EMPH
 ‘Mother, **come on** and sit here (moving from the place at which you currently are).’ (IR, OLB2:68)

-tà(a) ‘MOT’ appears to be unique among imperative-forming inflections in also occurring with a *first person* subject, in *non-imperative* clauses only. In (681)-(682), the clause modality is controlled by the Proposal (§12.4.2.7) and Intentional (§12.4.2.8) inflections respectively, while the Motion modal simply indicates that the proposed/intended activities involve *movement* on the part of the (first person) subject. In (682), note also that -tà(a) ‘MOT’ is subject to irregular Initial gemination (§4.1.5.1).

(681) *saagó mozî tadè.*

háa = go mò-zí-tà(a)-dèe
 tea=IND make-BEN-MOT-PROP
 ‘I’ll just **go** make some tea for them, what [they being located away from where I am now]?’ (MN, B1:83)

(682) “*áo gaddè, ŋó...agô eekubá, îhigò*

aò gadè = ə ŋó agò = ee = kú = bá(a) isì = go
 child group=TOP 1.SG hot-COP.PFV=CMPL=PFV.DRCT water=IND
huttâa lapè.”

hú-tà(a)-lapè
 wash.body-MOT-INTN
 “Hey boys,” (he said to the Paadam) “I’ve gone and gotten all hot, I **reckon on going** to take a bath.” (TB, OAM 293)

12.4.2.5. ‘Away’ imperative -ée

‘Away’ imperative in -ée is attested as a suffix to motion predicates only. It entails a proposal that the actor of the proposed motion event should go *away* from the place of speaking in order to perform it (683).

(683) “*nôk indó gó kaarú duukù,*

nó-kè ín-dó = go káa-rúu-dùu-kú

2.SG-GEN go-NZR:TIME=IND have/exist-CERT-IPFV-CMPL

nó iné kuká, ” òmdû nà ná.

nó ín-ée-kú = káa óm-dùu-nà = əə = na

2.SG go-IPTV.AWAY-CMPL=HORT.ADVS tell-IPFV-NZR:SUB=COP.IPFV=DECL

“‘Your time to go has come, you need to get **out of here**,’ they said, see?’ (NyPB, LAT 193)

Unlike most other imperative types, ‘Away’ imperative -ée seems to require a following hortative particle of some kind.²³⁸ In addition to second-person imperatives, -ée ‘IPTV.AWAY’ may also form a first person non-singular inclusive hortative in *zù* (684).

(684) *ál aakaé zukà.*

aló áa-káa-ée zù = káa

DST.LOC.SLEV come-TENT-IPTV.AWAY HORT.INCL=HORT.ADVS

‘Let’s go (**away from where we are and**) take a look over there.’ (IR, FA 015)

There are some indications that ‘Away’ imperative -ée may be cognate with the ‘Disjunct imperfective’ suffix -ée discussed in §12.5.2.

12.4.2.6. Permissive -hòo

Permissive -hòo occurs with *first person subjects only*, and entails a request for permission from the addressee to allow the speaker to perform the predicated action. In

²³⁸ It is not yet certain whether or not this is an absolute grammatical requirement; it may be, for example, that in high-context situations, a hortative particle could be left off if the overall mood were understood (as with the general imperative in -tó; see §12.4.2.1). However, consultants have not accepted such utterances in elicitation, and due to the relative infrequency of ‘Away’ imperative -ée, no qualifying contexts have yet been discovered in texts.

practice, use of *-hòo* appears to be limited to cases where the speaker is proposing to take over some activity which has already been initiated by the addressee, or which will in some other way affect the addressee's activities; in translation, *shall I (for you)* or *why don't you let me*. Accordingly, predicates in Permissive *-hòo* are usually also derived in Benefactive *-zí*. Permissive *-hòo* is not generally used to request permission to do things on one's own behalf (685). Its historical source is unknown.

(685) *ŋó akêngo mozî kaahò.*

ŋó akèn = go mò-zí-káa-**hòo**
1.SG one=IND make-BEN-TENT-PERM

'Why don't I try to make one (cigarette) for you (since you seem to be doing a poor job at it).' (TR, OL14:84)

12.4.2.7. Proposal -*dèe*

Proposal *-dèe* occurs with *first person subjects only*, and marks the predicated event/state as one the speaker is proposing to bring about. Often, it may entail a sense that the speaker is checking with the addressee to be sure that he or she has no objections, or is otherwise inviting comment on the proposal. However, it does not usually imply that the speaker lacks permission or is not in control (686)-(688). The historical source of Proposal *-dèe* is unknown.

(686) *ací, ŋó rúum aadêe kú.*

ací ŋó ruum áa-**dèe**-kú
elder.brother 1.SG room(<Eng) come-PROP-CMPL

'Elder brother, I'll just go back to my room now, **what?**' (MN, B1:87)

(687) *acín toodè.*

acín tóo-**dèe**
cooked.rice scoop.rice-PROP

'I'll serve the rice now, **shall I?**' (KN, OL23:77)

(688) *transkripɕənəm rɪpî̃ tadè.*

transkripɕənəm rɪ-pî̃-tá(a)-**dèe**
transcription(<Eng) do-REACH-MOT-PROP

'I'll just go finish the transcription then, **what?**' (MN, OLB1:81)

12.4.2.8. Conjunct intentional -lapə

Conjunct intentional -lapə ‘INTN’ seems to be a recently-evolved suffix, which derives historically from a (still-occurring) complementizer of purpose/intention -lapə under matrix clause ellipsis (i.e., de-subordination). This process is described in §16.6.2.2.1.

As a modal suffix, -lapə ‘INTN’ occurs in declarative clauses with a *first person subject only*, or in interrogative clauses with a *second person subject*. This patterning – usually described as *conjunct* – is described in a more general context in §12.5. Semantically, -lapə ‘INTN’ entails a clear assertion on the speaker’s part of his or her *intention* to bring about the predicated event/state. Unlike Permissive -hòo or Proposal -dèe, the Conjunct intentional in -lapə ‘INTN’ has no sense of “asking permission”, but rather implies a high degree of speaker control over the situation, as well as a relatively assertive attitude (689) (cf. also §12.4.2.4 ex. (682)).

(689) “məgumə...gumbôk rəbbooló, ɲó nokəlò aalə pə.”

məgum = əə gùm-bók rə-boolo ɲó nó-kə = lo áa-lapə
flame=TOP lean-DOWN/SOUTH-IRR-COND 1.SG 2.SG-GEN=LOC come-INTN
“If the flames...should burn to the south, I **will** go to your (home, i.e., marry you).” (NyPB, LAT 197)

In the same way, -lapə ‘INTN’ contrasts with Irrealis -rə, although both forms predicate non-real or unrealized events/states, -lapə ‘INTN’ clearly entails a sense of intention or control over a hypothetical future activity which -rə ‘IRR’ lacks. Accordingly, -lapə ‘INTN’ is more frequent than -rə ‘IRR’ in questions regarding a second person’s *desires* or *wishes* concerning a future/irrealis event (690).

(690) doIpə rè?

dó-lapə ree
eat-INTN PQ
‘Do you want a bite?’ (lit., ‘is it your intention to eat?’) (BcR, EM 20-3-07)

Third person subjects in *-lapə* ‘INTN’ are *not* possible, unless licensed via direct speech report verb *əm-* ‘say; tell’ (usually, with a *purpose* or *reason* sense) (§16.7). In (691), although the main clause subject is *coreferential* with the (ellipsed) subject of *pák-* ‘suspend’, it is the *syntactic* subject of the higher clause in *əm-* ‘say; tell’ only. The speech report clause must contain a syntactic *first person* subject of intention (i.e., underlying *ŋó* ‘1.SG’).

(691) *b̥h̥ əm purnâm pagbəə l̥gləpə əmdù!*

[b̥h̥]_S [əəm purna = əəm pák-bəə-l̥k-lapə]_E [əm-dùu]_{PRED}
3.SG APRX.ACC old.one(<Ind)=ACC suspend-CTIN-INTO-INTN **say-IPFV**
 ‘He says he’ll just keep hanging that there old one!’ (lit., ‘He says, “I’m going to keep hanging the old one.”’) (IR, HC 022)

12.5. Conjunct/disjunct marking

12.5.1. Overview

“Conjunct/disjunct” marking is a variety of person-sensitive grammatical marking which is not generally viewed as reducible to a case of grammatical “agreement” or “cross-referencing”. Usually, a structure exhibiting conjunct/disjunct patterning has some other, primary function, such as aspect-marking and/or possibly evidentiality. In a prototypical conjunct/disjunct system as described for Tibeto-Burman by Hale and Manandhar (1980) Delancey (1992) and Hargreaves (2005), one type of marking is reserved for main clause statements with first person subjects and questions with second person subjects (the “conjunct”), while another type of marking is used in all other cases (the “disjunct”). In some if not all languages with conjunct/disjunct systems, the conjunct marking type is also used in cases of main/subordinate clause subject-continuity, while disjunct marking is used when main/subordinate clause subjects are non-coreferential.

As was briefly noted in §12.3.2.4, there are indications that (subject) person-sensitivity in aspect-marking may have been a more pervasive feature of early Tani grammar, and may be (probably is) still-operating in the main clause morphosyntax of some (mainly northern) Tani languages (Sun 2003). In modern Lare Galo, what may have been a robust earlier system appears to have largely decayed, and is retained in only a few, relatively marginal, constructions. In §12.5.2, we review the set of constructions in which conjunct/disjunct marking is found in Galo, and then return to an overall appraisal in §12.5.3.

12.5.2. Patterns

The basic “conjunct” form is Perfective *-tó* ‘PFV’ (§12.3.2.4). There seem to be two “disjunct” forms, which will be somewhat provisionally described as Perfective *-gée* ‘PFV.DISJ’ and Imperfective *-ée* ‘IPFV.DISJ’, although their respective semantic values (in general as well as with respect to particular constructions) are not yet completely understood. The patterning of each of the three mentioned forms is somewhat different according to the construction.

12.5.2.1. ‘Direct’ perfective

In a clause marked by Secondary predicate inflection *-bá(a)* ‘PFV.DRCT’ (§12.3.3.2), conjunct Perfective *-tó* is used in statements with a first person subject (692) and questions with a second person subject (693).

(692) *ηό (*nó/*bñ) dotó bá.*

ηό (nó/bñ) dó-tó-bá(a)
1.SG (2.SG/3.SG) eat-PFV-PFV.DRCT
‘I (*you/*he/*she/*it) ate.’ (TR, 6:125)

(693) *nó (*ηό/*bñ) dotó baré?*

nó (ηό/bñ) dó-tó-bá(a) = ree
2.SG 1.SG/3.SG eat-PFV-PFV.DRCT=PQ
‘Did **you** (*I/*he/*she/*it) eat?’ (TR, 6:125)

Disjunct perfective *-gée* ‘PFV.DISJ’ is found in statements with a second or third person subject, and questions with a third person subject (694)-(695). Note that *-gée* is subject to Initial gemination (§4.1.5.1).²³⁹

²³⁹ Note also that the system does *not* appear to provide for a question with a *first person* subject. This seems not to be related to conjunct/disjunct patterning as such, but rather relates to difficulties associated with asking a first person question in the ‘Direct’ perfective *-bá(a)*, which indicates direct experience of an event; if anyone had directly experienced the speaker’s eating, it would surely be the speaker rather than an addressee.

(694) *nó/bîi (*ŋó) doggé bá (maabə).*
nó/bîi (ŋó) dó-**gée**-bá(a) (maabə)
 2.SG/3.SG 1.SG eat-PFV.DISJ-PFV.DRCT isn't.it
 'You/he/she/it (*I) ate (don't you see).' (TR, 6:125)

(695) *bîi (*ŋó/*nó) doggé baré?*
bîi (ŋó/nó) dó-**gée**-bá(a) ree
 3.SG 1.SG/2.SG eat-PFV.DISJ-PFV.DRCT PQ
 'Did he/she/it (*I/*you) eat?' (TR, 6:125)

Disjunct imperfective -*ée* 'IPFV.DISJ' marks an event whose natural point of termination has not yet been reached. It does not always contrast clearly with -*gée* 'PFV.DISJ' in the 'Direct' perfective in -*bá(a)*, inasmuch as the overall event is generally viewed in this construction as over with or in past time, from the point of view of the speaker's personal experience. However, in the context of motion predicates, there is a clear contrast: in the sentence in -*ée* 'IPFV.DISJ' in (696), note that the subject is construed to have already left, but not returned. In the sentence in -*gée* 'PFV.DISJ' in (697), note that the subject is construed to have gone and returned. In both cases, the event is viewed as having been witnessed or otherwise experienced by the speaker in the past.

(696) *márk guhatí inée bá.*
 mark guhati ín-**ée**-bá(a)
 NAME PLACE go-IPFV.DISJ-PFV.DRCT
 'Mark has gone to Guwahati (and is either on the way or is already there).' (MN, B8:22)

(697) *márk guhatí ingée bá.*
 mark guhati ín-**gée**-bá(a)
 NAME PLACE go-PFV.DISJ-PFV.DRCT
 'Mark has been to Guwahati (and returned).' (MN, B8:22)

12.5.2.2. Clausal nominalization

Clausal nominalizations in *perfective aspect only* make limited use of conjunct/disjunct marking in -*tó* 'PFV' and -*gée* 'PFV.DISJ'; seemingly, 'Disjunct imperfective' -*ée* 'IPFV.DISJ' is not used in this construction type. Among nominalized

(698) *ŋó (*nó/*bî) dotá nammé bære domá bære?*
 ŋó nó/bî dó-tó-nam = əə bæree dó-máa bæree
 1.SG 2.SG/3.SG eat-**PFV**-NZR:RLS=COP.IPFV CJEC eat-NEG CJEC
 ‘Have I (*you/*he/*she/*it) eaten or not (I can’t seem to remember)?’ (TR, 6:131)

(699) *bɪ̃/nó (*ŋó) doggée nammə bərə?*
bɪ̃/nó **ŋó** **dó-gée**-nam = əə **bərə**
3.SG/2.SG **1.SG** **eat-PFV.DISJ-NZR:RLS=COP.IPFV** **CJEC**
 ‘Did he/she/it/you (*I) eat?’ (TR, 6:131)

In the “Stative imperfective” construction, non-perfective final clauses in *-máa* ‘NEG’, *-dùu* ‘IPFV’, *-dó(o)* ‘STAT’ or, most often, *-dàk* ‘COS’ may occur with a following Disjunct imperfective suffix *-ée* ‘IPFV.DISJ’. The resulting construction depicts a state of affairs which did *not* reach a point of termination, but which is somehow no longer accessible to, relevant to or felt in the present. Stative imperfective clauses are attested in main declarative clauses with second (700) and third person subjects only (701); first person subjects are not accepted by my consultants.

(700) *nó acín dodêke lakà!*
 [nó]_A [acín]_O [dó-dàk-ée]_{PRED} la(a)ka
 2.SG cooked.rice eat-COS-IPFV.DISJ MIR
 ‘What the...you’ve already eaten!’ (IR, B8:52)

Stative imperfective clauses under clausal adverbial subordination in *bɔ* exhibit a subordinate/main clause constraint against subject coreference: subjects may be in any person, but cannot be coreferential (702)-(703).

(702) *ŋó domên dagêe bó əmlà, bîi dopák*

[ŋó_i]_A [dó-mên-**dàk-ée**=bó əm-là(a)]_{SBRD} [bîi_j]_A [dopák]_O
1.SG eat-AS.PLAY-COS-IPFV.DISJ=SBRD say-NF **3.SG** snack
mokà.

[mò-káa]_{PRED}

make-PF

‘He made snacks so that I could eat.’ (IR, B8:52)

(703) *dodó kêebə əmlà, ŋó acín motò.*

[Ø_{i/*j}]_A [dó-**dàk-ée**=bó əm-là(a)]_{PRED} [ŋó_{j/*i}]_A [acín]_O [mò-tó]_{PRED}
eat-COS-IPFV.DISJ=SBRD say-NF **1.SG** cooked.rice make-PFV

‘I made food so that (they/you/*I) could eat.’ (IR, B8:52)

Some speakers feel the Stative imperfective to be paradigmatic with Experiential perfect *-bée* ‘EPF’ with regard to conjunct/disjunct marking, with the Experiential perfect used in first person statements and second person questions; one consultant felt that while (704)-(705) were possible in first and second person subjects respectively, third person subjects were not acceptable.

(704) *ŋó guhatí bolò iibè.*

[ŋó]_S [guhatí bolò]_E [i-**bée**]_{PRED}
1.SG PLACE DST.LOC.DOWN descend-EPF
‘I’ve been down to Guwahati.’ (ZR, C1:147)

(705) *nó dobbè?*

[nó]_A [dó-**bée**]_{PRED}
2.SG eat-EPF

‘Have you eaten?’ (ZR, C1:147)

In my corpus, although the Stative imperfective appears to exhibit a true “disjunct” pattern, it is not obviously paradigmatic with the Experiential perfect *-bée* ‘EPF’. For one thing, the Experiential perfect is attested with third person subjects in both statements and questions (cf. examples in §12.3.2.7). For another thing, the Experiential perfect – like all perfect(ive) aspects – cannot occur in a clausal subordination, meaning that it cannot occur as a “conjunct” cross-clause coreferentiality marker. Thus, although I do not wish to discount my consultants’ intuitions regarding the relatedness of the Stative imperfective and Experiential perfect in terms of subject person alternations in certain functions, it is clear that it does not operate as a fully-fledged conjunct/disjunct pattern for all speakers.

12.5.3. Discussion

By comparison with other Tibeto-Burman languages for which it has been identified, conjunct/disjunct marking in Galo appears relatively impoverished. Not only does it not occur in simple main clauses, it does not appear to have uniform properties in those areas of the grammar in which it is found. Although more comparative work on Tani languages should be undertaken prior to making any firm statements, it would seem that, in Galo, we may be dealing with a *decayed* (and possibly still decaying) system which, while once potentially robust, is now retained only in areas of the grammar in which it seems likely to have had a relatively high functional value (such as in correlating subject person with direct evidence of information).

At the same time, there is evidence of a *new* conjunct/disjunct system arising in the Intentional modality (§12.4.2.8, §16.6.2.2.1). Although restricted to a single modality, the patterning is essentially that of a prototypical conjunct/disjunct system, and there is of course a possibility (though nothing near a certainty) that it could eventually generalize.

There is of course another possibility, however, and this is that conjunct/disjunct systems arise (in some if not all languages) quite by accident. Developing in Galo (if not in all languages which exhibit it) in at least one case from a fairly trivial process of de-subordination through matrix predicate ellipsis, the grammaticalization of a conjunct/disjunct system may not be motivated by any particular functional value associated with the pattern itself – it may be simply a by-product of some functionally quite unrelated process. Under the circumstances, it is possible that the emerging pattern may be exploited for some functional potential which is as yet not well understood (but which may well relate to evidentiality; see Sun (1993a) and Aikhenvald (2004:123-8)). But it is also possible that the conjunct/disjunct pattern remains in a language *as* a pattern simply because it is *learned as* a pattern; however, in terms of functional value, it may have little if any at all. Such a system would be expected to decay over time, and that is certainly what it looks like may have happened in Galo. Future research on related Tani languages should enable us to determine whether Galo is anomalous in this respect, or not.

13. Particles

The present chapter discusses particles, defined as non-relational, non-inflectional functional words which modify a major syntactic constituent (most often, an NP or a Predicate/Clause). The first section §13.1 discusses the overall structural and functional properties of particles. The following sections §13.2 and §13.3 discuss particles which bind to the noun phrase and predicate or clause, respectively. §13.4 supplements the preceding two sections, discussing particles which appear to be recent loans from Indic languages (and which are not used by all Galo speakers), and §13.5 discusses “versatile” particles, which bind to any major constituent. The chapter is closed by sections §13.6 and §13.7, which discuss interjective particles and interjections respectively.

13.1. Overview

13.1.1. Synchronic perspective

Particle is not a well-defined term either in principle or, usually, in practice.²⁴⁰ The most restrictive definition and consistent application of which I am aware is that of Matisoff (1973: 154), who defines “particle” with respect to Lahu as a category containing all and only *bound syntactic words* (i.e., words which cannot head a phrase, which cannot stand as a headless phrase, and/or which cannot in any other way occur as an independent syntactic constituent).

While potentially satisfying on a purely structural basis, *if* there is a difficulty with this definition, it may be the amount of *functional diversity* it admits. In addition to some of the highly pragmatically-oriented, often clause-final functional words commonly found in South East Asian languages – which are traditionally described as “particles” due to their relatively small size and seemingly obscure word-class status – Matisoff’s definition commits the analyst to including most types of adposition, case enclitic, and article, as well as some forms probably traditionally described as “adverbs”, in a class whose functional range then would extend from syntactic role marking to referential status marking all the way to speaker attitude/stance marking.

In the present work, markers of grammatical and/or referential status are treated as (internal) phrasal constituents (§6.1.2, §14.2-§14.3); “particle” then denotes a relatively

²⁴⁰ It may be no exaggeration to say that while “adverb” is often used to describe a relatively large word whose categorial status cannot be otherwise determined, “particle” is often used to describe a relatively small one.

more “optional”, usually post-phrasal form, which provides supplementary (non-basic, non-obligatory, and/or non-inflectional) pragmatic or epistemic information, and which can often mark multiple constituent types and/or occur in more than one syntactic position with the same basic function. This definition is almost certainly not watertight, neither in the sense of clearly distinguishing particles from phrasal operators, nor in the sense of enabling clearcut recognition of all and only the members of a well-motivated natural class. Unfortunately, as with the “adverbs” and “prepositions” of English, the syntactic and functional diversity of the Galo particle class is such that a well-motivated subclassification would have to take an enormous range of synchronic and diachronic facts into account – a project which both demands a much larger speech corpus than that currently available and a work of more specialized approach. Thus, although an effort has been made here to group and subclassify particles on well-motivated distributional and functional grounds, both the category as a whole and its subclassification should be viewed as highly provisional and subject to revision as more data become available.

13.1.2. Diachronic perspective

As of this writing, etymologies have not been identified for the vast majority of Galo “particles”. This fact, taken together with their frequent distributional and functional versatility, suggests that at least some particles may be very old indeed, with at least some forms potentially reconstructible to ancestral languages. Unfortunately, on this topic we can say almost nothing further, since virtually no mention of particles has been made in any of the extant sources on Tani language grammars – leaving no basis for reconstruction.²⁴¹ The reason for this omission seems clear: most particles only rarely occur when sentences are elicited in translation from Indo-European languages, whereas they occur very frequently in the context of spontaneous, face-to-face conversation (which has not generally formed part of the database of previous works on Tani languages).

Within a narrower historical perspective, it appears that particles have in some cases arisen secondarily as a result of *fusion*, whether of two particles or (more commonly) of a particle with a particular enclitic or suffix. Such (usually disyllabic) sequences may subsequently *collapse* under particular morphophonological conditions, giving rise to a

²⁴¹ The term “particle” in Abraham’s (1985) description of Apatani refers to the predicate-dependent forms described in this work as “predicate derivations”. As for the constituent-peripheral forms described here as “particles”, there is no treatment in Abraham’s grammar, with the exception of a brief mention of the Apatani Reported information particle *juke* (also found in Galo) on the final page of that work.

completely new form; for example, consider the Lare Galo Conjectural particle *bəree*, which seems to reflect fusion of Proto-Galo Dative/Adverbializing enclitic **bə* with Polar Interrogative particle PG **rjee*. In Pugo Galo, this has reduced to a new monosyllabic form *bee* (< Pre-Pugo **be-jee* < Proto-Galo **bə-rjee*, following the regular Pugo process of Intervocalic glide deletion (§2.4.4.6). Other, similar examples are discussed in passing in subsections below.

13.1.3. Particles and cleft/focus constructions

Most particles currently attested for Galo are capable of standing as marker of a *cleft/focus* construction, including most (though not all) predicate/clause-marking particles, and some (though not most) noun phrase-marking particles; in absence of the Conjectural (or other qualifying) particle, the sentence in (706) is ungrammatical.

(706) *jəə bərə pardû kò?*

[jəə **bəree**]_{FOC} [pàr-dùu-kò = əə]_{TOP}
 who CJEC make.fire-IPFV-NZR:LOC/OBL=TOP
 ‘Who was it who made this fire?’ (KN, OLxx)

For further discussion of cleft/focus constructions, see §9.4.

13.1.4. Particles and tone

Since many particles occur phrase- or utterance-finally, and are therefore very frequently subject both to the prosodic contour of a preceding constituent and to phrase- or utterance-final boundary effects and/or expressive intonation effects, it has been difficult to establish the underlying tonal status of many Galo particles. Such uncertain cases are left unmarked for tone in this work. Although it may appear as though tone loss or susceptibility to spreading could be symptomatic of the advanced grammaticalization of particles, I caution the reader that this does not always prove to be the case in Galo, and that future research may well enable establishment of underlying tonal representations for particles with greater confidence than I have been able to do to date.

13.1.5. Subclassifying particles: a final cautionary note

The below subclassification is primarily based on distribution. However, it seems clear that semantic and/or functional categories may also be identified which cut across distributional subclasses.²⁴² Thus, it should be emphasized that the present subclassification is to some extent organizational in nature; with further investigation into the sometimes quite complex cognitive descriptions of Galo particles, a more meaningful semantically and/or functionally-based subclassification quite different from that presented here could well be made possible.

13.2. Noun phrase-final particles

This section discusses particles which primarily or exclusively modify noun phrases.

13.2.1. Adclausal nominal subordination

A small and seemingly closed set of forms which all derive historically from fusions of predicate suffixes with following enclitics – and which all continue to occur as semantically relatable predicate suffixes – function to *directly subordinate a noun phrase to a clause of which it is not an argument*. A single example is given here (707); for further examples and discussion, see the sections referenced in Table 13.1.

(707) *b̃h̃ booló, ɲó inmá rɔ́.*

[b̃h̃ **boolo**]_{SBRD} [ɲó ín-máa-rɔ́]_{CLAUSE}
3.SG COND 1.SG go-NEG-IRR
'If (it's) him, I won't go.' (ILR, EM 2-5-07)

²⁴² For example, since 'Wonderment' *d̃h̃* can occur in both declarative and interrogative clauses, but 'Uncertainty' *pə* can occur in declarative clauses only, they are differently subclassified below. However, it seems equally possible to group them both under a common functional-semantic heading 'Epistemics'.

| Form | Function as particle | Etymology | Ref. |
|----------------|--|--|-----------|
| <i>boolo</i> | Conditional adclausal nominal subordination 'if/in the case of [NP], [CLAUSE]' | * <i>boo</i> 'NZR?' + <i>lo</i> 'LOC' | §16.3.2.1 |
| <i>dakkòm</i> | Concessive adclausal nominal subordination '[NP] notwithstanding, [CLAUSE]' | - <i>dàk</i> 'COS' + <i>kom</i> 'ADD' | §16.3.2.2 |
| <i>l(a)cìn</i> | Concessive adclausal nominal subordination 'even/although/despite [NP], [CLAUSE]' | - <i>là(a)</i> 'NF' + <i>cìn</i> 'ADD' | §16.3.2.2 |

Table 13.1 – Adclausal nominal subordinating particles

13.2.2. Argument modification

A relatively large and seemingly closed set of forms occur on the periphery of an argument noun phrase. A small number, including Contrastive *da*, Recursive *(d)da(da)* and Additive *cìn* also have the ability to mark a cleft/focused noun phrase, but others – such as Completive *kú* and Comparative *dèn* – lack this functionality.²⁴³ The reason for this difference in distribution is not yet clear (Table 13.2).

| Form | Function | Other/cognate functions | Ref. |
|------------------|-------------|---|-----------------------|
| <i>kú</i> | Completive | Completive predicate inflection - <i>kú</i> | §12.3.3.1 |
| <i>cìn</i> | Additive | Additive predicate-internal particle <i>cìn</i> | §13.5.3 |
| <i>kòm</i> | Additive | Formative of Concessive subordinator (-) <i>dakkòm</i> | §13.2.1, §16.3.2.2 |
| <i>dèn</i> | Comparison | N/A | N/A |
| <i>da</i> | Contrastive | Achievement predicate inflection - <i>dáa</i> (?) | §12.3.3.4 |
| <i>(d)da(da)</i> | Recursive | Achievement predicate inflection - <i>dáa</i> (?) | §12.3.3.4 |
| <i>daram</i> | Concessive | Concessive clause-coordinator <i>daram</i> | §16.3.1.3 |
| <i>jáa</i> | Admissive | Comparative predicate derivation - <i>jàa</i> (?) | §11.2.5.11 |
| <i>ləə</i> | Abessive | N/A | N/A |
| <i>báa</i> | Supposition | N/A | N/A |

Table 13.2 – Argument noun phrase-modifying particles

²⁴³ Although it is possible for non-clefting particles to occur *within* the marked focus of a cleft construction, they are not *themselves* clefting particles; instead, a second particle with clefting functionality must follow. For example, in the sentence [*əəm dèn né*], [*ŋó mèn-dùu-nâ*] = *əə* '[ANAP.ACC COMP DECL.ADM]_{FOC}, [1.SG say-IPFV-NZR:SUB=TOP]_{TOP}' 'That (not what you had thought) is what I'm saying', it is not Comparative *dèn*, but rather the Admonitive particle *né* which stands as focusing particle, licensing the left-dislocation; without the Admonitive particle, the sentence would be ungrammatical. For further discussion of the grammar of focus/cleft constructions, see §9.4.

Argument noun phrase-modifying particles may be subdivided into three major position classes – Types 1a and 1b, which have the potential to co-occur in an ordered sequence, and Type 2, which supplants both of Types 1a and 1b (Table 13.3). Uncertainty exists where particles are less-frequently attested and/or where their use is dispreferred by some speakers; forms with less certain distribution are marked by: (?). An example of ordered sequencing is given in (708).

| Type 1a | Type 1b |
|----------------|------------------|
| <i>kú</i> | <i>da</i> |
| <i>cìn</i> | <i>(d)da(da)</i> |
| <i>kòm</i> (?) | <i>daram</i> (?) |
| Type 2 | |
| <i>jáa</i> | |
| <i>dèn</i> | |
| <i>báa</i> | |

Table 13.3 – Positional subclassification of argument noun-phrase modifying particles

(708) *ηêək moòk hîg kudá...îsi-rikkóm holú*

ηêə-kə mookó hîgè **kú=da** isì-ríkó = əəm holúu

1.REFL-GEN place SPRX.IND CMPL=CNTR water-field=ACC fence

ragmá dú.

rák-máa-dùu = _

plait.large-NEG-IPFV=NF1

‘**Now** (in) our place **on the other hand**...we don’t fence in the paddy fields. (LN, MH 049)

13.2.2.1. Completive *kú*

Completive particle *kú* is a clear cognate of Completive predicate inflection *-kú* (§12.3.3.1); the ultimate etymology of *-kú/kú* is currently unknown, but almost certainly dates at least to the Proto-Tani stage. Completive particle *kú* marks noun phrases whose referents are construed as ‘now’, ‘ultimately’ or ‘finally’ participating in the predicated event/state, often as their (possibly anticipated) participation marks an episodic boundary, turning point or termination of a series of events. Completive particle *kú* often interacts with predicate marking in *-kú* (709); however, the two forms are non-redundant, and are thus not reducible to an instance of aspectual concord (710).

(709) *b̃h̃ hoowám kú...guup̃h̃ molà...laalêe kuddál əmmə...*

b̃h̃ hoó = əm **kú** guup̃h̃ mò-là(a) làa-lèe-kú-da-là(a) əm-nam = əə
 3.SG cattle=ACC **CMPL** penalty claim-NF take-SSEQ-CMPL-REPT-NF say-NZR:RLS=TOP
hób doolú ló câag kaakú manè.

hobá doolúu = lo càa-gó-káa-kú mane
 mithun village=LOC ascend-COMT-PF-CMPL that's.to.say(<Asm)
 'Now again he claimed a penalty and (**in the end**) taking a cow with him he, like,
 brought it to the mithun village.' (NyPB, LAT 124)

(710) *hòg caaká kú. hokkə kú, hòg caakà î.*

hogò càa-káa-kú hokə = əə = **kú** hogò càa-káa (ə)î
 SPRX.LOC ascend-PF-CMPL SPRX.ABL=TOP=**CMPL** SPRX.LOC ascend-PF ETAG
 'It came up to here. **Then** from here, it went up to here, eh.' (LN, TG 053)

13.2.2.2. Additive *cìn* and *kòm*

Additive *cìn* (Pugo *sìn*) is a common, versatile particle with the basic function of indicating participation in a predicated event/state 'also', 'as well (as)' or 'in addition (to)' another known referent (711).

(711) *ηoocîn inrə!*

ηó = **cìn** ín-rə
 1.SG=ADD go-IRR
 'I **too** will go (in addition to all of you).' (IR, OLB3:33)

cìn 'ADD' also commonly occurs in the 'Additive co-participant' construction, in which it marks *both* co-participating referents (schematically, *I also went and he also went*; see Conjunctive/Additive coordination in §16.3.1.1). It also quite commonly occurs in a "Dismissive" construction. In this construction, the Additive particle follows an interrogative/indefinite pronoun in a negative polarity clause, indicate that 'none' or 'not any' of a set of qualifying referents in fact participate in the predicated event/state (712). For several further examples, see the individual sections on interrogative/indefinite pronouns in §7.3.

(712) *bulləm jôocîn memmâ.*

bulù-əəm jòo = **cìn** mèn-máa = ^
 3.PL-ACC **what**=ADD speak.to-NEG=NF12
 'He didn't say **anything at all** to them.' (IR, FA 091)

cìn ‘ADD’ is one of a very small set of versatile particles with the ability to “interrupt” a predicate complex (§13.5.3), and also occurs as a formative of Concessive coordinator *(-)la(a)cìn* (§13.2.1; §16.3.2.2). It also has the ability to stand as a clefting/focalizing particle. The etymology of *cìn* ‘ADD’ is unknown.

Additive *kòm* is believed to be a Minyong loan (possibly entering via Pugo Galo), and its use as a simple Additive particle, replacing native Galo *cìn* ‘ADD’ in examples like (711) and (712), is frowned on by many of my Lare consultants. Be that as it may, *kòm* is well-established in Lare Galo as a formative of Concessive coordinator *(-)dakkòm* ‘CONC’ (§16.3.1.3), and it has been attested as an (albeit infrequent) alternative to *cìn* ‘ADD’ in certain constructions (cf. §7.3.3.2).

13.2.2.3. Implicit comparison *dèn*

Implicit comparison *dèn* ‘ICMP’ marks noun phrases whose referents are viewed as implicitly ‘under comparison’ with another referent, in terms of their participation, or fitness for participation, in the predicated event/state. It is sometimes translatable via English ‘rather’ or ‘though’ (713)-(714).

(713) *ŋó dèn ákèné loŋí loúm gó rəbbóo ló*

ŋó **dèn** akèn = əə lóo-ŋì lóo-úm = go rə-boolo
 1.SG ICMP one=TOP CLF:DAY-two CLF:DAY-three=IND live/exist-COND
bohó eí má.

bohó ≡ eí ≡ máa

fear ≡ HEMP ≡ NEG

‘If *I* stayed on my own for two or three days *I* wouldn’t be scared a bit [**unlike you**].’ (AO, CC 199)

(714) *nó dèn pítə.*

nó **dèn** pítə = əə

2.SG ICMP rich.person=COP.IPFV

‘**You’re** the rich one (**not him**).’ (IRm, V1)

Very rarely, *dèn* has been observed marking *non-final clauses* as events that are realized *instead of* or *in contrast to* something which had been expected; marking of non-final clauses is not a common property of particles in Galo (715).

(715) “*dotó rêela dèn, ardó bó kegée ká!*”

dó-tó-rée-là(a) **dèn** ardó = bó kéK-ée = káa
eat-PFV-PSEQ-NF **ICMP** clever/speedy=AVZR flee-IPTV.AWAY=HORT.ADV
‘After you get the consolation prize of eating that, go ahead and run away.’ (lit., ≡
‘After eating that **rather** (than what you had hoped to eat)...’) (MK, TT 333)

Implicit comparison *dèn* does not seem to mark copular or finite/inflected predicates/clauses, and does not have clefting/focalizing capability. Its etymology is unknown.

13.2.2.4. Contrastive *da*

Contrastive *da* is a very common and versatile particle, which may be reflected in a series of more or less homophonous and functionally similar forms or formatives in both the noun phrase and predicate areas of the grammar. Its basic and most frequent function is to mark a referent as *contrasting* with another, previously mentioned referent. Often, this can take the form of a *switch-topic* function, with a sense not unlike English ‘(and/but) as for [NP]...’, and frequently marks a first person pronoun when a speaker wishes to interject a personal opinion (716).

(716) *ŋó dá m̥l̥loəm m̥ənəm̥ ná.*

ŋó **da** m̥l̥l̥o = əm̥ m̥ə-nam = əə na
1.SG CNTR roof=ACC think-NZR:RLS=COP.IPFV DECL
‘**As for** me, (I’m) thinking about (what to do about) the roof.’ (IR, HC 008)

Not all noun phrases marked in *da* are topics, however; furthermore, the sense of ‘contrast’ seems to be *thematically* governed, as opposed to being a pure marker of referential discontinuity per se. In (717), *da* marks a speech report argument as contrasting thematically with the previously mentioned *predicate*.

(717) *hagɨ́ róm hagɨ́ míngó là.*

hagɨ́-ró = əm hagɨ́-mín-gó-là(a)

sigh-IRR=ACC.TSUB sigh-JOIN-COMT-NF

“*ajjêə*” *dá əmróm* “*ajjêə*” *dá əmmíŋ gəlà.*

ajjêə **da** óm-ró = əm ajjêə **da** óm-mín-gó-là(a)

IJEC CNTR tell-IRR=ACC.TSUB IJEC CNTR tell-JOIN-COMT-NF

‘When he sighs, it repeats his sigh. And when he **then** says “aya,” it also **then** says “aya!”’ (NyPB, LAT 285-286)

Rarely, Contrastive *da* has been attested as a marker of cleft/focal noun phrases.

Its etymology is unknown.

13.2.2.5. Recursive (*d*)*da*(*da*)

Recursive (*d*)*da*(*da*) marks noun phrases whose referents are construed as participating in the predicated event/state *just like/in the same manner as a previously mentioned referent*, or in a way which otherwise resembles some previously occurring event. When marking a nominalized predicate, the implied previous event is of the type denoted by the predicate stem. Potentially historically relatable to Contrastive *da* (§13.2.2.4), the two forms are sometimes very difficult to distinguish. They may be differentiated as follows:

- (A) when standing as the second syllable of a phonological word and following a light ((C)V) syllable stem, Recursive (*d*)*da*(*da*) occurs as a monosyllable undergoing *initial gemination* in [dda] (718); Contrastive *da* does *not* undergo initial gemination (719).

(718) *ajjòm həmbə dəənâa kuddá, pətáa tapén*

ajjò = əm həmbə dèə-nà = əə kú = (**d**)**da** pətáa-tapén

night=TMP.IRR.SPAN SPRX.PADV soar-NZR:SUB=TOP CMPL=**RCUR** bird-bat

eenà.

ee = na

COP.PFV=DECL

‘In the nighttime, this thing that was flying **again** like this...it was a bat.’ (IIR, EM 20-3-07)

(719) *ajjòm həmbə dənâa kudá, pətáa tapén*

ajò = əm həmbə dən-nà = əə kú = **da** pətáa-tapén
 night=TMP.IRR.SPAN SPRX.PADV soar-NZR:SUB=TOP CMPL=CNTR bird-bat
eenà.

ee = na

COP.PFV=DECL

‘In the nighttime, this thing that was flying like this **now**...it was a bat.’ (TB, OAM 065)

(B) when not meeting condition (A), Recursive (*d*)*da* is obligatorily **repeated** [dada]

(720), whereas Contrastive *da* is not (717)

(720) *ikîi əcìn...məm dadá...ajáa ŋûr tokú.*

ikîi əə = cìn bî-əəm **dada** ajáa-ŋûr-tó-kú
 dog TOP=ADD 3.SG-ACC **RCUR** love-RECP-PFV-CMPL

‘The dog also reciprocated his love.’ (lit., ≡ ‘The dog also reciprocally loved him **just as** (the boy had previously demonstrated his love to the dog.’) (TR, FS 022)

13.2.2.6. Concessive *daram*

Concessive coordinating particle *daram*, described in §16.3.1.3, also occurs as a noun phrase particle marking a referent as unexpectedly or excessively participating in the predicated event/state; in this function, it is usually well-translated by English *even* (721).

(721) *acéâ! porók darám caadûu jò!*

ací = əə porók = əə **daram** càa-dûu = jo
 elder.brother=VOC chicken=TOP **CONC** ascend-IPFV=CEXP

‘Hey Elder Brother! **Even** the chickens are climbing up [onto the wet concrete; what are we to expect next, cows?!]’ (MN, B2:22)

13.2.2.7. Admissive *jáa*

Admissive *jáa* is infrequently found marking the S argument of a negative existential predicate. Its function is to concede or admit that a small amount, percent or extent of the marked referent may participate in the predicated event/state, despite that it

may be of little consequence and may be as good as non-participation. It is usually translatable via English *(not) much* (722).²⁴⁴

(722) *oké...menlôə há...já...kaamá.*

okkəə mèn-ləə-háa **jáa** káa-máa
 SCNJ speak-GRAD-NZR:IRR **ADMS** have/exist-NEG
 ‘And so...there’s not **much** more to tell.’ (MK, LW 056)

My consultants believe that *jáa* may be relatable to the Comparative predicate derivation *-jàa* ‘COMP’. If this is accurate, the tonal discrepancy may be explainable in terms of an earlier derivational alternation *jáa* ~ *jàa*, with the high tone alternant potentially also relatable to the initial formative of adjective/noun *jaakáa* ‘many; a large quantity’ (which would regularly carry an etymological high-tone; see §4.2.2.2).

13.2.2.8. Abessive *ləə*

Abessive *ləə* is a rarely-used particle marking a referent as a remembered entity not present at the time of speaking. It is often used when speaking in an attitude of reminiscence, or with a lonely, wistful sense (723)-(724).

(723) “*ací, ací mæədì...ŋôk ací lə*

ací ací məə-dìi ŋó-kə ací = **ləə**
 elder.brother elder.brother think-AGAIN 1.SG-GEN elder.brother=**ABES**
ací mæədîi lə” î?

ací məə-dìi **ləə** = (ə)î
 elder.brother think-AGAIN **ABES**=ETAG
 ‘(She said) “Brother, Brother Thoughtful...my **dear old** brother, **dear old** Brother Thoughtful!” eh?’ (LN, TG 074)

(724) *dillí bolò lə...rəmên bé kə.*

dilli bolò **ləə** rə-mèn-bée kə
 Delhi DST.LOC.DOWN **ABES** live/exist-AS.PLAY-EPF INFO
 ‘**Back** down in Delhi...times were good, you know.’ (ZR, C2:25)

²⁴⁴ A positive polarity variant of (722) *?/*mèn-ləə-háa jáa káa-dùu* is not accepted by my consultants.

13.2.2.9. Suppositional *báa*

The status of Suppositional *báa* is somewhat uncertain; at least some of my consultants have claimed it to be a direct importation from plains languages which has entered Galo as spoken in foothill areas only very recently (possibly, within the last few years). I have not been able to investigate the matter fully (and could not say which language is the supposed donor); however, *báa* is well-attested in my data in three primary functions:

The first and probably “basic” function is marking an argument noun phrase which is being placed under consideration as an *example*, much as in English *suppose we go home now* (725).

(725) *nó bá inbooló, aljâa cinrê còm.*

nó **báa** ín-boolo aló-jâa ≡ cìn ≡ ró com
 2.SG SUPP go-COND good-COMP≡ADD≡IRR GUES
 ‘**Supposing** you go, it may work out all the same.’ (ZR, C2:5)

A second, related function is in marking subordinated “quasi-” S complements of *rî-* ‘do’, with the overall sense ‘(there’s a chance that) S may happen’ (726). For discussion of “quasi-”S complements of *rî-* ‘do’, see §16.5.4.4.

(726) *homên jòo aalâab bá rîrê əmlâa jì bohiká.*

[homén jòo áa-là(a)=bó]_S **báa** [rî-ró]_{PRED} əm-là(a) jì bohó-káa
 tiger and/or.such come-ABIL=SBRD SUPP do-IRR say-NF DISC afraid-PF
 ‘They were frightened, thinking that a tiger or some such thing **might** come.’ (lit., ‘saying “**suppose** a tiger comes”’) (IR, FA 060)

A further type of construction in which Suppositional *báa* is quite commonly found involves interrogative noun phrase marking in *báa* followed by Emphatic (*ə*)*í* (§13.5.1) (usually realized [baí ~ baí]). The sense of the overall expression is one of speaker concession that he or she has no idea which referent might qualify as the mentioned event participant, possibly with a dismissive implication to the effect that it doesn’t much matter anyway (727).

(727) *acabbó...pírík gobaí taakú*

ací-abó = əə pírík go = **báa** = (ə)í taakúu
 elder.brother-father=TOP khaleej.pheasant IND=SUPP=EMPHbird.variety
gobaí ablêeʰ bəərʰkú əí?

go = **báa** = (ə)í àp-lèe-là(a) bóə-rə-kú (ə)í
 IND=SUPP=EMPH shoot-SSEQ-NF carry/hold-IRR-CMPL ETAG

‘The men **may** bring back khaleej pheasants or *taaku* birds, **according to what they may have** shot, right? (LN, GMW 038)

13.3. Clause-final particles

The particles described in this section primarily occur *clause-finally*. According to their subtype, they may follow a final (inflected) predicate, copula, or verbless clause; in most cases, they may also mark the focal constituent of a cleft/focus construction (§9.4). It is sometimes difficult to determine whether the grammatical scope of a clause-final particle is in fact over the entire clause or only the clausal focus (generally, predicate, copula or verbless clause complement). Whatever the case, it is clear that inasmuch as *no* clause-final particles are *ever* permitted to occur *within* a nominalized, subordinated or non-final-marked predicate stem (unlike aspectual inflections; see §15.3.2), clause-final particles must be analysed as falling *outside the grammatical predicate word*.

13.3.1. Hortative

Hortative particles prototypically follow the inflected predicate of an imperative clause. Some may also follow predicative adverbials and noun phrases (cf. §13.3.1.1, examples (732)-(733)).

Hortative particles may be subdivided on the basis of the type of imperative with which they may co-occur, as well as in one case on the basis of position (Table 13.4). Hortative particles do not generally co-occur with one another, and do not generally occur in cleft/focus constructions.

| | Pos. 1 | Pos. 2 |
|--|----------------|--|
| -tó ‘IPTV.ODIR’ -ée ‘IPTV.AWAY’ -gée ‘IPTV.CONC’ -tá(a) ‘MOT’ -jó ‘PROH’ | | k ‘HORT.EMPH’ kée ‘HORT.POL’ kaa ‘HORT.ADVS’ kêə ‘HORT.ADM’ pəna ‘HORT.OBLG’ |
| -là(a) ‘IPTV.SDIR’ | zù ‘HORT.INCL’ | k ‘HORT.EMPH’ kée ‘HORT.POL’ kaa ‘HORT.ADVS’ |
| -là(a) ‘IPTV.SOFT’ | | na ‘DECL’ né ‘DECL.ADM’ kêə ‘HORT.ADM’ |

Table 13.4 – Hortative particles

13.3.1.1. General hortatives *kée*, *kaa*, *kêə* and *k*

The most semantically general and statistically frequent hortative particles are *kée* ‘HORT.POL’ and *kaa* ‘HORT.ADVS’, in that order. Polite hortative *kée* ‘HORT.POL’ serves to “lighten” the force of most types of imperative, rendering the overall expression relatively more *polite* and *request-like*. Although *kée* ‘HORT.POL’ lacks the sense of formality usually associated with English *please*, the latter is usually the closest available translation (728).

(728) *jâd dîin gó lagí rô? mênzi toké.*

jadì diin = go lagí-rá mèn-zí-tó = **kée**
 how.many day(<Asm)=IND want/need-IRR say-BEN-IPTV.ODIR=**HORT.POL**
 ‘How many days does it take? (**Please**) tell him.’ (LN, OPO 065)

‘Advisative hortative’ *kaa* ‘HORT.ADVS’ entails a feel of *giving advice*, as though the speaker knew what was good for the addressee and was instructing him as to how he should run his affairs. As such, *kaa* ‘HORT.ADVS’ can render an imperative somewhat more abrupt-sounding, and is thus inappropriate in some registers or social contexts (such as when a younger addresses an elder). In (729), the speaker of the reported clause is the head of a village council, addressing a soon-to-be-banished miscreant; note that use of *kée* ‘HORT.POL’ would be inappropriately request-like in this context.

- (729) “*nôk indó gó kaarúu duukù,*
 nó-kà ín-dó = go káa-rúu-dùu-kú
 2.SG-GEN go-NZR:TIME=IND have/exist-CERT-IPFV-CMPL
nó inée kuká, ” əmdúu nà ná.
 nó ín-ée-kú = **káa** óm-dùu-nà = əə = na
 2.SG go-IPTV.AWAY-CMPL=**HORT.ADVS** tell-IPFV-NZR:SUB=COP.IPFV=DECL
 “‘Your time to go has come, you’d **better** get out of here,” they said, see?’ (NyPB,
 LAT 193)

‘Emphatic hortative’ *k* ‘HORT.EMPH’ and ‘Admonitive hortative’ *kəə* ‘HORT.ADMN’ seem to be in some sense expressive derivatives of *kée* ‘HORT.POL’, *káa* ‘HORT.ADVS’, or both. Emphatic hortative *k* ‘HORT.EMPH’ sets an *abrupt, commanding tone* to an imperative, and is appropriate when an elder, such as a parent, is commanding a child, as in (730). *kəə* ‘HORT.ADMN’ sets a similarly imperious tone, but carries the additional implication of admonishment to the addressee, as if the person had already been asked properly once or twice, but has forgotten or has been dallying (731).

- (730) *həə?! opín motòk!*
 həə? ò-pìn-mò-tó = **k**
 what.the.hell.are.you.doing fall-STOP-SSUB-IPTV.ODIR=**HORT.EMPH**
 ‘What are you thinking?! Let (the rain) stop (before you go out)!’ (MN,
 OLB2:138)

- (731) *occíkəmə zilâa kəə!*
 occík = əəmə zí-là(a) = **kəə**
 knife=ACC give-IPTV.SOFT=**HORT.ADM**
 ‘(Don’t forget to) give him the knife, **now!**’ (IR, OLB5:24)

In addition to marking finite/inflected imperative clauses as in (728)-(731), general hortatives also mark predicative *adverbials/adverbially-subordinated clauses* (732) and *nominals* (733). Such marking aids in lending the expression hortative force and/or an imperative implicature, and seems to derive from imperative predicate ellipsis.²⁴⁵

²⁴⁵ For example, in (732) it would be possible to insert an imperative predicate in *rî-* ‘do’ between the adverbially subordinated clause and the hortative particle, and in (733) an imperative predicate in *zí-* ‘give’ could occur between the Contrastive noun phrase particle *da* and Polite hortative particle *kée*.

(732) *adín domáa bəkə!*
 adín dó-máa = bə **kə**
 meat eat-NEG=SBRD **HORT.ADM**
 ‘Don’t eat meat, **y’hear** (since the doctor has ordered against it, although I suspect that you will ignore his advice)?’ (lit., ≡ ‘Not eating meat-ly, **y’hear**?’) (KN, OL25:12)

(733) *əṇṇíí gó daké.*
 əṇṇíí = go da = **kée**
 a.bit=IND CNTR=**HORT.POL**
 ‘(Give me) a little more, **please**.’ (BH/RmR OL13:109)

13.3.1.2. Inclusive hortative *zù*

Inclusive hortative *zù* ‘HORT.INCL’ prototypically follows a Self/speaker-directed imperative in *-là(a)* ‘IPTV.SDIR’, and may or may not be followed by a General hortative (§13.3.1.1). Its function is to propose *joint speaker/addressee participation* in the predicated event/state (734).

(734) *acín doláa zu(kè).*
 acín dó-là(a) = **zù** (= kée)
 cooked.rice eat-IPTV.SDIR=**HORT.INCL**(=POL)
 ‘**Let’s** eat (, shall we?)!’ (KN, OL23:43)

Rarely, Inclusive hortative *zù* has been observed to lend a predicative nominal inclusive hortative force – again, probably as a result of predicate ellipsis (735) (cf. §13.3.1.1, example (733)).

(735) *márk, ṇùn hòk kuzù.*
 márk ṇunù hòk kú = **zù**
 NAME 1.PL SPRX.ABL CMPL=**HORT.INCL**
 ‘Mark, **let’s** us (get off) here.’ (DR, C1:124)

zù ‘HORT.INCL’ may have a partial cognate in the interjection *kazùu* ‘let’s go’ (§13.7.1), although the difference in vowel length would require explanation.

13.3.1.3. Other restricted hortatives

A set of hortative particles with restricted distribution seems to have emerged relatively recently through reanalysis of Simple and Admonitive declarative particles *na* and *né* as hortative forms. Both forms follow Softened imperative *-là(a)* exclusively, and could well be analysed as having fused to it (736)-(737). They do not seem to follow other imperative types.

(736) *aló bó inlâa nà!*

aló = bó ín-là(a) = **na** or -laanà
 good=AVZR go-IPTV.SOFT=DECL IPTV.SOFT
 ‘Go safely **now!**’ (IR, OLB5:24)

(737) *izìn tîlâa nè.*

izì = nè tíi-là(a) = **né** or -laanè
 now=TMP.IRR.PUNC imbibe-IPTV.SOFT=ADM IPTV.SOFT.ADM
 ‘(No), have some (liquor) after a little while (**instead of now, as you’re intimating**).’ (MN, OLC2:51)

A rare hortative particle *pənà* whose properties are not yet comprehensively understood has been attested following imperatives in *-tó*, seemingly with an Advisative sense ‘this should/ought to be done’ (738). Seemingly deriving from a fusion of Irrealis/obligative complementizer *-pə* with Declarative particle *na*, it has the interesting property of licensing *third person imperative subjects* – normally impossible in Galo (§9.5.2). This construction may have arisen historically out of predicate ellipsis; synchronically, however, no matrix predicate may be (re-)inserted, leaving third person imperative subject-licensing only analyzable as a constructional property of an imperative in *pənà* (739).

(738) *mə̀tótó pənà.*

mə̀ə-tó **pənà**
 think-IPTV.ODIR HORT.OBLG
 ‘You **should** think (about it).’ (MN, OLC2:45)

- (739) *m̃i m̃iəm niktó pənà.*
 b̃i b̃i-əəm ñk-tó pənà
 3.SG 3.SG-ACC punch-IPTV.ODIR HORT.OBLG
 ‘He **should** punch him.’ (IIR, EM 20-3-07)

13.3.2. Declarative

In this section we describe particles which occur primarily or exclusively in the context of main declarative clauses, including predicative and copula clauses, as well as predicative nominals/verbless clause complements and (in most cases) declarative cleft/focus constructions. A provisional positional subclassification is presented in Table 13.5; most (though not all) Position 1 and 2 forms are attested as co-occurring in the sequence given, while no Position 1 and 2 forms are attested as co-occurring with members of the same position class. Additional testing will be requiring to determine whether the Position classes given are fully consistent in all possible conditions.

| Position 1 (mostly epistemic) | | Position 2 (mostly pragmatic/ speech-act functional) | | Position 3 | |
|-------------------------------|-------------|---|------------------------------|------------|------------|
| Form | Gloss | Form | Gloss | Form | Gloss |
| <i>juu</i> | Reportative | <i>na</i> | Declarative | <i>m</i> | Resolutive |
| <i>ben</i> | Evidential | <i>né</i> | Admonitive | | |
| <i>pə</i> | Uncertainty | <i>no</i> | Counterexpectation | | |
| <i>laaka</i> | Mirative | <i>kəʔ</i> | Contradictive | | |
| <i>lapə</i> | Predictive | <i>kə(mə)</i> | Informative (sympathetic) | | |
| <i>(d)da(da)</i> | Recursive | <i>da</i> | Assertive | | |
| <i>əmlaa</i> | Purposive | <i>dé (dè)</i> | Exhortative (concessive) | | |

Table 13.5 – Declarative particles

Position 1 forms mainly encode functions related to the status of the marked information vis-à-vis the *speaker’s knowledge*, while Position 2 and 3 forms mainly represent *speech-act functions* (i.e., an indication of how the speaker wants the addressee to feel about the information, its nature, and/or how it is being conveyed). However, it is neither absolutely clear that these functional descriptions exhaustively motivate the position classes, nor that one or the other functional type is strictly limited to one or another position class. Thus, while the functional descriptions given here may be taken as provisional hypotheses, it must be emphasized that a great deal more research on the

functions and distribution of declarative particles should be undertaken prior to making any very firm claims.

Examples (740)-(741) illustrate the position classes.

(740) *kellô naakù na mərəáat/...atú gonná*

kéK-lòo-nà = əə = kú na mərəáa atúu go = na = əə
flee-DOWN-NZR:SUB=TOP=CMPL DECL HEST portion IND=SLCT=TOP
deori gadə bəhì beṅkəm.

deori gadə bə = hì **ben = kə = m**
Deori.tribe group DST.DOWN=PTOP **EVID=INFO=RSOL**
POS1 POS2 POS3

‘Those who ran down here/...you know, now that I think of it, it seems that some of them may have been these Deori guys down there.’ (TB, OAM 322)

(741) *əgə, toləkə iinà dadə nàm.*

əgə toləkə ìi-nà = əə **(d)da(da) na = m**
HEST DST.LOC.ABL descend-NZR:SUB=COP.IPFV **RCUR DECL=RSOL**
POS1 POS2 POS3

‘So, in the same way, (you’re) also from up there.’ (TB, OAM 334)

13.3.2.1. Position 1

13.3.2.1.1. Reportative *juu*

Reportative *juu* marks information as having been in some way ‘reported’ to the speaker. This includes information which was overheard by the speaker, told directly to the speaker, signalled in some way to the speaker or to someone else, or which was in some other way *derived from the communicative performance of another individual*.

Reportative *juu* is followed by Informative particle *kə* more often than not, as in (742), but this is not a grammatical or semantic requirement, as (743)-(744) show.

(742) *dokên dó jú kə.*

dó-kèn-dó(o) **juu** kə
eat-GOOD/EASY-STAT **REP** INFO
‘They’re **said to be** tasty.’ TR, 14:100

(743) *jizí aló-ajò bə məədə məədə lakù jù naí.*

jizí aló-ajò = bə məədə məədə-là(a)-kù **juu** na = (ə)î
 man.old day-night=DAT think-REPT.1 think-REPT.1-NF-CMPL **REP** DECL=ETAG
 ‘**They say** the old man was thinking day and night.’ (TB, OAM 254)

(744) *ârə gò rolà...kâarə nammə jù.*

ârə = go rò-là(a) kâa-rò-nam = əə **juu**
 morning=IND sneak-NF look-THROUGH.HOLE-NZR:RLS=COP.IPFV **REP**
 ‘One morning he sneaked up and peeped in, **so it’s said.**’ (NyPB, LAT 310)

Reportative *juu* is the principal means in Galo of *reporting speech indirectly*, as in (743)-(744), although it also commonly marks a clause headed by direct speech reporting verb *əm-* ‘say; tell’ (745).

(745) *“iikâ pə lagí dù” əmlâa jù.*

ìi-kâa-pə lagí-dùu əm-là(a) **juu**
 descend-TENT-CTZR:IRR/OBLG want/need-IPFV say-NF **REP**
 “‘We’ll just have to go (down and) find out,’ he said.’ (TB, OAM 259)

When marking a verb of locution as in (745), it is often difficult to determine whether *juu* ‘REP’ is marking the information contained in the *speech report* as reported (*he said that, it is reported information*), or whether *juu* ‘REP’ it in fact marks the overall clause (including the speech verb) as reported information (*he said that, so they say*). In principle – according to my consultants – *both* interpretations are possible, and context seemingly enables listeners to know which sense of *juu* ‘REP’ is intended. However, since most examples in my corpus in which *juu* ‘REP’ co-occurs with a speech verb are found in folktales – in which, in principle, *all* information has been overheard – it has been difficult to isolate the condition using natural data; additional research is required.

The historical source of Reportative *juu* is unknown.

13.3.2.1.2. Evidential *ben*

Evidential *ben* marks information as inferred on the basis of evidence, usually of a physical nature, viewed as the tangible result of some event which the speaker did not himself witness or learn about in any other more direct way. *ben* is usually best translated

by English *seems*, except that, unlike the latter, it does not mark statements of deduction from facts. In (746), the speaker has not actually seen any ‘people’, but views light emerging from a house as a sign that people are likely to be present; failure to mark in *ben* would suggest that the speaker has in fact seen the people, or has some other more direct form of access to the information.

(746) *kaapâ gərəmǎ...akên gonnà mendú...*

káa-pàa-gərǎ = əm = əə = ˈ akên go = na = əə mèn-dùu = ˈ

look-ATTN-ACNC=ACC.TSUB=TOP=NF11 one IND=SLCT=TOP say-IPFV=NF11

aló á jíúǎk duudà bèn.

aló áa jíi = əkə dùu-dó(o) **ben** = ˈ

DST.LOC.SLEV DST.SLEV person=IDEF.PL stay-STAT EVID=NF12

‘After they saw (the lit-up house), one of them said, “**it seems that** some people are over there.”’ (IR, FA 014)

13.3.2.1.3. Uncertainty *pə*

‘Uncertainty’ *pə* indicates that the speaker is uncertain of the truth of the marked assertion, but is prepared to assert its possibility or plausibility, probably on the basis of deduction from facts (rather than from evidence, e.g.). *pə* ‘UCRT’ is most often translatable via English *may* or *might*. In (747), marking in *pə* ‘UCRT’ allows the speaker to assert his belief that ‘chopping’ is a real possibility, but at the same time his uncertainty that it will indeed come to pass; failure to mark in *pə* ‘UCRT’ would indicate that the speaker has full confidence in ‘chopping’ coming to pass, and imply that he has some inside or firsthand knowledge that allows him to speak with certainty.

(747) *“hók intà boolò, parǎ pə; ák intà boolò,*

hokə ín-tà-boolo pá-rǎ **pə** akə ín-tà-boolo
SPRX.ABL go-INCP-COND chop-IRR UCRT DST.ABL.SLEV go-INCP-COND

parǎ pə paadǎmǎ.”

pá-rǎ **pə** paadám = əə

chop-IRR UCRT Paadam.tribe=TOP

‘If we go by this way, they **may** get us [i.e., kill us by chopping with a machete]; if we go by that way, they **may** get us, the Paadam.’ (TB, OAM 256)

Uncertainty *pə* is quite probably related to Irrealis complementizer *-pə* (§16.6.2.1);

both may ultimately reflect PTB nominalizer **pa*.

13.3.2.1.4. Mirative *la(a)ka*

Mirative *la(a)ka* indicates a speaker attitude of surprise or astonishment, usually at the information reported in the marked clause, but potentially also at the addressee in connection with some aspect of the marked information. In (748), the speaker is reacting in astonishment and disapproval at an event unfolding as he speaks, of which the addressee was also an uninvolved witness. In (749), the speaker is not astonished at his own ‘speaking’, but rather at his addressee for his lack of awareness in asking him to discuss something which has already been discussed.

(748) *azên gə jesì tîdû lakà!*

azên = gə jesì tî-dûu **la(a)ka**

friend=GEN urine imbibe-IPFV **MIR**

‘(The pig) is drinking his friend’s urine, **of all things!**’ (TZ, OL15:17)

(749) *əgəm, əgəm, mēnto bá laká!*

əgə-m əgə-m mèn-tó-báa **la(a)ka**

ANAP.IND-ACC ANAP.IND-ACC speak-PFV-PFV.DRCT **MIR**

‘**What are you talking about**, I already talked about all that!’ (NyR, MDS 062)

la(a)ka exhibits the irregular but pervasive process of Phrase-medial truncation (§4.1.5.2), and is realized [laka] in the overwhelming majority of attestations. The longer form [laaka] has only been attested in a verbless clause, as *aúm go = la(a)ka* ‘three IND=MIR’ ‘What do you know, there’s three of them!’ (realized [aúm golâaka], with second syllable position licensing the long realization; for details, see §4.1.5.2). The etymology of *la(a)ka* is uncertain, although given its morphophonological behaviour it is reasonable to suspect an initial proto-formative in Non-final suffix *-lâ(a)*.

13.3.2.1.5. Predictive *lapə*

Predictive *lapə* is a seeming extension of modal complementizer of Conjunct intentional inflection *-lapə* (§12.4.2.8). Its function is to cast information as outside the

speaker's direct experience, but about which the speaker is prepared to make a *prediction* of truth on the basis of personal knowledge and judgement (750).

(750) *ŋə̀ə̀kə...aɦ́gə́...hobîn-hoə́ ɲûm kulə́ pə̀ŋpò.*

ŋə̀ə̀-kə aɦ́ = gə hobîn-hoə́ ɲûm kú = **lapə̀** = ɲo

1.REFL-GEN self=GEN goat-cattle DLMT CMPL=**PRD**=CEXP

‘(If anything may come to destroy our fields) it **will** only turn out to have been our own livestock.’ (LN, GMW 079)

Predictive *lapə̀* appears to be a recent development in Galo ultimately deriving from a process of desubordination; this is discussed in §16.6.2.2.2.

13.3.2.1.6. Recursive (*d*)*da*(*da*)

Recursive (*d*)*da*(*da*) indicates that the event/state depicted in a clause is occurring ‘again’, as a precise *repetition* of a previous event/state. Recursive (*d*)*da*(*da*) exhibits the same gemination and (morphological) repetition conditions described with regard to its noun phrase-marking counterparts discussed in §13.2.2.5 (751).

(751) *pôol pikèn kokîbə ɲó tîrə kuddá.*

poolò pì-kèn kookî = bá ɲó tîr-rə-kú = (**d**)**da**(**da**)

month CLF:SPHERE-one back.side=DAT 1.SG imbibe-IRR-CMPL=**RCUR**

‘After one month, I’ll start smoking **again**.’ (MN, OL16:91)

13.3.2.1.7. Purposive *əmlàa*

Purposive *əmlàa* compositionally reflects *əm-là(a)* ‘say-NF’, in the anaphorically-referring, complementizer-like function of this verb which is described more generally in §16.7. As a seemingly recently-evolved particle, *əmlàa* occurs clause-finally, and also as a marker of cleft/focal NPs. While at least some clause-final uses, such as in (752), could conceivably be analysed as syntactically compositional (and the overall construction therefore bi-clausal), it is clear that the particle analysis is required for examples like (753). In *no other case* can a non-final predicate or clause license a cleft/focus structure, which is a function open only to syntactic particles in Galo; (754) demonstrates the ungrammaticality of a non-final predicate in *r̥-* as focalizing particle of a cleft structure. For discussion of the syntax of cleft/focus constructions, see §9.4.

(752) *nó ín-lapè əmlâi?*

nó ín-lapè əmlàa/əm-là(a)=ì
 2.SG go-CTZR:PURP/INTN PURP/say-NF=PQ
 ‘It’s that/you say you want to go, is it?’ (BcR, EM 20-3-07)

(753) *nó silapatár bolò jôo əmlà insá?*

nó silapatar bolò [jôo əmlàa]_{FOC} ín-há = əə
 2.SG PLACE DST.LOC.DOWN what PURP(*say.NF) go-NZR:IRR=TOP
 ‘For what purpose (*saying what) are you going down to Silapathar?’ (lit., ≡ ‘It is for what purpose (that) you are going down to Silapathar?’) (MN, B5:103)

(754) **nó silapatár bolò jôo rîlà insá?*

nó silapatar bolò [jôo rî-là(a)] ín-há = əə
 2.SG PLACE DST.LOC.DOWN what happen-NF go-NZR:IRR=TOP

13.3.2.2. Position 2

13.3.2.2.1. Simple declarative *na*

Simple declarative *na* ‘DECL’ is one of the most frequent Lare Galo morphemes.²⁴⁶

When following the inflected predicate of a final clause or a copula, it has the basic speech-act functional value ‘I’m telling you this’. While not grammatically obligatory on a declarative clause per se, its use appears to communicate the speaker’s confidence in the validity of his assertion, and to enhance the addressee’s confidence in the speaker’s knowledge accordingly (755). Simple declarative *na* marks appositive declarative clauses more often than it does not in my corpus; it may be that *na* is in the process of developing as a marker of the appositive clause focus (cf. §9.4).

(755) *ŋôk áb bulù censâe nà.*

ŋó-kə abó bulù cèn-há = ee **na**
 1.SG-GEN father 3.PL know-NZR:IRR=COP.PFV **DECL**
 ‘My father and his bunch would have known.’ (LN, MF 131)

²⁴⁶ My impression is that Simple declarative use is more widespread in Lare than in Pugo Galo. Early in my fieldwork, when I was sometimes working with Lare and Pugo speakers simultaneously, I found that disagreements would sometimes arise over Simple declarative particle use, with Lare speakers often dispreferring Pugo declarative sentences which more often lacked a declarative particle, and vice versa. Future comparative research must determine whether this impression is statistically borne out.

Although use of Declarative *na* seems intimately associated with speaker confidence in an assertion, it is *not* a marker of first-hand or directly-experienced knowledge. For example, it is common to find Declarative *na* following a Reportative or Evidential particle, as in (743).

It is also possible for a clause or phrase marked in Declarative *na* to be followed by an ‘Emphatic tag’ particle *(ə)î* (§13.5.1). Use of *na* in this very common means of forming a polar question has the effect of casting a declarative clause as the speaker’s best guess, about which his confidence is high, but which nevertheless for some reason requires listener confirmation (perhaps as though simply to confirm that the listener is in agreement) (756).

(756) *əə, modêk modêk là nai.*

əə *mò-dèk* *mò-dèk-là(a)* **na** = *(ə)î*
 AFF make-DIFFERENT make-DIFFERENT-NF DECL=ETAG
 ‘Right, **you mean** (to say that they were) changing and changing it, eh.’ (MK, LW 019)

Declarative *na* is the most frequent marker of a *declarative cleft/focus construction* (§9.4), particularly when the marked noun phrase is the focal rejoinder to a cleft interrogative (757).

(757) *A: nó jòolo là ìnkò? B: ací bogín gə*

nó *jòo* = *lo* **laa** *ín-kò* = *əə* *ací* *bogín* = *gə*
 2.SG what=LOC CQ go-NZR:LOC/OBL=TOP elder.brother NAME=GEN
nám álo nà ìnkò.

namá *alò* **na** *ín-kò* = *əə*
 house DST.LOC.SLEV DECL go-NZR:LOC/OBL=TOP
 A: ‘Where have you been?’ B: ‘I’ve been to Aci Bogin’s house.’ (MN, OL19:58)

Declarative *na* may derive historically from the combination of Subject nominalizer *-nà* with a following copula *əə*, a pattern with which it exhibits almost complete surface homophony as well as semantic resemblance (cf. §15.3.2.2). However, that they are synchronically distinct when occurring at the right edge of a declarative clause is demonstrated by their co-occurrence in examples like (758). In this complex expression, the initial subject nominalizer-copula sequence casts the information as a fact. The Reportative particle then casts it as something that the speaker overheard. Finally, use

of the Declarative particle marks the overall clause as something about which the speaker him- or herself is confident. Schematically: *it is so that it is said that it is so*.

(758) “*ηό taníi gó inlám ból doodó kulà,*

ηό taníi = gə ín-lám bólò dóo-dó(o)-kú-là(a)
1.SG human=GEN walk-NZR:WAYPOINT DST.LOC.DOWN lie.down-STAT-CMPL-NF
bìè mēḡku booló... ηό cēnrə kú,”

bìi = əə mēn-kú-boolo ηό cēn-rə-kú
3.SG=TOP speak-CMPL-COND 1.SG know-IRR-CMPL
əmlà...doodó naajù nà.

ám-là(a) dóo-dó(o)-**nà = əə = juu na**
say-NF lie.down-STAT-NZR:SUB=COP.IPFV=REP DECL
“Lying there in the path of Man, if he speaks, then I’ll know (my name),” he said,
and thus he lies there, so it’s said. MK, TT 260

Finally, it is very common in everyday Galo discourse to encounter final clauses which end in the sequence *na na*, and which have the effect of *softening the declarative force* of the expression, as when a speaker wishes to politely inform someone of something which they might not necessarily have been expected to know. Such sequences appear to be analysable as cases of final clausal nominalization in *-nà = əə* ‘-NZR:SUB=COP.IPFV’ – with the nominalized predicate standing in CC function (§15.3.2.2) – followed by a clause-final Declarative particle *na* ‘DECL’, according to the basic pattern exemplified in (758). However, it is not altogether clear that the pragmatic value of declarative *softening* is directly derivable from this composition. It may be that a distinct form *na na* ‘Soft/polite declarative’ is either incipient or has already evolved (759).

(759) *kaík-rapkòm cìn dá...allîb*

kaík-rapkò = əəm cìn da allîi = bó
fireplace.shelf.upper-fireplace.shelving.complex=ACC ADD CNTR well=AVZR
motè kâ əmdû nà ná.

| | | | |
|----------------|-------------------|----------------------------|----------------------------|
| mò-tó | káa] _E | [ám-dùu- nà = əə | na] _{PRED} |
| make-IPTV.ODIR | HORT.ADVS | tell-IPFV-NZR:SUB=COP.IPFV | DECL |
| | | ám-dùu na | na |
| | or | tell-IPFV DECL | DECL |

‘[I’ve been telling Tuka that...that should there be any (leftover) beams and such...(…)] that he should also (use them to) make a fireplace shelving complex up nicely, **you see what I mean?**’ (IR, HC 021)

13.3.2.2.2. Admonitive *né*

Admonitive *né* has identical distribution to simple Declarative *na*, as well as basic declarative functionality. However *né* carries an additional overtone of *admonishment* of the addressee, in effect entailing a claim that the speaker believes the marked information to run counter to some *incorrectly held mental state of the addressee*. In (760), the addressee has incorrectly followed a previous instruction. Use of *né* in this case communicates the speaker's impatience with the addressee's behaviour. In (761), *né* marks a focal NP as a correction of an earlier misstatement of the addressee's, and also indicates the speaker's belief that the addressee should have known the information, and shouldn't have to be told. See also (737), in which use of *né* indicates speaker reaction against his addressee's perceived intentions.

(760) *əmbə móo né!*

əmbə móo **né**
 ANAP.PADV COP.NEG **ADM**
 'No, not like that!' (IRd, MPO 067)

(761) *mərûm né hukkò.*

mərûm **né** hú-kò = əə
 last.night ADM wash.body-NZR:LOC/OBL=TOP
 'Don't you see, yesterday is when I bathed.' (IR, OLB4:56)

13.3.2.2.3. Counterexpective *jo*

Counterexpective *jo* marks information as counter to, contrary to, the opposite of, or otherwise inconsistent with a standing expectation (whether the expectation is held by the speaker himself or is presumed by the speaker to be held by an addressee). Often, use of *jo* gives a sense that the speaker is *correcting an error* someone else has made. When marking information uttered in immediate reaction to some concurrent state of affairs, *jo* can also have a mirative overtone (762)-(764).

(762) *ŋó “caaci” əmɪ́ mǎ ɲò!*

ŋó caaci əm-nam = əə ɲo
 1.SG elder.brother(<Hin) say-NZR:RLS=COP.IPFV CEXP
 ‘No, I said “caaci” (not “caaca”, as you had claimed).’ (MN?, OLB9:3)

(763) *okǎ, homenə, homén əmdà kaapâa má, alləm*

okkǎə homén = əə homén = əəm da kǎa-pâa-máa alə = əəm
 SCNJ tiger=TOP tiger=ACC CNTR look-ATTN-NEG footprint=ACC
ɲûmɲo.
 ɲûm = ɲo
 DLMT=CEXP
 ‘We didn’t see the tiger **in the end**, though, just his footprints (**contrary to what had been anticipated**).’ (RmR, CC 044)

(764) *buləm, jûbmotə là...dorâa hikubée jú ɲò.*

bulə = əəm jûp-mò-tó-là(a) dó-râa-hí-kú-bée juu ɲo
 3.PL=ACC sleep-APPL:CAUS-PFV-NF eat-ISOL-REFL-CMPL REP CEXP
 ‘He let them sleep and **in fact** he ate by himself, they say (**whereas it had been feared that he would eat them**).’ (TR, FA 085)

Counterexpective *ɲo* has the ability to mark cleft/focal NPs; its etymology is unknown.

13.3.2.2.4. Contrarative *kǎ?*, Simple informative *kǎ* and Sympathetic informative *kəmə*

Contrarative and Simple informative particles *kǎ?* and *kǎ* are seemingly related, and might be viewed as a unified form with two expressive variants. That said, my consultants have usually viewed their functions as distinct. The more frequent of the two is Contrarative *kǎ?*, which usually marks a statement as a *contradiction* of a previous statement of the addressee’s (765), or else more generally as a *view to the contrary* of some viewpoint or opinions of the addressee’s (whether they are actually stated or just construed as such by the speaker) (766).

(765) *A: lâatka əmbée tù. B: əmmaí kǎ?!*

lâa-tó = kǎa əm-bée = tu əm-máa = (ə)í kǎ?
 take-IPTV.ODIR=ADVS tell-EPF=ARVL tell-NEG=EMPH CTRY
 ‘A: I certainly told you to get some (betelnut). B: **No**, you didn’t!’ (RmR/AO, CC 078)

(766) *əgəm, iza...ɣunnəm...jaamée gaddə, mēnzi lacìn*

əgə = əəm izzàa ɣunù = əəm jaamé gadə = əə mēn-zí-la(a)cìn
ANAP.IND=ACC now 1.PL=ACC boy group=TOP say-BEN-CONC
mənə garɣbəî tadâkku.

mə-nà garɣ = bə = (ə)í tá-dàk-kú
lie-NZR:SUB resemble=SBRD=EMPH listen/hear-COS-CMPL

korûmgə rinəmə əmbə rɪbbée kəʔ!

korùm = gə rì-nam = əə əmbə rì-bée **kəʔ**
anceints=GEN do-NZR:RLS=TOP ANAP.PADV do-EPF **CTRY**

‘Nowadays, even if we tell about this sort of thing, young people listen to it just as though we were liars. The things that happened in the old days **actually did** happen like that!’ (NyR, MDS 111-112)

Informative kəʔ has no such contrarative sense. Very often, it follows Reportative particle *juu*, in this function, the labialism of the Reportative particle rhyme [uu] often spreads over to the Informative particle, surfacing as a labialization of the velar stop release, as [juu kʷə]. This is a seemingly irregular, possibly subdialectal phenomenon found mainly in the speech of some of my older consultants; its motivation is not yet fully understood. Informative *kəʔ* is rarely if ever directly translatable via overt English expressions; some of my consultants claim that its “meaning” is something like ‘here is your information’ (767)-(768).

(767) *kellô naakù na mərəáat/...atú gonná*

kéK-lòo-nà = əə = kú na mərəáa atúu go = na = əə
flee-DOWN-NZR:SUB=TOP=CMPL DECL HEST portion IND=SLCT=TOP
deorí gadə bəhì beŋkəm.

deori gadə bə = hì ben = **kəʔ** = m

Deori.tribe group DST.DOWN=PTOP EVID=INFO=RSOL

‘Those who ran down here/...you know, now that I think of it, it seems that some of them may have been these Deori guys down there.’ (TB, OAM 322)

(768) *əmbə, rɪbbé jú kʷə, korûm nai.*

əmbə rì-bée juu **kəʔ** korùm na = (ə)ì
ANAP.PADV happen-EPF REP **INFO** ancients DECL=ETAG

‘That’s how they say it happened, in ancient times, right?’ (TB, OAM 123)

Sympathetic informative *kəmə* marks information which is viewed as contrary to what the addressee is thought by the speaker to have hoped-for. It carries an additional implication that the speaker is *in sympathy with the addressee’s* inability to either find out

some particular information or obtain a particular result (769)-(770). The initial formative of Sympathetic informative *kəmə* seems to be cognate with either or both of Contrarative *kəʔ* or Simple informative *kə*, however the status of the final formative(s) is unknown.

(769) *dip' gə amîn-mennəməm jôocin allîb...*

dipə = gə amîn mèn-nam = əm jòo = cìn allî = bə
 PLACE=GEN name speak-NZR:RLS=ACC what=ADD well=AVZR
mərāa maakə mə.

mərāa-māa = **kəmə**

whatever-NEG=INFO.SYM

‘Where the name of Dipa (village) comes from, look, I’m...really not (sure) **either.**’ (LN, MF 120)

(770) *áah! sigarét kaamá kəmə!*

aah sigaret káa-māa **kəmə**
 IJEK cigarette(<Eng) have/exist-NEG INFO.SYM

‘Aah! (**No, I can’t give you a cigarette because**) there are no cigarettes about (**and I too have been looking for one!**)’ (MN, T15:52)

All three informative particles are capable of marking a cleft/focal NP, although this use is rare. There is also a possibility of cognacy with consent interjection *kəə* ‘okay’ (§13.7.3).

13.3.2.2.5. Assertive *da*

Assertive *da* is a possible cognate of Contrastive *da* (§13.2.2.4); while the former is mainly found marking a predicate/clause, the latter more usually occurs as an NP-marker, and the semantic difference between them could accordingly be a function of context. That said, at least some of my consultants insist that their senses are distinct, and they are therefore treated separately here.

The basic sense of Assertive *da* is to mark information as the speaker’s *best guess* or *assertion*, in a context where a point of uncertainty is known to exist, and when multiple potential alternatives are by implication available. In (771), the speaker draws a conclusion that an inanimate object lying across his path is in fact (most likely) a chameleon.

(771) *hooz̥h̥ z̥ipóo gonná dà!*

hooz̥h̥ z̥ipóo go = na = əə **da**
 chameleon plump.one IND=SLCT=COP.IPFV **ASRT**
 ‘(Oh! I reckon) it’s a fat old chameleon!’ (MK, TT 262)

More often than not, Assertive *da* follows Evidential *ben*, with which it may be in the process of fusing as a unit. While a clause in simple Evidential *ben* has a “non-committal” feel, as though the speaker were simply presenting information for which there is evidence, but whose veracity he may well doubt himself, further marking in *da* establishes the speaker’s commitment to belief in its truth, as though the evidence seen were viewed by him as irrefutable (despite his having had no direct access to experience of the depicted event). As such, simple *ben* might be used in a case when the speaker is himself pondering a question, and may invite a rejoinder from someone with better access to information, while *benda* might be used in a case when the speaker considers himself to be in a relatively better position to present the case. In (772), the speaker has seen the person in question with wet hair, supposes that this can only indicate that she has bathed, and, knowing well that his addressee has *not* seen the evidence (since he has just arrived and asked for the person’s whereabouts), believes himself to be in a good position to make a confident assertion.

(772) *b̥h̥ is-hukáa bendà.*

b̥h̥ is̥i-hú-káa ben = **da**
 3.SG water-wash.body-PF EVID=**ASRT**
 ‘(I’ve come to the conclusion that) she seems to have taken a bath.’ (ZR, C2:35)

13.3.2.2.6. Exhortative *dê* and Concessive exhortative *dê*

Exhortative *dê* is found widely throughout Arunachali languages, as well as in much of Upper Assam (and elsewhere in India), and there is uncertainty over its origin and direction of borrowing;²⁴⁷ whatever the facts may be, it is clearly a salient, useful and readily loaned form. In Galo (as also in the Mising and Boro dialects spoken nearby to the Galo area), the function of *dê* ‘EXHR’ is basically one of *prodding* or *exhorting* an

²⁴⁷ Some of my consultants believe *de* to be a reduction of Galo *ədê*, a supposed interjection which I have not myself attested in natural speech, and whose properties I have been unable to research. It seems, however, that the latter form (to the extent that it in fact occurs in modern Galo), could also be analysable as *əə = de* ‘COP.IPFV=EXHR’, which would reopen the question of the ultimate origin of *de*.

addressee to agree with the speaker or to consent to a proposal or command set forth by the speaker. *dê* ‘EXHR’ also frequently combines with Emphatic tag *(ə)ì* to form a relatively insistent type of polar question, with a strong implication that the speaker believes the addressee will or should respond positively (773)-(774).

(773) *əgə...nunnəm ɲó doojĩgo ɦĩzĩrə dêi.*

əgə nunù = əəm ɲó doojĩ = go ɦĩ-zĩ-rə **dê = (ə)ì**
 HEST 2.PL=ACC 1.SG story=IND narrate-BEN-IRR **EXHR=ETAG**
 ‘So...I’ll tell y’all a story, **hey**.’ (IR, FA 007)

(774) *kanôo rəm mentò, dê.*

kanôo-rə = əəm mèn-tó **dê**
 hungry-IRR=ACC.TSUB speak-IPTV.ODIR **EXHR**
 ‘If (you) get hungry, just say so, **got it?**’ (KZ, OL10:25)

Concessive exhortative dê is seemingly related to Exhortative *dê*, although it is considerably less frequent. It marks information which is conceded as revealing a *gap in the speaker’s knowledge* or fact contrary to the speaker’s beliefs or expectations, while simultaneously seemingly exhorting the addressee to agree (775)-(776).

(775) *òo, nôk rokciyə aldù dêi.*

òo nó-kə rokciyə = əə alə-dùu **dê = (ə)ì**
 oh! 2.SG-GENknife=TOP good-IPFV **EXHR.CONC=ETAG**
 ‘Oho, your knife’s **actually** pretty good, isn’t it.’ (IR, OLxx)

(776) *cenmâa dei.*

cèn-mâa **dê = (ə)ì**
 know-NEG **EXHR.CONC=ETAG**
 ‘You know, I **actually** don’t know.’ (MN, OLxx)

Neither Exhortative particle has the ability to mark a cleft/focal construction.

13.3.2.3. Copula/appositive

Some particles with declarative functions occur primarily or exclusively following copula and/or (other) appositive/verbless clauses. Some may also mark focal constituents of cleft/focus constructions, but most cannot or do not generally follow finite, inflected predicates. Copula/appositive particles do not generally co-occur with other particles, or with one another. The forms are listed in Table 13.6.

| Form | Gloss | Reference |
|---------------|----------------------|-------------|
| <i>la</i> | Assurance | §13.3.2.3.1 |
| <i>ji</i> | Discovery | §13.3.2.3.2 |
| <i>jina</i> | Indirect declarative | §13.3.2.3.3 |
| <i>jino</i> | Direct declarative | §13.3.2.3.3 |
| <i>maaco</i> | Tag rejoinder (1) | §13.3.2.3.4 |
| <i>maabə</i> | Tag rejoinder (2) | §13.3.2.3.4 |
| <i>maadii</i> | Tag rejoinder (3) | §13.3.2.3.4 |

Table 13.6 – Copula/appositive clause-final particles

13.3.2.3.1. Assurance *la*

Assurance *laa* has been attested following copula clauses (777) and/or predicative clauses under clausal nominalization, as well as predicative clauses with a following Predictive particle *lapə* (see §13.3.2.1.5) (778).²⁴⁸ Its basic function is to *assure an addressee that the marked information is the case*, or that the set of events described in the clause will indeed come to pass or prove to be the case, despite any misgivings he or she may have.

- (777) “*jôolo*” *əmnəmé*, “*aó (...)* *isì...mərəáa*, *abúu...luujír gə...*
 jòo = lo əm-nam = əə aó isì mərəáa abúu luujír = gə
 what=LOC say-NZR:RLS=TOP HDST.SLEV water HEST river riverbed.edge=GEN
əttám odòo rûuko ahì...jublâa
 əttám odòo-rûu-kò áa = hì jùp-là(a)
 cliff.sloping far-CERT-NZR:LOC DST.SLEV=PTOP sleep-NF
doodée naalâ.”
 dóo-dée-nà = əə **laa**
 LOC.EXIS.ANIM.LYING-PROS-NZR:SUB=COP.IPFV ASSR
 ‘(Paako Tai) having asked him “where”, (Abo Tani replied) “she’ll be there...umm...sleeping over on the high point of this cliff along the riverbank there, **you’ll see.**”’ (MK, TT 069)

²⁴⁸ Why Predictive *lapə* should license a following Assurance particle is unclear, but may at least in part be related to the earlier occurrence of *(la)pə* as a nominalizer, if the etymology discussed in §12.4.2.8 is accurate. Semantically, of course, the co-occurrence makes a certain amount of sense.

(778) *telefún aaró lapò là.*

telefon áa-ró lapò **laa**

telephone(<Eng)come-IRR PRD ASSR

‘The telephone will ring, **you’ll see.**’ (ZR, OLC2:37)²⁴⁹

Assurance *laa* seems to be cognate with Non-final suffix *-là(a)* ‘NF’ (§16.4.2)

and/or Nominal conjunction *laa* ‘NCNJ’ (§6.2.3). A few of my consultants have suggested it may have arisen from the sense ‘and (you’ll see)’, with a following clause ellipsed and its implied sense transferred to the erstwhile coordinator. However, it is important to note that, at least in modern Lare Galo, there is no marked intonation such as would imply synchronic clause-ellipsis.

Assurance *laa* has not been attested as a marker of cleft/focus constructions.

13.3.2.3.2. Discovery *ni*

‘Discovery’ *ni* follows a noun phrase or copula. It marks information as *previously unknown* (whether to the speaker or to a third person whose thoughts the speaker is modelling, as in a folktale) and/or *unexpected* and which has *just been discovered*, or which some unfolding set of circumstances (including a process of deduction) suggest to probably be the case. As such, it may also have a mirative overtone, expressing a shock-like reaction to an unfolding and/or unanticipated state of affairs. ‘Discovery’ *ni* has been attested as a marker of cleft/focus constructions; however, it *cannot* follow finite/inflected predicates/clauses. It may be variously translated as ‘it turned out that *x*’, ‘(he) found/discovered/realized that *x*’ or ‘it thus seemed that *x*’.

In (779), *ni* marks an assertion whose truth or falsity is unknown to the speaker, but which he realizes to be plausible by way of a process of deduction. In (780), *ni* marks information which was previously unknown to the protagonist of the story, and which has just been discovered by him.

²⁴⁹ Note that **telefún aaró la*, in which the Predictive particle does not occur, is ungrammatical.

(779) *əgə...məənəmá...cainá arâa tòl eejí.*

əgə mǎə-nam = əə caina arâa tolò ee = **ji**
 ANAP.IND think-NZR:RLS=TOP China(<Eng)inside DST.LOC.UP COP.PFV=**DISC**
 ‘So this...if you think about it...**must** have taken place up in China.’ (TB, OAM 125)

(780) *occíkgo bəətá là, bəəm...uŋŋâa bəm kîl*

occík = go bǎə-tó-là(a) bəə-m uŋŋâa bəm kîl-là(a)
 knife=IND carry/hold-PFV-NF HDST.DOWN-ACC baby DST.DOWN-ACC slice-NF
dodûu kunà jî.
 dó-dûu-kú-nà = əə **ji**
 eat-IPFV-CMPL-NZR:SUB=COP.IPFV **DISC**
 ‘Taking a knife, she slices off a piece of the baby and eats it, **it turns out.**’ (NyPB, LAT 311)

The etymology of ‘Discovery’ *jî* is unknown.

13.3.2.3.3. Direct and indirect declaratives *jino* and *jina*

Particles *jino* and *jina* both occur following predicative noun phrases and/or copula clauses exclusively, and seemingly mark an assertion as *certain*, based on *direct* and *indirect* knowledge respectively. Somewhat awkwardly, *jino* may be translated as ‘this is definitely *known to me* to be the case’ and *jina* as ‘this is definitely *believed (by someone)* to be the case’ (781)-(782). Neither may mark a finite/inflected predicate or clause, and neither may mark a cleft/focal constituent. It is plausible to suppose that the initial formative of both *jino* and *jina* is cognate with Discovery *jî*, however most of my consultants do not recognize a contemporary semantic/functional relationship.

(781) *pâk kunəmə jino.*

pá-kə-kú-nam = əə **jino**
 chop-TO.DEATH-CMPL-NZR:RLS=COP.IPFV **DECL.DIR**
 ‘In the end, we killed him, (**I say**).’ (NyR, MDS 109)

(782) *tól ée jínà.*

tolò ee jina

DST.LOC.UP COP.PFV DECL.IDIR

‘It is definitely said to have happened up there.’ (IR, C1:117)

13.3.2.3.4. Tag rejoinders *maaco*, *maadii* and *maabə*

A set of ‘Tag rejoinders’ *maaco*, *maadii* and *maabə* all seemingly bear a reflex of Copula negator *máa*, with final formatives appearing to reflect a reduction of *com* ‘Guess’ (§13.3.3.4), *dii* ‘Wonderment’ (§13.3.3.4) and Dative/Adverbializer *bə* (§16.5.1) respectively. All are attested following copula clauses, some predicative noun phrases (verbless clause complements), and cleft/focal NPs. Each has also been attested following non-nominalized finite/inflected clauses, but some other speakers claim such uses to be ungrammatical and/or as reflecting innovative or sloppy usage. Each of *maaco*, *maadii* and *maabə* carry a sense of *invitation to a rejoinder expressing agreement with the speaker’s assertion*, and may be translated by English ‘isn’t it’ or ‘is it not so’. A clear semantic/functional contrast has not yet been identified, however a difference may exist in the degree to which the speaker believes his assertion is or is not potentially subject to question or doubt.

In (783), the speaker first begins a sentence, then, realizing he has left out several important details, decides to backtrack to an earlier point in the narrative and proceed from there. Use of *maadii* here serves to check that his addressees are following him.

(783) *taníi anə, korùm hí-ée-nà, əə...taníi anə...*

taníi anə korùm hí-ée-nà əə taníi anə
NAME mother ancients die-IPFV.DISJ-NZR:SUB HEST NAME mother
duunà maadii.

dùu-nà = əə

maadii

LOC.EXIS.ANIM-NZR:SUB=COP.IPFV **isn’t.it.so**

‘Tani’s mother in the old times passed aw/...aah...**Is it not the case that** Tani’s mother...was still alive.’ (MK, TT 056)

In (784), the speaker is presenting a hypothetical example in which he establishes a particular ‘starting point’ on a timeline; use of *maaco* here serves to check that the addressee has understood and is following his purpose.

(784) *izà, startiŋ-pointé maacò î?*

izzàa startiŋ.point = əə **maaco** (ə)î
 now starting.point(<Eng)=COP.IPFV **isn't.it.so** ATAG
 'Now, **we can suppose** it's the starting point, eh?' (TK, OLC2:51)

Finally, in (785), which illustrates the use of tag rejoinders as a focus particle, *maabə* strongly exhorts the addressee to agree with the speaker's assertion.

(785) *nó tättə maabə tīgēe kò!*

[nó tättə **maabə**] [tīi-gée-kò = əə]
 2.SG nothing.but **isn't.it.so** imbibe-PFV.DISJ-NZR:LOC/OBL=TOP
 'Was it not you and you alone who smoked up (all the cigarettes)!' (MN, OLT17:52)

13.3.2.4. Position 3: Resolutive *m*

Position 3 is open only to a single form *m* 'Resolutive'. Resolutive *m* can seemingly follow any major constituent, and any other particles which obtain to it, although it has not been attested in every possible environment as of this writing, and cannot alone mark a cleft/focused NP. It seems to have a core sense of *speaker resolve*. Following an imperative clause, it expresses either impatience with the addressee for not having already done the commanded action, or otherwise indicates that the speaker is unwilling to countenance any hesitation or disagreement on the part of the addressee; imperatives in Resolutive *m* are commonly spoken by parents to their children, as in (786).

(786) *nó cōg aatə kēm.*

nó hogò áa-tó = kée = **m** = _
 2.SG SPRX.LOC come-IPTV.ODIR=HORT.POL=**RSOL**=FI
tatə kēm.
 tá-tó = kée = **m** = _
 listen-IPTV.ODIR=HORT.POL=**RSOL**=FI
 'You come here, **see**. Listen to this.' (IR, FA 002)

Following a *declarative* clause, Resolutive *m* serves to mark information as a *clear and straightforward fact*, often with the implication that the addressee should understand it without any difficulty, would have no real basis for questioning it, and may be under admonishment for not already knowing it or perhaps doubting it. In (787), use of

m reflects the speaker's surprise and annoyance at his addressee for having asked what a *pəzək* bird is, since he's quite sure than the addressee knows of the bird, and should therefore know its name.

(787) *pətá, pəzək... “koík!” əmnám (...) doogúm*

pətáa pəzək koík! óm-nà = əə = m doogúm
bird bird.variety ONOM say-NZR:SUB=COP.IPFV=RSOL thunder
gumrám, “koík!” əmdə lakam.

gúm-rə = əəm koík! óm-dó(o) la(a)ka = m
thunder-IRR=ACC.TSUB ONOM say-STAT MIR=RSOL

‘A pezek bird is the one that says “koík!” **as you ought to know**; (...) when thunder rolls it for some reason says “koík!”, **right**.’ (NyPB, LAT 058)

(787) also demonstrates a subtle point in the parsing of Galo noun phrase grammar, which is the underlying homophony of both Subject nominalizer *-nà* and Declarative particle *na* when followed by Resolutive *m* with Realis/Non-subject nominalizer *-nam* (in (787), the copula *əə* is underlyingly present, but phonetically neutralized following regular morphophonological processes (cf. §4.3). In fact, it is quite likely that Resolutive *m* and the final etymological formative of Realis/Non-subject nominalizer *-nam* reflect a PT object marker **m*, and the remaining formatives in [na] are possibly likewise cognate (§15.2.2). However, that Realis/Non-subject nominalizer *-nam* is *not* reflected in (787) can be shown by a variety of facts, including lack of Genitive marking on the copula subject *pətáa pəzək* (if *əmnám* were a Non-subject nominalization, *pətáa pəzək* would thus have to be analysed as the subject of a relative clause, which obligatorily takes Genitive marking in Galo; see (§15.3.1), and the parallelism with the following clause in *laaka*. A second example, now employing Declarative *na*, is given by way of further illustration; in (788), note that Realis/Non-subject nominalizer *-nam* can never occur following a nominalizer or a copula (first clause), nor can it follow a noun phrase of any kind (second clause).

(788) *tôləkə iinâa nàm, borîi əəcîn*

tolokə ìi-nà = əə = na = **m** borîi əə = cîn
 DST.ABL.UP descend-NZR:SUB=COP.IPFV=DECL=**RSOL** Borii.tribe TOP=ADD
nàm.

na = **m**

DECL=**RSOL**

‘They’re **simply** ones who came down from up there (in the north), the Bori as well, **see.**’ (TB, OAM 188)

13.3.3. Interrogative

This section describes particles which occur primarily or exclusively on polar and/or content interrogative clauses (Table 13.7).

| Form | Function | Reference |
|--------------|--------------------------|-----------|
| <i>ree</i> | Polar interrogative | §13.3.3.1 |
| <i>laree</i> | Dubitative | §13.3.3.2 |
| <i>rem</i> | Assumptive interrogative | §13.3.3.3 |
| <i>bəree</i> | Conjectural | §13.3.3.4 |
| <i>dîi</i> | Wonderment | §13.3.3.4 |
| <i>com</i> | Guess | §13.3.3.4 |
| <i>laa</i> | Content interrogative | §13.3.3.5 |
| <i>lə</i> | Clarifying interrogative | §13.3.3.6 |

Table 13.7 – Interrogative particles

13.3.3.1. Polar interrogative *ree*

ree ‘PQ’ is the most common and semantically-neutral *polar interrogative marker* in Galo. It may occur following predicative noun phrases or declarative copula/finite/inflected clauses (789), and may also mark a cleft/focal NP (790). It has the basic function of marking an assertion as one of whose truth/falsity the speaker is completely ignorant, but which he believes his addressee to be in a position to know. *ree* cannot follow an imperative clause, nor can it follow a clause containing an interrogative/indefinite pronoun or noun (i.e., it cannot mark a content interrogative clause). The etymology of Polar interrogative *ree* is unknown.

(789) *nunûk agomó zupkáa re zubmáa re?*

nunù-kə agóm = əə zùp-káa = **ree** zùp-máa = **ree**
 2.PL-GEN speech=TOP be.resolved-PF=**PQ** be.resolved-NEG=**PQ**
 ‘Was your^{PL} problem resolved or not?’ (MN, OLB2:121)

(790) *k^waarí âlo re întə rəkkò?*

[k^waari alò **ree**]_{FOC} [ín-tà-rə-kò = əə]
 quarry(<Eng) DST.LOC.SLEV **PQ** go-INCP-IRR-NZR:LOC=TOP
 ‘Is it over to the quarry that you’re going?’ (KN, OLB2:20)

13.3.3.2. Dubitative *larèe*

Dubitative *larèe* ‘DUB’ has the same distribution as Polar interrogative *ree*. It indicates speaker surprise at seeing an indication that the marked information is or should be the case, and forms an insistent polar question to verify whether it is or is not so (in principle, probably expecting a negative answer) (791). In cases where the speaker and addressee both know quite well that the marked information is not and can not be the case, the sense is closer to a rhetorical question, possibly with disapproving and/or mirative overtones; if (792) were marked in simple Polar interrogative particle *ree* ‘PQ’, it would inappropriately suggest the speaker’s earnest ignorance as to whether or not his addressee (in this case his son) was in fact insane.

(791) *məjîrê! lubî pòol kaadé larè?*

məjîr = əə lubî poolò káa-dó(o) **larèe**
 NAME=VOC WORD month have/exist-STAT **DUB**
 ‘Meyir! Is there **really** a month named Lubi (my sense is that there isn’t one, but he is suggesting that there is)?’ (IR, 02-2007 FILE)

(792) *mudû larè?*

mù-dùu **larèe**
 be.crazy-IPFV **DUB**
 ‘Are you mad (to be acting like this)?!’ (IR, OLT8:100)

The second formative of Dubitative *larèe* clearly reflects Polar interrogative *ree*, however the initial formative is unknown. Although Dubitative *larèe* occurs relatively infrequently in my corpus, it is commonly believed among my consultants that Dubitative *larèe* is namesake of the Lare (*larèe*) dialect of Galo which forms the focus of this

description (in Pugo Galo, the corresponding form is *lee*). I am unable to comment on the likelihood of this being true or not.

13.3.3.3. Assumptive interrogative *rem*

Assumptive interrogative *rem* marks information whose truth/falsity is unknown to the speaker, but which the *speaker believes is known to the addressee*. Inasmuch as it entails a speaker assumption concerning the addressee's knowledge, it forms a fairly *impatient* or *insistent-sounding type of question*. Although it appears that Assumptive interrogative *rem* must derive from Polar interrogative *ree* plus a following formative *m* – which, in turn may reflect either Temporal subordinator *əəm*, Resolutive *m* or some (other) reflex of a PT object-marker **m* – Assumptive interrogative *rem* can mark both polar and content cleft interrogative clauses (793)-(794).

(793) *izzâa rêm?*

izzâa **rem**

now **QASM**

‘**You mean** (you want to go) now?’ (KZ, OL9:144)

(794) “*nôk jès hîgǎ rəəmǎ...ŋoí laanəməm*

nó-kà jesì hî-gǎrǎ = əəm = əə

ŋoí làa-nam = əəm

2.SG-GEN urine urinate-ACNC=ACC.TSUB=TOP

fish take-NZR:NSUB=ACC

jâə rêm dodêna?”

jâə **rem** dó-dée-nà = əə

who **QASM** eat-PROS-NZR:SUB=TOP

“After your pissing in the river, who **on earth** would want to eat any fish caught there?” (NyPB, LAT 048)

13.3.3.4. Conjectural *bəree*, Guess *com* and Wonderment *dîi*

Conjectural *bəree*, Guess *com* and Wonderment *dîi* each seem to follow any major constituent, in any type of non-imperative clause. Each indicates a different degree of uncertainty and/or speaker attitude toward the likelihood that some unknown fact is potentially knowable.

When following a *declarative clause* or when marking a declarative cleft/focal NP, Conjectural *bəree* indicates that the speaker is uncertain of the truth or falsity of an assertion but believes that the truth is knowable and is presenting the marked information as his *best conjecture* (usually, based on deduction from facts rather than evidence) (795).

(795) *hìgì “ahâa”...agóm hìgì, bók*

hìgì ahâa agóm hìgì bókə
PTOP.IND cook(<Hin) speech PTOP.IND DST.ABL.DOWN
aamáa dûunə gò bəreì.

áa-máa-dùu-nà = go **bəree** = (ə)ì
come-NEG-IPFV-NZR:SUB=IND **CJEC**=ETAG
‘**Might** this word “aha” not be coming from (the plains languages) down there.’
(MK, TT 023)

When following a *interrogative clause* or cleft/focal NP containing an interrogative/indefinite pronoun, the sense of *bəree* is of speaker belief that the *addressee* is in a position to make a conjecture regarding the unknown information; in (796), the speaker had just entered a room in which a fire is blazing, finds the other three inhabitants of the house sitting next to it, and is thus quite confident that at least one will know the answer.

(796) *jəə bərə pardûu kò?*

jə(ə) **bəree** pàr-dùu-kò = əə
who **CJEC** make.fire-IPFV-NZR:LOC/OBL=TOP
‘Who was it who lit (this fire)?’ (KN, OLxx)

‘Guess’ *com* similarly marks information as unknown, but indicates a speaker belief that it *may be unknowable and/or not worth knowing*. *com* ‘GUES’ thus frequently marks rhetorical questions, and also occurs in the semi-fixed expression *əcom* ‘I have no idea/how on earth should I know?’ (seemingly < *əə* ‘Imperfective copula’ + *com* ‘Guess’) (797)-(798).

(797) *opôp lîg/...lîgrə còm?*

opòp lîk-ré **com**
fermentation.starter insert-IRR **GUES**
‘So **I suppose** they’ll...put in the starter now?’ (LN, OPO 047)

(798) *jôojôəm dolâa rəká cóm!*

joojòo = əəm dó-là(a) rə-káa **com**

what.sort=ACC eat-NF live/exist-PF **GUES**

‘**Who knows** what sort of things they might have eaten to survive!’ (TB, OAM 041)

Wonderment *d̥i* also marks information as unknown and possibly unknowable, but indicates a more or less earnest desire of the speaker’s to know the information if possible, and entails a polar question-like implication that the addressee should, if possible, fill in the missing information. *d̥i* also, like *com*, often marks rhetorical questions (799)-(800).

(799) *əə, jôo adəgó dudûudi dumaad̥i.*

əə jòo adó = go dú-dùu = **d̥i** dú-máa = **d̥i**

AFF what sound=IND make.sound-IPFV=**WOND** make.sound-NEG=**WOND**

‘You know, (he was oblivious as to) what sort of sound **may** or **may** not have been occurring.’ (IR, FA 082)

(800) *puà...əkə...puâ tarikó d̥i?*

puaa əkə puaa tarik = əə **d̥i**

half.kilo(<Asm) HEST half.kilo(<Asm) correct=COP.IPFV **WOND**

‘This (word)...pua...**I wonder, is it** really correct (Galo)?’ (MK, TT 293)

Conjectural *bəree* may derive from a fusion of Dative/Adverbializer *bə* with Polar interrogative particle *ree*, and occurs as *bee* in Pugo (following regular post-Proto-Galo changes in Pugo; cf. §2.4.4.6). The etymologies of ‘Guess’ *com* and ‘Wonderment’ *d̥i* are unknown.

13.3.3.5. Content interrogative *laa*

Although other particles such as ‘Guess’ *com* and ‘Conjectural’ *bəree* also mark content interrogative clauses, *laa* is the most semantically neutral, frequent, and versatile of content interrogative markers. It occurs only very rarely on final predicative interrogative clauses, occurring more often on nominalized or, especially cleft/focus clauses containing an interrogative pronoun or noun (801)-(802).

(801) *boiní, nó jôo rîdûuna là?*

boini nó jòo rî-dûu-nà = əə **laa**

NAME 2.SG what do-IPFV-NZR:SUB=COP.IPFV CQ

‘Boini, what are you up to?’ (KN, OLB4:88)

(802) *jêl zukkáa pokkáa tarê kunnà?*

jêə = **laa** zúk-káa pók-káa-tà-ré-kú-nà = əə

who=CQ run-TENT hop-TENT-INCP-IRR-CMPL-NZR:SUB=TOP

‘Who will be the one to run to his side after all?’ (NyPB, LAT 078)

13.3.3.6. Clarifying interrogative *lə*

Clarifying interrogative *lə* indicates a speaker attitude of uncertainty over something which was just said, or which is reported to have occurred, together with a desire for *clarification* on the subject. It seems very likely to derive from an alternative pronunciation of Content interrogative *laa*, but must be analysed as synchronically distinct inasmuch as they may co-occur (803)-(804).

(803) *əmmáa lə!*

əm-máa **lə**

tell-NEG CLAR

‘I didn’t tell you (to buy some betelnut), **you say/that’s what you’re claiming?!**’

(RmR, CC 081)

(804) *jô, jô...là lə?*

jòo jòo la **lə**

what what CQ CLAR

‘What...what was **that (you just said)?**’ (NyPB, LAT 077)

13.4. Constituent-final particles deriving from Indic loans

As a morphosyntactic category, constituent-final particles seem to be relatively open to expansion via Indic loans. Although it has been long known that discourse particles are easily borrowed (Matras 2002), the case of Galo is fairly interesting inasmuch as particle use is far richer in Galo than in most Indic languages (i.e., particle use in the target language is far richer in this case than particle use in the source). Moreover, several of the Indic forms borrowed as particles in Galo do not have the same categorical or functional status in the source language as they eventually have when borrowed into Galo. This would suggest that Galo speakers are not necessarily making use of *Indic* discourse-organizational strategies when they borrow Indic forms as particles;

rather, it would seem that they are more often making use of Indic lexical *material* for the purpose of expanding the Galo particle inventory on a Galo-internal basis (rather than directly borrowing or calquing an Indic construction).²⁵⁰ It has been difficult to do effective research in this area simply because most of my consultants strongly disapprove of use of Indic-derived particles, insist that they represent incorrect speech, and are rarely prepared to discuss their use short of providing “correct” native Galo alternatives! That said, each of the forms discussed here occurs consistently, if, overall, less frequently than native Galo particles in my corpus, particularly (but not exclusively) in the speech of Galo from Assamese contact areas. Since the distribution of loan-derived particles has not been researched as of this writing to the extent that they may be confidently presented as integrated members of the Galo system of particle categories and functions, they are presented here in a separate section.

Referent-focusing particle *tu* derives from the Assamese definite article/classifier *tu*. In Galo, it has the effect of *placing the referent in higher-than-would-be relief*, whether for the purpose of contrasting with another referent or heightening a feel of precision or importance to the reference. It seems largely to replace the native Galo Contrastive particle *da* ‘CNTR’ in this function; if there is a semantic difference, it seems to be that a sense of referential contrast is not *necessarily* entailed by marking in *tu* (805). This usage of the Assamese definite article/classifier seems to be widespread in at least some dialects of Upper Assamese, particularly as it is spoken by plains tribals of the Arunachali border area.

(805) *taníi ətú m̥pə lagí dù.*

| | | | |
|-------|-------------------------------------|-------------------|----------------|
| taníi | əə = tu | m̥pə | lagí-dùu |
| NAME | TOP= RFOC (<Asm) | multiply-CTZR:IRR | want/need-IPFV |

ôm-orəgò tù n̥npə lagí dù.

| | | | |
|------------------|--------------------------------|----------------------|----------------|
| ômə-orə = go | tu | n̥npə | lagí-dùu |
| daughter-son=IND | RFOC (<Asm) | progenerate-CTZR:IRR | want/need-IPFV |

‘**This** Tani needed to progenerate. He needed to have *children*.’ (NyPB, LAT 004-006)

²⁵⁰ Another possibility of course is that Indic languages *as spoken by Galo* make use of (non-standard) grammatical and/or discourse-organizational structures, which may more closely resemble those of Galo than do other, “standard” varieties of those languages (with respect to particle use and, presumably, in other ways as well). Put simply, Galo speakers who borrow Indic-derived particles into Galo may be borrowing them not from the “standard” varieties of a given Indic language, as spoken by people from Guwahati or Delhi, but rather from the variety or varieties of these languages which the Galo, and, potentially, neighbouring Tibeto-Burman tribespeople, speak themselves.

‘*Auto-revelative*’ *tu* has the same Assamese source, but occurs clause-finally. It marks information as obvious or self-evident, implying that the addressee must already know, or should have already known, the marked information without the speaker having had to inform him or her (806). While not completely overlapping, its use sometimes replaces native Galo Assertive *da* (§13.3.2.2.5), and may be imported to this function via analogy; clause-final *tu* seems not to occur in any Assamese dialect with which I am familiar.²⁵¹

(806) *əənà, tazîr-tabbo, əə...tazîr...*

əə = na tazîr-tabbo = əə əə tazîr
 COP.IPFV=DECL creeping.bamboo-bamboo.variety=TOP bamboo creeping.bamboo
jibbò tazîr bædûu tù.
 jibbò = əə tazîr bædûu **tu**
 priest=TOP creeping.bamboo carry/hold-IPFV AURV
 ‘That’s right, creeping *tazîr-tabo*...creeping bamboo...a shaman carries *tazîr-tabo*,
as you surely know.’ (NyPB, LAT 090)

tu does not occur as a marker of cleft/focused NPs in Galo.

‘*Reason*’ *zee* derives from the Assamese clause-complementizer *ze*. It is not generally used as a complementizer in Galo, but instead occurs clause-finally to mark information as a ‘reason why’ some particular, already-mentioned state of affairs is the case. The origin of this usage is as yet uncertain, as it does not seem to occur in any natively-spoken Assamese dialects. Reason *zee* may be straightforwardly translated via English ‘it’s because’ or ‘that’s why’ (807). *zee* ‘REAS’ does not seem to occur as a noun phrase particle, and does not generally mark cleft/focused NPs.

(807) *jipâk tättâ zè*

jipâk tättâ **zee**
 non.hill.tribal nothing.but REAS
 ‘**It’s because** (his friends) are all non-hill-tribals (that he keeps inserting
 Assamese words).’ (KN, OL23:47)

²⁵¹ While not a nominalizer as such, the clause-final use here of what is basically a noun phrase operator to form factitive-like expressions recalls similar strategies in other Asian languages, such as Japanese clause-final *mono* (literally, ‘thing’).

‘*Precision focusing*’ *hee* derives from the Indic copula *he*, which seemingly occurs in Assamese as a Hindi loan and is potentially imported into Galo via either or both of those languages. In Galo, it is not (ever) used as a copula, but rather occurs as a clefting/focusing particle only with the sense ‘exactly’, ‘precisely’ or ‘without a doubt’ (808). I cannot at present say whether or not such uses are available in any potential Indic source dialects. Although *hee* seems not to precisely correspond to any native Galo form, its use sometimes overlaps with that of Counterexpective *no* (§13.3.2.2.3).

(808) *əgəm kuhê kaarâa dûuku nà*

əgə-m kú = **hee** káa-ráa-dùu-kú-nà = əə
 ANAP.IND-ACC CMPL=PREC.FOC(<Ind) look-ISOL-CMPL-NZR:SUB=TOP
ĩ?

(ə)î

ATAG

‘Now it’s **just** that one that we have to watch over, eh.’ (LN, GMW 069)

Concessive counterexpective *aru* derives from the Assamese conjunction *aru* ‘and’. It is only very rarely employed as a conjunction in Galo, even among speakers in high Assamese contact areas. The more frequent clause-final function of *aru* is to mark an assertion as something which might reasonably have been expected *not* to have been the case, but which in fact is. It may be variously translated via English ‘actually’, ‘in fact’, ‘nevertheless’, ‘in any case’ or ‘all the same.’ In some uses, *aru* has overtones of sequentiality – presumably the context in which its use arose – as when one might not have naturally anticipated that a particular event would occur next in a sequence (given what had preceded), but when it in fact did (809). Such uses of *aru* seem common in Assamese dialects of the Galo contact area, and may or may not be more widespread.

(809) *abó-taní (...) arogò accôb kâarədù*

abó-taní arò = go accò = b́ káa-rò-dùu

Abo.Tani morning=IND quiet=AVZR look-THROUGH.HOLE-IPFV

aru, b̃h̃ arrôm inrémə̃t̃ ɲojjém

aru b̃h̃ arò = əəm ín-ré = əəm = (ə)î ɲoí = əəm

CONC.CEXP(<Asm) 3.SG morning=ACC go-IRR=ACC.TSUB=ETAG fish=ACC

lâadu manè.

làa-dùu **mane**

take-IPFV **that's.to.say(<Asm)**

‘One morning (...) Abo Tani **in fact/then** stealthily peeked, when she would go in the morning, right? (She) was catching fish, **I mean.**’ (NyPB, LAT 027)

Hesitation *mane* is an ubiquitous form of the Assam plains, reflecting Assamese

man- ‘mean’ + *-e* ‘Third person subject’. It is as addictive an expression as may be found in any language, on a par with American English *like* and every bit as distasteful to language purists. Usually translatable via English *like*, *I mean* or *that’s to say*, *mane* occurs clause-initially or -finally in Galo of the foothills area, and also as a general hesitation word. However, unlike native Galo hesitation words such as *mərāa* (§13.7.6), *mane* cannot stand as a “pro-lexeme”. Use of *mane* is less widespread outside Assamese contact areas, although it is probably more widespread than many Galo seem to have hoped (809).

13.5. “Versatile” particles

“Versatile” particles form a small, closed set, and are so-called due to their ability to occur in an especially wide variety of contexts, both constituent-finally and, in some cases, constituent-internally. Most have a basically *emphatic* function, and are used to draw extra attention to certain clausal and/or phrasal constituents. However, most do *not* occur as markers of a cleft/focus construction. Some versatile particles have homophonous and semantically relatable forms in other form-classes; depending on the analysis, one could either describe such forms as (probably) diachronically related but synchronically distinct, or else as constituting a perhaps even more versatile class of particles than is being envisaged here. Although the first of the two approaches is the one more consistently taken in this grammar, in the interest of descriptive completeness the full potential distribution of the versatile particles is presented in subsections below (Table 13.8).

| Form | Function | Reference |
|-----------|---------------|-----------|
| (ə)í | Emphatic | §13.5.1 |
| eí | High emphatic | §13.5.1 |
| (ə)î | Emphatic tag | §13.5.1 |
| (?ə)î | Assertive tag | §13.5.1 |
| ɲúm ~ ɲûm | Delimiting | §13.5.2 |
| záa ~ zâa | Reality | §13.5.2 |
| rúu ~ rûu | Certainty | §13.5.2 |
| cáo ~ cêu | Precision | §13.5.2 |
| cìn | Additive | §13.5.3 |

Table 13.8 – Versatile particles

13.5.1. Emphatic, focal, and polar question marking particles with formative *i*

There is a large set of Galo forms seemingly organized around a basic formative *i*, whose functions are probably relatable and may ultimately permit reduction (whether in a synchronic or a diachronic sense) to a basic form (ə)í ‘Emphatic’. Variations, both functional and phonological, would then be viewed as products of syntactic position and scope as well as, potentially, of prosodic expressivity. At the same time, there is certainly evidence that form-function specialization either has occurred or is in the process of occurring, and not all possible phonological shapes seem to be permissible in all syntactic positions/functions.²⁵² In what follows, three basic form-function categories are described, with the caveat that a certain amount of formal and functional “spillover” occurs between them, and may ultimately reflect the existence of an “underlying” relationship of some kind.

Emphatic (ə)í occurs as an *enclitic to any non-final constituent*, seemingly with local scope. Its basic function is to highlight or draw additional attention to the constituent, as though to increase a sense of precision or importance. When marking a noun phrase, Emphatic (ə)í conveys a sense of ‘precisely (this)’, ‘right (then/there)’ or ‘(this) and

²⁵² I have asked numerous consultants on numerous occasions whether one form in *i* is ‘the same as’ or ‘means the same as’ another, and found the range of possible answers to be almost unlimited, and equally unlimited in their potential for cross-contradiction!

nothing but (this)’. In (810), spoken by an elder female who is a lifelong resident of the Assam-bordering foothills area,²⁵³ three mentions of Emphatic (ə)í occur.

- (810) *ap̃ñi lokkə̃ hikai maanəmə (...) anə bæədāk lokkəí*
 ap̃ñi lokkə̃ hikai-máa-nam = əə anə bəə-dāk lokkə̃ = (ə)í
 bit ABL.SRC teach(<Ind)-NEG=TOP mother bear-COS ABL.SRC=EMPH
annəí abb^w əí hobəgə moodii lo...
 anə = əə = (ə)í abó = əə = (ə)í hobə = əgə moodii = lo
 mother=TOP=EMPH father=TOP=EMPH mithun=ANAP.IND mountain=LOC
rəŋóo nə zaatə̃.
 rə-ŋóo-nə zaatə̃ = əə
 exist-HAB-NZR:SUB nature(<Ind)=COP.IPFV
 ‘(Due to our) not teaching them from when they’re young...*right* from when
 they’re born, be they *female*, be they *male*, these mithuns are mountain-dwellers
 by nature.’ (LN, MH 042)

When marking a *predicate*, Emphatic (ə)í has the unusual property of occurring *within* the predicate complex, either following the predicate word and preceding any particles, or else (and more often) *interrupting* the grammatical predicate word (see §10.6 for discussion of this phenomenon in a more general context). In either case, the position of (ə)í is always clitic to the *left edge* of a phonological word – it *cannot* occur *within* a phonological word (811)-(812).

- (811) *nók rənəməm nó all̃ibə rəmə booló,*
 nó-kə̃ rə-nam = əəm nó all̃ibə = bə rə-máa-boolo
 2.SG-GENlive/exist-NZR:RLS=ACC 2.SG well=SBRD exist-NEG-COND
nó injoí ká í.
 nó ín-jó = (ə)í = kaa (ə)í
 2.SG go-PROH=EMPH=ADVS ETAG.ASRT
 ‘If you don’t live your life properly, you **absolutely** mustn’t go, eh!’ (LN, MF 045)

²⁵³ (ə)í occurs with far greater frequency in the speech of Galo living in foothill areas than in the higher areas, and with far higher frequency in the speech of my female consultants than in that of males. Its usage is believed by some of my consultants to derive from mimicry of plains languages – a plausible claim which, however, I have not been able to properly verify. Some of my consultants consider Emphatic particle use or overuse to be bad form or to constitute low-register speech, although its use is certainly addictive; I have been personally scolded on several occasions for my unseemly imitation of these patterns!

(812) *añgô ân-abó, gôñku agomám jôogo cìn*

añ = gə anə-abó gonkù agóm = əəm jòo = go cìn
 self=GEN mother-father classical.language speech=ACC what=IND ADD
centəí kumáa nám.

cèn-tà = (ə)í = kú-máa na = m

know-INCP = EMPH = CMPL-NEG DECL=RSOL

‘They won’t **even** learn a danged thing of our forefather(s’) classical language.’
 (LN, FYG 021)

High emphatic *eí* shares the distribution of Emphatic (ə)í. As such, it may be described as an intensified variant of the basic Emphatic (ə)í, however, use of *eí* is more frequent in clauses with a negative connotation, and possibly signals a dismissive speaker attitude (813)-(814) (also cf. §13.2.2.3 ex. (713)).

(813) *tñko loeí goorə!*

tñ-kò lo = eí gòo-ró
 imbibe-NZR:LOC/OBL LOC=HEMP pass.time-IRR
 ‘It (the time) will be spent **only** on drinking!’ (MN, OLC2:45)

(814) *“áo nízirəm eí dūug tokk^wá.”*

àò nízir = əəm eí dùu-gá-tó-kú = káa
 child girl=ACC HEMP stay-COMT-IPTV.ODIR-CMPL=HORT.ADV
 “**Just** stay (i.e. sleep) with your daughter.” (NyPB, LAT 329)

Emphatic tag (ə)í follows predicates, including any and all particles which may be associated to it. It does not mark cleft/focal NPs. Its basic function is to “check” that the addressee is following and/or agrees with the speaker. By implication, it usually forms a polar question which differs somewhat in feel from a polar question in *ree* (§13.3.3.1); namely, it indicates that a speaker is relatively certain that the marked information is the case, but is checking with the addressee to make doubly sure (815). ‘Emphatic tag’ particle (ə)í may occur alone in this function, or it may follow other polar question-forming particles. In (816), use of (ə)í basically renders the question more “insistent”-sounding.

(815) *bɛ̃ aalóo caakai*

bɛ̃ aalóo càa-káa=(ə)ɪ̃

3.SG PLACE ascend-PF=ETAG

‘He went up to Along, **did he?**’ (MN, 20:14)

(816) *higɪ̃ “ahâ”...agóm higɪ̃, bók*

| | | | | |
|----------|------------|--------|----------|------------|
| higɪ̃ | ahàa | agóm | higɪ̃ | bókə |
| CATA.IND | cook(<Hin) | speech | CATA.IND | DST.ABL.DN |

aamáa dũunə go bəreɪ̃.

áa-máa-dũu-nà go bəre=(ə)ɪ̃

come-NEG-IPFV-NZR:SUB IND CJEC=PQ

‘I wonder whether this here word “aha” might not be coming from (the plains languages) down there, eh.’ (IR, TT 023)

Assertive tag (ʔə)ɪ̃ is by far the most frequent of the set of particles with formative

i, and follows any major constituent. Like ‘Emphatic tag’ particle (ə)ɪ̃, it basically functions to “check” that the addressee is following the speaker. However, it differs in having a wider distribution (including many contexts which could not be interpreted as forming polar questions), and a more assertive declarative force. Clause-finally, it forms a minimal pair with ‘Emphatic tag’ particle (ə)ɪ̃ (817) (compare (815)). Finally, while other particles with formative *i* usually encliticize to a preceding term, it is very common for ‘Assertive tag’ particle (ʔə)ɪ̃ to head its own phonological word, with glottal stop onset (818). ‘Assertive tag’ particle (ʔə)ɪ̃ may be variously translated as “isn’t it?”, “eh?” “see?” or “right?”.

(817) *bɛ̃ aalóo caaká ʔi*

bɛ̃ aalóo càa-káa (ʔə)ɪ̃

3.SG PLACE ascend-PF ATAG

‘He went up to Along, **didn’t he?**’ (MN, 20:14)

(818) *apɛ̃ gò, həkə dookú nà ná! abùr əi?*

apɛ̃ = go həkə-dó(o)-kú-nà = əə na abùr (ʔə)ɪ̃
 year=IND whatever-STAT-CMPL-NZR:SUB=COP/IPFV DECL cursed ATAG
 ‘For a year, it will be like this, see! Cursed, **eh?**’ (LN, WGD 074)

13.5.2. “Adverbial” particles

The set of forms described in this section have identical or closely similar distribution, and share the unusual phonological property of allowing either high (unmarked) or rising-falling (emphatic) tonal realizations (cf. §4.2.2.2.1). They very often “reset” the boundary of a phonological phrase (meaning that preceding Low/Tense words occur with a phonetically low contour – as would normally be the case in a phrase-final context – rather than with a Rising(-Falling) tone – as would normally be the case in a phrase-medial context). All adverbial particles occur in morphosyntactic positions which suggest co-membership in other form-classes; this may be viewed by the analyst either as a property of their morphological class, or as a case of historical change and (then) homophony among distinct lexical items. In either case, there is a clear semantic core to each form, and native Galo speakers certainly view their cross-categorical manifestations as instances of “the same form”. Adverbial particles are semantically more complex than versatile particles with formative *i*, and are often translated via lexical adjectives or adverbs in Indo-European languages. However, it is important to note that they bear neither the structural nor the distributional properties of Galo adjectives or adverbs (as they have been defined in this grammar), and cannot be reduced to either class.

13.5.2.1. Delimiting *júm* ~ *jûm*

Delimiting *júm* ~ *jûm* has the basic function of *delimiting a preceding constituent* as ‘itself and nothing more’. It is almost always translatable via English *only*, although depending on context it may be more felicitously translated via *just*, *nothing but/more than*, etc. With respect to the noun phrase grammar, Delimiting *júm* has been

attested both phrase-internally – preceding phrasal enclitics, postpositions, and particles – and phrase-externally – following enclitics and postpositions, but preceding (other) particles (819)-(820).

(819) *izà...partəná nûmbə rɪlà...*

izzàa partəná **nûm** = bó rɪ-là(a)
 now prayer(<Hin) **DLMT**=DAT do-NF
 ‘Nowadays (among the Christianized Galo), it’s become **nothing but** praying.’
 (NyR, MDS 048) (inside NP)

(820) *patə paŋoó...ulúu gò nûm*

pá-tə pá-ŋoó = əə ulúu = go **nûm**
 chop-NZR:MAJORITY chop-NZR:MAJORITY=TOP boat=IND **DLMT**
kunám.
 kú = na = m
 CMPL=DECL=RSOL
 ‘From such a huge mass, **only** a single boat (was made).’ (TB, OAM 273) (outside NP)

With respect to predicate grammar, *nûm* generally occurs *within* the predicate complex. Unlike versatile particles which are based on formative *i* (§13.5.1), *nûm* is able to occur inside a phonological word (821), as well as at the margins; in the latter case, it forms a *distinct* phonological word (822).

(821) *tiijnûm takələð...*

tíi = **nûm** = tà-kò = lo
 be.well-seasoned=**DLMT**=INCP-NZR:LOC/OBL=LOC
 ‘To **just** start (the fermenting rice beer) getting sweet...’ (LN, OPO 070) (inside phonological word)

(822) *ŋó nám lokkə korlèn nûm nammə pò.*

ŋó nám lokkə kór-lèn = **nûm** = nam = əə ɲo
 1.SG house ABL.SRC step-OUT = **DLMT** = NZR:RLS=COP.IPFV CEXP
 ‘(At the time when the accident happened) I had **just** stepped out of my house (and in fact didn’t see a thing, contrary to what you supposed).’ (MN, 15:140) (at phonological word boundary)

13.5.2.2. Reality *záa* ~ *zâa*

Reality *záa* ~ *zâa* has the basic function of marking a preceding constituent as *real* or *factual* – perhaps contrary to some standing expectation – and may be translated by English *real(ly)*, *tru(ly)*, *authentic(ally)*, *actual(ly)* or *without doubt*. In some uses, it may have an intensifying function which is closer to the intensifying senses of English *really*, *truly*, *considerably* or *(very) much (so)*.

With respect to the noun phrase grammar, Reality *záa* may precede or follow phrasal enclitics (postpositions, articles or demonstratives) (823)-(824).

(823) *ṇunûk duukò zâa cìn (...) tê baahár tê maabê.*

ṇunû-kê dùu-kò **zâa** = əə = cìn tê baahár tê maabê
 1.PL-GEN stay-NZR:LOC/OBL **REAL**=TOP=ADD DST.UP PLACE DST.UP isn't it
 'And our **real** place...it's that Basar up there, isn't it.' (TB, OAM 143) (inside NP)

(824) *mârê-kenlù êmbê zâa îsi-rikké rimáa tó!*

mârê-kenlù êmbê **zâa** îsi-rikké = əə rî-máa-tó = (?ə)î
 long.ago ANAP.PADV **REAL** water-field=TOP do-NEG-PFV=ATAG
 'In the old days, we didn't cultivate wet fields that **much**, eh!' (lit., 'we didn't cultivate using wet fields') (LN, GMW 051) (outside NP)

With respect to the predicate grammar, *záa* shares the distributional characteristics of Delimiting *núm* in interrupting the predicate complex and occurring within or at the boundary of a phonological word (825)-(826).

(825) *bî dóz zaamá; îkiəm zîtê kuké.*

bî dózî = **záa** = máa ikî = əəm zí-tó-kú = kée
 3.SG full = **REAL** = NEG dog=ACC give-IPTV.ODIR-CMPL=HORT.POL
 'He's not **really** full; give him the dog (meat; that will satisfy him).' (IR, C1:69)

(826) *aazáa nammó...ôpoəm, nízíg namló...*

áa = **záa** = nam = əə opòo = əəm nízí = gə namó = lo
 come = **REAL** = NZR:RLS=TOP liquor=ACC man.old=GEN house=LOC
nenzí dù.

nén-zí-dùu

filter.rice.beer-BEN-IPFV

‘They having **in fact** come, in the old man’s house...they made beer for them.’
 (TB, OAM 284)

Additionally, Reality *záa* may also *follow* a copular or finite/inflected predicate, generally preceding (other) particles, but (when finite), *following* predicate inflections (827)-(828).

(827) “*ηό hoozî əəzâa kó.*”

ηό hoozî əə = **zâa** kó
 1.SG chameleon COP.IPFV=**REAL** INFO
 ‘I’m **actually** a chameleon.’ MK, TT 264

(828) *nîik agomóm, áam meŋkâa là zâa*

nîi-kə agóm = əəm áa-m mèn-kâa-là(a) **zâa**
 someone-GEN speech=ACC DST.SLEV-ACC speak-TENT-NF **REAL**
məəlêe kʷəmó...izì pòri là, ηunù...rədûu kú.
 mǎə-lèe-kú = əəm = əə izì porì-là(a) ηunù rǎ-dùu-kú
 think-SSEQ-CMPL=ACC.TSUB=TOP now study-NF 1.PL live/exist-IPFV-CMPL
 ‘Having a **real** desire to speak it, some strangers’ language...now...here we are, studying it.’ (MK, LW 074)

13.5.2.3. Certainty *rúu* ~ *rûu*

Certainty *rúu* ~ *rûu* has the basic function of marking a constituent as *certain*, *definite(ly the case)*, *doubtless* or *unquestionable*, in preference to any other potential referent, event or manner, etc. Like other “adverbial” particles, it may occur NP-internally, preceding enclitics/postpositions and/or demonstratives, or it may follow them (829)-(830).

(829) *hòk íhi abú rúu hòkè hikáa-hijáa abúu hòk iibôo lo...*

hòkè isì-abúu **rúu** hòkè hikáa-hijáa abúu hòkè ìi-boolo
 SPRX.ABL water-river CERT SPRX.ABL PLACE river SPRX.ABL descend-
 COND

‘If we **definitely** use *this* river, this Hika-Hija River to go down...’ (TB, OAM 257)

(830) *əgə rúu.*

əgə **rúu**
 ANAP.IND CERT

‘Utterly so/I **completely** agree/That’s **absolutely** right.’ (ILR, OLxx)

Certainty *rúu* ~ *rúu* interrupts the predicate word in phonological-word-internal or marginal positions; following Intensifier *-jàa*, it has a superlative sense (831)-(832) (cf. §11.2.5.11).

(831) *zirúu lakà!*

zí=**rúu**=là(a)=káa
 give=CERT=IPTV.SDIR=HORT.ADV
 ‘Give it to me **without fail!**’ (MN, OLT17:54)

(832) *buppî lòk aṇṇí jaarúu nà...kənók zâab jupkà.*

buppî lokè aṇṇí-jàa=**rúu**=nà=əə kənók=zâa=bó jùp-káa
 all ABL little-INTS=CERT=NZR.SUB=TOP enthusiastic=REAL=DAT sleep-PF
 ‘The **smallest** of all of them...was just sleeping away with real enthusiasm.’ (IR, FA 074)

13.5.2.4. High certainty *jaarúu*

In a seeming extension of the superlative use of Certainty *rúu* ~ *rúu* when following *-jàa* ‘COMP’, a particle expressing ‘High certainty’ *jaarúu* has been observed to mark noun phrases. Although this may appear to provide evidence for the Particle status of Intensifier *-jàa* ‘COMP’ – as well as for the Superlative sequence *-jàa=rúu* ‘COMP=CERT’ as exemplified in (832) (discussed in §11.2.5.11), it is important to note that, unlike *jaarúu*, *-jàa* ‘COMP’ cannot occur independently outside of the predicate word. This would suggest that ‘High certainty’ *jaarúu* may derived from *reanalysis* of the predicate superlative sequence *-jàa=rúu* ‘COMP=CERT’ as a free syntactic operator (833). This development may have been encouraged by the frequent occurrence of *-jàa=rúu* ‘COMP

≡CERT' as an independent phonological word, as in (832).

(833) *əi! nó jaarûu lakà tiiβên jaanà!*

əi! nó jaarûu la(a)ka tíi-bèn-jàa-nà = əə
DISM 2.SG HCERT MIR imbibe-FREQ-INTS-NZR:SUB=TOP
'Eh! It's **utterly** *you* who's the chain-smoker (to think that you're accusing me)!'
(MN, T10:64)

13.5.2.5. Precision *cəə* ~ *cəə*

Precision *cəə* ~ *cəə* has the basic function of marking a constituent as *precise* or *exact* in nature or sense. It seems to derive from a noun meaning '(precise) time' or '(exact) moment', although its continuing noun-like usage is limited to temporal phrases such as (834); *cəə* ~ *cəə* cannot stand as head of a common noun phrase.

(834) *ôg cəə ogò...*

ogò cəə ogò
ANAP.TMP/LOC PREC ANAP.TMP/LOC
'At that (**exact**) **time**...' (IR, B1:33)

More commonly, *cəə* ~ *cəə* is postposed to a nominal or noun phrase (835)-(836).

(835) *tarík cəəgo zilâa ká.*

tarík cəə = go zí-là(a) = káa
correct.thing PREC=IND give-IPTV.ODIR=HORT.ADV
'Give me the **precise** amount (I don't want to have to come back again).'

 (MN, 5:79)

(836) *higè cəəna ηòk hiktərə.*

higè cəə = na ηó-kə hík-tər = əə
SPRX.IND PREC=DECL 1.SG-GEN track-NZR:ENDPOINT=TOP
'This is **exactly** the point where I stopped tracking (because the trail disappeared).'

 (MN, OLB5:79)

Predicate-internally, *cəə* ~ *cəə* generally occurs as a modifier of adjectives of quantity or degree (837).

(837) *allòm taók kabbóolo tarík cêə háe nà.*

allò = əəm taók káp-boolo tarík≡cêə≡há = ee na
 tomorrow=ACC fan.palm shingle-COND correct≡PREC≡NZR:IRR=COP.PFV DECL
 ‘If we make the roof tomorrow it will have been **right** on.’ (IkR, HC 042)

13.5.3. Predicate-interrupting function of Additive *cìn*

Additive *cìn* is analysed elsewhere as a noun-phrase-marking particle (§13.2.2.2); unlike the “adverbial” particles discussed in §13.5.2, it has *not* been observed to occur *inside* the noun phrase. However, like (other) versatile particles, it has the ability to interrupt the predicate complex, either within or at the margins of a phonological word. In this function, it may be translated via English *also* or (in negative polarity predicates) *even* or *so/as much as* (838)-(839).

(838) *cencîn lîmà!*

cèn≡cìn≡lî-màa
 know≡ADD≡DESD-NEG
 ‘I don’t **even** want to know!’ (KItE, OLB2:105)

(839) *əgè-m, izì murkoè-m, əgè-m,*

əgè-m izì murkòo = əəm əgè-m
 ANAP.IND-ACC now money=ACC ANAP.IND-ACC
kaapà cîn kumai?
 káa-pàa≡cìn≡kú-máa = (ə)î
 look-ATTN≡ADD≡CMPL-NEG=ETAG
 ‘Now, those kinds of coins, you don’t **so much as** see them any more, right?’ (LN, TG 090)

13.6. Interjective particles

A small number of particles are available as modifiers of interjective (non-predicative, non-argument) nouns or noun phrases only.

| Form | Function | Reference |
|----------------|--------------|-----------|
| <i>nu</i> | Suggestive | §13.6.1 |
| <i>áa</i> | Vocative 1 | §13.6.2 |
| <i>ǎǎ ~ âǎ</i> | Vocative 2 | §13.6.2 |
| <i>go...áa</i> | Supplicative | §13.6.2 |

Table 13.9 – Interjective particles

13.6.1. Suggestive *nu*

Suggestive *nu* is an interrogative-like particle found following nouns or, more usually, pronouns. It forms a complete expression with the sense ‘what about *x*?’, ‘how about *x*?’ or ‘and as for *x*?’. That is, in a context where the addressee has been discussing or referring to, or else acting on various entities, *nu* is used to *draw the addressee’s attention* to an entity which he or she may have forgotten, not noticed or not considered. Suggestive *nu* is often marked by Non-final intonation.

(840) *mñnú?*
 bñ = **nu** = ₂
 3.SG=SUGG=NFI1
 ‘**What about him?**’ (ZR, C1:136)

13.6.2. Vocatives

Simple Vocatives *áa* and *ǎǎ ~ âǎ* respectively serve to draw emphatic and high emphatic attention to an act of *calling* or otherwise *addressing a person*; *áa* is the more commonly-attested and probably “basic” form (inasmuch as emphatic variants of other parts of speech make use of a rhyme in [ǎǎ] or, especially, [âǎ], but rarely if ever [a]; cf. §7.4). Use of a Vocative particle is not strictly obligatory when addressing someone, and Vocative use may take on overtones of emergency or entreaty. Both Vocatives pattern as enclitics to a proper name, kin term or other term of address; they do *not* occur on common noun-headed NPS (cf. §6.1.4) (841)-(842).

(841) *toopó-gón mendù, “acc’á...ḡóm bə ìlì*

toopó-goná mèn-dùu ací = **áa** ḡó-m bə ìlì = əə
 NAME say-IPFV elder.brother=VOC 1.SG-ACC DST.DOWN stone=TOP
geegáp dù ḡó inlèn laamà” əmdù?

gée-gáp-dùu ḡó ín-lèn-là(a)-máa óm-dùu = (ə)î
 seal-STUCK-IPFV 1.SG go-OUT-ABIL-NEG tell-IPFV=ETAG
 ‘Toopo Gona said, “**O** brothers! I’m stuck on this rock and I can’t move!” she said, right?’ (LN, TG 042)

(842) *márkê! hôg aatók!*

mark = **əə** hogò áa-tó = k
 NAME=VOC.EMPH SPRX.LOC come-IPTV.ODIR=HORT.ADM
 ‘**Oi**, Mark! Come here, will you!’ (KTR, OL16:18)

‘Supplicative’ *go...áa* patterns as a split enclitic to a repeated proper name, kin term or other term of address. The final formative *áa* seems clearly derived from Vocative *áa*, while the initial formative appears to have derived from an idiosyncratic sense of Individuator *go*; this sense of *go* is not observed in modern Lare Galo outside of the Supplicative context (§14.2.1.2). The combined sense is one of *supplication* or *entreaty*, as when appealing to one’s elders for a favour, or when requesting something of a supernatural power by name, as in (843).

(843) *“apí mums’gò, apí mums’à, ḡokə...hìlê akc’é*

apí mumsì = **go** apí mumsì = **áa** ḡó-kə hìlêə akc’éə
 sister.elder NAME=SUPL.1 sister.elder NAME=SUPL.2 1.SG-GEN tree.variety branch
bəm nó nuut’r geekubá,

bə-m nó nùu-t’r-gée-kú-báa
 DST.DOWN-ACC 2.SG bob.knees-BREAK.LENGTH-PFV.DISJ-CMPL-DIR
nó ḡokə̀ò aakûpə lagidù!”

nó ḡó-kə = lo áa-kú-pə lagí-dùu
 2.SG 1.SG-GEN=LOC come-CMPL-CTZR NEED/MUST-IPFV
 “**O my dear** Elder Sister Mumsi, you cracked my stick down there (by standing on it), now you must come to my place (to marry me)!” (NyPB, LAT 172)

13.7. Interjections

Interjections are words or other fixed constructions which constitute a complete, self-contained utterance. They may be apposed to clauses, but do not themselves constitute syntactic clause constituents. The typical function of an interjection is to

express *speaker attitude*, often in a general, non-information-specific sense. As in most languages, there is a large number of interjections in Galo and interjection use almost certainly varies considerably from subdialect to subdialect and indeed individual to individual. The following will serve as a partial account only.

13.7.1. Calls and responses to humans

In addition to terms of address (kinship terms, titles and proper names) and vocatives (§13.6.2), which occur as enclitics to a term of address, the following Galo interjections are used to call or respond to humans (Table 13.10).

| Form | Gloss | Use |
|-----------------------------|----------------------|---|
| <i>bulôə</i> | ‘Hey, fellas!’ | to round up a dispersed group of people, as for a task |
| <i>kazùu</i> ²⁵⁴ | ‘Let’s go.’ | to suggest that an immediate addressee join the speaker in a task |
| <i>aí</i> | ‘Huh?’ | to provoke a response, as when an addressee seems not to be paying attention to the speaker or not answering a question |
| <i>oôí</i> | ‘Yes, what (is it)?’ | to respond to someone who has called to the speaker, as mother to a child |

Table 13.10 – Calls and responses to humans

13.7.2. Animal calls

The following interjections are used to beckon or to disperse different types of animal (Table 13.11). This is obviously a partial list, which I hope to be able to expand.

| Form | Gloss | Use |
|----------------------------|-------------------|-------------------------------------|
| <i>acuáa</i> | ‘Here, piggy!’ | to beckon domestic pigs |
| <i>ôo, ôo, ôo</i> | ‘Here, mithun!’ | to beckon domesticated mithuns |
| <i>áa, áa, áa</i> | ‘Here, cow!’ | to beckon cattle |
| <i>púrrr</i> (in falsetto) | ‘Here, chickens!’ | to beckon chickens |
| <i>êəcu</i> | ‘Here, boy/girl!’ | to beckon dogs |
| <i>asé</i> | ‘Scat!’ | to disperse dogs |
| <i>ús</i> | ‘Shoo!’ | to disperse chickens or other birds |

Table 13.11 – Calls to animals

²⁵⁴ The second syllable may be cognate to Inclusive hortative particle *zù* (§13.3.1.2).

13.7.3. Expressions of agreement or disagreement

The following interjections are used to express agreement or disagreement with a speaker, whether by way of rejoinder to a statement or response to a direct question (Table 13.12).

| Form | Gloss | Use |
|----------------|----------------------------------|--|
| əə | ‘Right; yeah.’ | agreement with a proposition |
| <i>mm ~ um</i> | ‘Right; yeah.’ | agreement with a proposition |
| ɾəm | ‘That’s right; indeed; I agree.’ | strong/polite agreement with a proposition, as younger to an elder or when joining the addressee’s side in a dispute |
| ə-hə? | ‘Uh-uh; nope’ | informal/abrupt negative response to a question |
| máa | ‘No.’ | strong/polite negative response to a question |
| ma? | ‘No (it isn’t so)!’ | disagreement with a presupposition or proposition |
| kəə | ‘Go on; come on; let’s go!’ | intolerance of prevarication |
| kəə | ‘Okay; sure; go ahead.’ | consent to a proposition or encouragement to proceed |
| kəlôo | ‘Will do.’ | consent to a proposition, request or demand |
| hm? | ‘Oh, for...!’ | disapproval of what someone is doing or suggesting |
| həə? | ‘What the hell!’ | strong disapproval of what someone is doing or suggesting |
| ə-həə | ‘What have you done!’ | strong disapproval of what someone is doing or suggesting |

Table 13.12 – Expressions of agreement or disagreement

13.7.4. Expressions of emotion or opinion

A wide variety of interjections have the basic function of expressing the speaker’s emotional state and/or opinions in reaction to some currently-unfolding state of affairs. The following subcategorizations are not asserted to represent any view of natural categories of emotional reactions etc., but are for organizational purposes only; any number of other, more insightful subcategorizations might be possible.

13.7.4.1. Surprise, amazement and admiration

The following interjections express speaker alarm or surprise at some concurrent state of affairs (Table 13.13).

| Form | Gloss | Use |
|----------------------------|------------------------------|---|
| <i>a</i> | ‘Oh!’ | general surprise at some unexpected event |
| <i>aréé</i> ²⁵⁵ | ‘Oh!; What the...?’ | surprise or consternation at something not behaving as it should |
| <i>ad̥ɦ</i> ²⁵⁶ | ‘Wow!’ | shock at some unexpected or unusual event or information |
| <i>addó</i> | ‘Wow!’ | emphatic variant of <i>ad̥ɦ</i> |
| <i>əddɦ</i> | ‘Wow!’ | emphatic variant of <i>ad̥ɦ</i> |
| <i>annəð</i> | ‘Oh my goodness!’ | amazement or bewilderment at some unusual and impressive event or information |
| <i>abbɦ</i> | ‘Whoa!’ | shock at the (great) size, quantity or scale of something |
| <i>ablaa</i> | ‘Holy moly!’ | astonishment or wonder at the (great) size, quantity or scale of something |
| <i>at̥ɦ</i> ²⁵⁷ | ‘How lovely!’ | admiration at the grace or perfection of an entity |
| <i>ajáa-maabə</i> | ‘Incredible; of all things!’ | bewilderment at some unusual or untoward state of affairs (literally, ‘love/sympathy-isn’t it’) |

Table 13.13 – Expressions of alarm or surprise

13.7.4.2. Fear or endangerment

The following interjections express a speaker’s sense of alarm, fear or apprehension of his own or another person’s endangerment (Table 13.14).

| Form | Gloss | Use |
|-----------------------------|-------------------|--|
| <i>akc̥ɦ</i> ²⁵⁸ | ‘That was close!’ | alarm at a near miss |
| <i>accí</i> ²⁵⁹ | ‘That was close!’ | alarm at a near miss |
| <i>boccó</i> ²⁶⁰ | ‘Yikes!’ | fear, alarm or apprehension, as upon hearing some frightening news |
| <i>jəc(c)u</i> | ‘Watch it!’ | warning to someone about to enter a dangerous situation |

Table 13.14 – Expressions of fear or endangerment

13.7.4.3. Pain, fatigue or frustration

The following interjections express a speaker’s feeling of pain, fatigue or frustration at some state of affairs outside his control (Table 13.15).

²⁵⁵ Seemingly a Hindi loan.

²⁵⁶ Seemingly derived from adjective *əd̥ɦ* ‘incredible’.

²⁵⁷ May be relatable to *at̥ɦ* ‘nectar’ < *t̥ɦ* ‘sweet; well-seasoned’.

²⁵⁸ Seemingly an interjective variant of adjective *akc̥ɦ* ‘on the brink’.

²⁵⁹ Seemingly an interjective variant of an archaic noun *accí* ‘fraction’, now found only in the compound *əpp̥ɦ-accí* ‘bit-fraction’ ‘tiny bit’.

²⁶⁰ Seemingly an expressive variant of noun/adjective *bohó* ‘fear; afraid’.

| Form | Gloss | Use |
|--------------|---------------|--|
| <i>ajaʔ</i> | ‘Ouch!’ | reaction to physical pain |
| <i>áa(h)</i> | ‘Oh, for...!’ | exasperation or frustration |
| <i>hoe</i> | ‘Whew!’ | the sound of a sigh, as when collapsing after a long journey |
| <i>ajjəə</i> | ‘Aya!’ | alarm, frustration or exhaustion, as when taking a breather during an arduous task |
| <i>ətəə</i> | ‘Aya!’ | frustration or resignation to catastrophe |

Table 13.15 – Expressions of pain, fatigue or frustration

13.7.4.4. Humility or embarrassment

The following interjections express a speaker’s feeling of humility or embarrassment, as when inconveniencing another or after committing a social faux-pas (Table 13.16).

| Form | Gloss | Use |
|-------------|--------------|--|
| <i>o</i> | ‘Oh!’ | surprise at the situation falling outside one’s control, as when losing balance |
| <i>əəkà</i> | ‘Whoops!’ | self-alarm at a realization that one has misspoken, also signalling to listeners that a correction is imminent |
| <i>əət</i> | ‘Oops!’ | alarm with an overtone of guilt or embarrassment, as when having blundered and (thereby) caused another inconvenience, or when having been caught out in one’s effort to be stealthy and perhaps deceptive |
| <i>əsəs</i> | ‘Oh, sorry!’ | apologetic self-alarm at having trespassed over someone’s privacy, as when stepping on his or her foot |

Table 13.16 – Expressions of humility or embarrassment

13.7.4.5. Triumph, anger or aggression

The following interjections express a speaker’s sense of triumph, anger or aggression (Table 13.17).

| Form | Gloss | Use |
|-----------------------------|--------------------------------|--|
| <i>hoí</i> | ‘Kill, kill, kill!’ | traditional Galo war cry, called out during a <i>pazúk</i> ‘war dance’ |
| <i>həə?</i> | ‘what the hell are you doing!’ | expression of displeasure at the actions of another |
| <i>accôɽ</i> ²⁶¹ | ‘Aha!’ | expression of triumph at the discovery of a secret, or else a declaration of one’s own or another person’s intent to be cunning in obtaining one’s objective |

Table 13.17 – Expressions of triumph, anger or aggression

13.7.5. Pleasantries or other conventionalized expressions

The following interjections are conventionalized expressions, which are either relatable to modern Galo syntax (but have specialized senses) or else may reflect some preserved archaic patterns (Table 13.18).

| Form | Gloss | Composition | Use |
|-------------------|-------------------------------|--|--|
| <i>əkkə-zâa</i> | ‘Thank you.’ | <i>əkə = əə = zâa</i> ‘APRX.PL=COP.IPFV=REAL’ | gratitude at formal occasions |
| <i>alrûudo</i> | ‘Thank you.’ | <i>alə = rûu = dó(o)</i> ‘good = CERT = STAT’ | general gratitude |
| <i>əcòm</i> | ‘Indeed; I have no idea.’ | <i>əə = com</i> ‘COP.IPFV=GUES’ | dismissive uncertainty |
| <i>helòo</i> | ‘Give it here.’ | ??? | requesting to see or hold something |
| <i>helòm</i> | ‘Let’s have it!’ | <i>helòo = m</i> ‘give it here=RSOL’ | insistently requestion to see or hold something |
| <i>lák-kaamáa</i> | ‘Just as the doctor ordered!’ | <i>lák- káa-máa</i> ‘MISS have/exist-NEG’ ²⁶² | expression of satisfaction when an unfolding state of affairs turns out to suit one’s purposes precisely |

Table 13.18 – Pleasantries or other conventionalized expressions

13.7.6. Hesitation words

A handful of Galo ‘Hesitation words’ are available to assist a speaker in moving his turn forward when uncertain of precisely what he wants to say, or when unable to remember a particular word or phrase. In addition to relatively inconsequential stand-

²⁶¹ An expressive variant of adjective *accòo* ‘quiet; careful; casual’.

²⁶² Note that the root *lák-* cannot be used as a lexical noun in modern Galo, although it is reflected in the predicate derivation *-lák* ‘MISS’. Either this represents a highly idiosyncratic nominal use of a predicate derivation, or, and more likely, it represents a fixed expression from an earlier stage of the language in which monosyllabic roots were more likely to stand as lexemes.

alone uses similar to stammering sounds such as *əə*... ‘uh...’ and *mm*... ‘umm...’, as well as loanwords such as *mane* ‘that means; that’s to say’ (<Asm) (§13.4), true Hesitation words may act as “pro-lexemes”. Able to stand as a meaningless pro-head of *any* lexical category, the function of a true Hesitation word is to preserve all of the *grammar* of the speaker’s target construction, without requiring him to commit himself to a particular lexeme to stand as its head; examples are *məráa* = *go* ‘HEST=IND’ ‘a whatever’ and *məráa-tó* ‘HEST-PFV’ ‘whatevered’. In (844), note that the speaker does not bother to repair his use of the hesitation word *məráa*; he simply assumes the intended sense to be clear from context, and proceeds with his narrative. For similar “pro-lexemic” use of *həkə*, see (818) and also discussion in §7.4.3.3.1.

- (844) *okkə kudá, həkə...cīkcí lo...ôrəkə, jôowə...*
 okkə kú = da həkə cīkcí = lo orək = əə jôo = əə
 SCNJ CMPL=CNTR PTP.SEMB bamboo.wall=LOC dao=TOP and.such=TOP
puráa...məráa là doodù.
 puraa **məráa**-là(a) dóo-dùu
 everything(<Asm) HEST-NF LOC.EXIS.INAN-IPFV
 ‘And furthermore, on the wall, daos and all that sort of thing was (**hanging**) there.
 (IR, FA 027)

Uses of hesitation words in nominal/noun phrase functions are often accompanied by Topic marker *əə* or Locative postposition *lo*. Sometimes, these represent the true grammatical constituents of a phrase in which a Hesitation word is standing as pro-lexemic head; other times, they seem to represent more or less fused elements of an embedded Hesitation *phrase*. In (845), note that only Genitive *gə* may be analysed as a true grammatical element of the noun phrase in which *hərii(lo)* stands as pro-lexemic head; in ordinary circumstances, Genitive *gə* cannot follow Locative *lo* in the same phrase (Locative genitives are formed via the ablative *lokə* in modern Galo; see §14.3.6).

- (845) *ərí logə...hocərgə...rəəbú əəkú eəni.*
 [[**ərii** = lo] = gə] [[**hocər**] = gə] rəəbúu əə = kú ee = ni
 [[**HEST**(<**Asm**)=**LOC**]] = GEN [[**deer**] = GEN] horn TOP=CMPL COP.PFV=DISC
 ‘Actually, it was the antler of an umm...of a stag,’ (TR, FS 056)

Hesitation words can be an excellent test for constituent boundaries – from a linguist’s point of view – however I have found it very difficult to apply the test in elicitation, as my consultants usually frown on overuse of hesitation words, insist they would never use them themselves, and in short, cannot see the value of any sort of scientific enquiry which would include them! It is possible that this barrier will eventually be overcome, but for the moment, I have relied only on naturally-attested Hesitation word utterances. The set of hesitation words attested in my corpus is listed in Table 13.19.

| Form | General sense |
|----------------|--|
| <i>məráa</i> | dedicated hesitation word |
| <i>(h)ərii</i> | Assamese-derived hesitation word, used by some foothills Galo in place of <i>məráa</i> |
| <i>həkə</i> | Speaker-proximate/proximate-topical semblative demonstrative |
| <i>əkə</i> | Addressee-proximate/anaphoric semblative demonstrative |

Table 13.19 – Hesitation words

13.7.7. Onomatopoeia

Onomatopoeia of course can be expected to vary widely from place to place and speaker to speaker. The following items are those which have been attested repeatedly, and seem relatively entrenched; the list could probably be increased a hundredfold with time and prolonged exposure to spontaneous discourse (Table 13.20).

| Form | Gloss | Sense |
|-----------------|----------------------|---|
| <i>kokorəko</i> | ‘Cock-a-doodle-doo!’ | sound of a cock/rooster crowing |
| <i>paa</i> | ‘Moo!’ | sound of a bovine (cattle or mithun) mooing |
| <i>koi</i> | ‘Oink!’ | sound of a hungry pig demanding food |
| <i>ɲarak</i> | N/A | sound of a person snoring |
| <i>goo</i> | ‘Hey!’ | sound of a person shouting |
| <i>bís-bòs</i> | N/A | sound of a person whispering |
| <i>bíd-bòd</i> | N/A | sound of a person murmuring |
| <i>puu</i> | ‘Whoosh!’ | blowing sound (wind or human breath) |
| <i>cukom</i> | ‘Kapow! Bang!’ | sound of something fast and agile (impact, burst or motion) |
| <i>gərək</i> | ‘Crack!’ | sound of a stick or branch breaking |
| <i>tekk</i> | ‘Crack!’ | sound of a stick of branch breaking |

Table 13.20 – Onomatopoeia

14. Grammatical, semantic and pragmatic noun phrase functions and their marking

This chapter discusses the grammatical, semantic and pragmatic functions played by noun phrases in a Galo clause, as well as the operators which mark them. It is divided into three main sections: an overview section in §14.1, followed by a detailed description of the basic functions and functional extensions of pragmatic marking in §14.2 and of grammatical and semantic noun phrase relational markers in §14.3.

14.1. Grammatical functions and grammatical relations

“Grammatical functions” may be understood quite generally to indicate the grammatical role played by a particular noun phrase with respect to the argument structure of the clause in which it occurs: namely, whether the noun phrase stands as a core argument of that clause, or not, and if so, as what sort, etc. By contrast, the term “grammatical relations” has come to be understood as referring to the *grammaticalization* of particular “macro-alignments” of grammatical functions, as they are reflected in and/or made use of in various and potentially quite diverse areas of the grammar (Andrews 1985). While there is nothing approaching widespread agreement concerning the applicability of both concepts (in the same way or at all) to all languages, it seems to me that their application in this way leads to a reasonable description of the grammar of Galo. The following three subsections will present an overview.

14.1.1. Transitivity, argument structure and “macro-roles”

I take the terms *transitivity* and *argument structure* to indicate two semi-distinct viewpoints on the same overall linguistic property, which is the number and status of noun phrases which are required to be present in a clause if a particular sense of the predicate is to properly obtain; “transitivity” seems to imply a more predicate-oriented stance (i.e., one speaks of the “transitivity” of verbs), while “argument structure” seems to imply a more noun phrase-oriented stance (i.e., we speak of the “number and status of (noun phrase) arguments”), and that is all.

By *macro-roles* I intend the conventional assignment in Basic Linguistic Theory (beginning with Dixon (1979)) of “syntactico-semantic” labels S, A, O and E to the following argument types, according to the transitivity of the clauses in which they occur:

| | |
|---|--|
| S | Single argument of an intransitive clause |
| A | More controlling/actor-like argument of a transitive clause |
| O | Less controlling/acted-on argument of a transitive clause |
| E | Extension to the core of an atransitive, intransitive or transitive clause |

These labels are first used in a *lexical-semantic sense*, to refer to the set of “core arguments” for which a particular predicate word is specified (§5.2.4); so, for example, a transitive sense of *dám-* ‘hit’ has two core arguments A and O as part of its lexical specification, and this lexically-specified argument structure may or may not undergo a subsequent set of restructuring derivations (i.e., “valence-changing” derivations; cf. §11.2.5) prior to reaching the final projection of a predicate word when it is uttered in a clause.

The labels are also employed with a *clause-level, syntactic sense*, to refer to the realization of a predicate’s arguments by particular noun phrases in a clause (§9.2); so, for example, two noun phrases, each with a set of independently definable properties, occur in any clause headed by transitive verb root *dám-* ‘hit’.

Accordingly, the following set of core argument structures are established, in which S, A, O and E refer *both* to the set of core arguments assigned to a predicate *and* to their syntactic realization in a particular clause headed by that predicate, and (OBL) refers to any number of oblique (a.k.a. “adjunct”, “peripheral” or “non-core” noun phrases). Oblique noun phrases may provide some additional information regarding, but do not directly support, the core sense of the predicate (Figure 14.1).

| | | | | |
|---------------------------|---|---|---|-------|
| (g) atransitive | | | | (OBL) |
| (h) extended atransitive | | | E | (OBL) |
| (i) intransitive | S | | | (OBL) |
| (j) extended intransitive | S | | E | (OBL) |
| (k) transitive | A | O | | (OBL) |
| (l) extended transitive | A | O | E | (OBL) |

Figure 14.1 – Basic set of possible core argument structures (adapted from Dixon (2006: 7)); note that ordering here is arbitrary, and is not intended to reflect actual constituent order in Galo

14.1.2. Relationship between semantic roles, argument types and syntactic realizations

The literature abounds with proposals as to how the relationship between semantic roles, argument types and syntactic realizations should be construed, both in universal-grammatical (or universal-cognitive) senses and in senses developed with respect to

particular languages or types of languages, and assessment of even a small portion of these proposals nowadays must lie well beyond the scope of a descriptive grammar. I simply outline here the approach which I have found useful in the analysis of Galo grammar, and readily concede that any number of more efficient or insightful proposals may be adduced, either with respect to human language overall or with respect to Galo in particular.²⁶³

First, in some “underlying” sense, we can understand a verb to be “subcategorized” for a set of zero or more arguments, as outlined in Figure 14.1. Next (in an analytical rather than procedural sense of “next”), we can understand these core arguments to be underlyingly associated with a set of semantic types, in the sense of a lexicon-internal “construction”. Potentially, a large set of verbs may assign a similar or identical set of semantic types to the same basic set of arguments (for example, a large set of “state change” verbs may assign Agent and Theme roles to A and O arguments respectively); or, there may be a more detailed semantic specification of the type of nominal which can stand in a particular argument position (for example, one existential verb may subcategorize for an animate S while another may subcategorize for an inanimate S). In principle, this assignment could be viewed as arbitrary, however in practice, of course, more agentive semantic roles are generally assigned to the A argument position and less agentive roles to the O argument position.

Then, we come to the syntactic realization of the arguments in a particular clause, as they are “projected” by the predicate as a function of its head (usually, a verb, but possibly also an adjective); at this point only, it becomes possible to talk of “grammatical relations”, or higher-order alignments of certain argument types in opposition to others. In Galo, we find good evidence for the grammaticalization of S/A alignment in opposition to the “core remainder” O and/or E, and may therefore begin to speak of, for example, the “subject” of a particular clause, as it may be identified in terms of a set of criteria to be outlined in §14.1.3. The projected instantiations of underlying, verb-subcategorized A, O and so on are thus recognized in terms of these identified mapping relations (A onto “subject”, etc.).

Figure 14.2 roughly schematizes this conception:

²⁶³ My principle informing influences have been the construction-based grammar of Croft (2001), and the inductive, typologically-oriented proposals of Basic Linguistic Theory, particularly as developed by Dixon and colleagues (Dixon 1979; Dixon 1994; Dixon and Aikhenvald 2000).

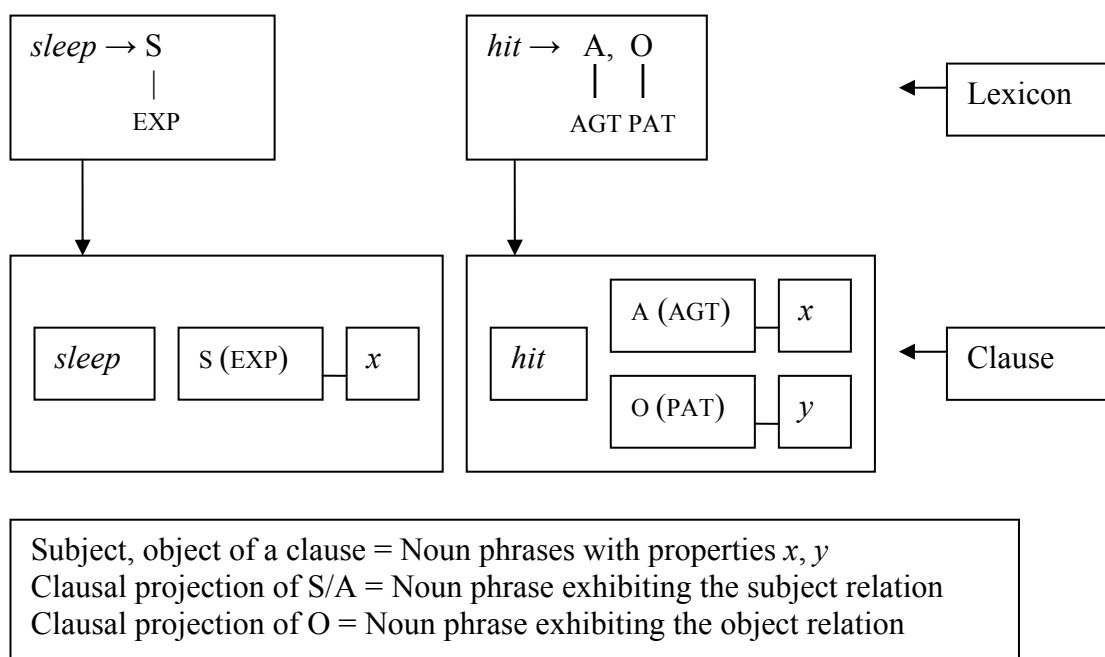


Figure 14.2 – Schematization of the derivation from lexical entry to clausal projection, and its interpretation

To be quite clear, I am claiming that in Galo, as (seemingly) opposed to a number of nearby languages – particularly of Tibeto-Burman stock – direct marking of core argument semantic roles vis a vis the predicate *does not* occur.²⁶⁴ Instead, we must posit levels of structure *both* within the lexicon *and* within the clause syntax to account for the behaviour of Galo noun phrases and their interpretation. This fact suggests to me, at least, that Galo has undergone grammaticalization of, possibly, particular pragmatic-organizational processes (such as interclausal argument co-reference constraining strategies) which other related languages of the area may not have, possibly as part of an overall shift in its basic typology. In-depth exploration of this topic lies well outside the scope of this work; however, I would suggest that much might be learned from a future study of this nature.

²⁶⁴ For example, both Ao Naga (Coupe 2007) and Meithei (Chelliah 1997) – being the currently best-described of North-East Indian Tibeto-Burman languages – appear to make strong use of semantically-oriented marking, and neither language is claimed by the cited authors to have developed grammatical relations at all. Similar phenomena have been identified in other more-or-less Burma-bordering languages, such as Singpho (Morey forthcoming).

14.1.3. Grammatical relations

In Galo, we find fairly robust evidence for the grammaticalization of “subject”, in the standard sense of S/A alignment in opposition to other core argument roles.²⁶⁵

Independent evidence for the grammatical relation “object” is less robust, due mainly to differences in the extent to which E arguments align with or are distinct from O arguments when considered from various grammatical perspectives. The following subsections §14.1.3.1-§14.1.3.7 review areas of Galo grammar in which the grammatical relation of subject is manifest and/or recognizable, as well as some in which grammatical relations might perhaps be expected to be reflected, but seem not to be. In them, I informally refer to O as constituting an “object” relation in opposition to “subject”. §14.1.3.8 then discusses grammatical treatment of O and E arguments in more detail, addressing the question of whether one or more independently-identifiable “object” relations may be said to exist in Galo, or not.

Before proceeding, it may have been noted that at various points in this grammar, mention has been made of grammatical features which seemingly reference S and O, but not A (as with certain Result predicate derivations; see §11.2), as well as O and obliques, and sometimes S, but not A (as with predicate-collocated nominals and/or “incorporation”; see §5.3.2.1 and §14.2.2.2). Such groupings seem *not* to be describable as “grammatical relations” (interesting though they are on their own terms), inasmuch as they do not interact with basic techniques in the language for determining the relationship of main clause arguments to a predicate; accordingly, such groupings will not be mentioned further in what follows.

14.1.3.1. Evidence from main clause relational marking

In a prototypical Galo transitive clause, in which the predicate is headed by a lexically transitive verb and in which both A and O argument noun phrases are definite, referential and overtly represented, identification of noun phrase functions is a trivial matter: O is obligatorily marked in the *accusative*, and A is unmarked (846)-(848).

²⁶⁵ I am aware that an older “standard” view held “subject” to refer to the noun phrase “outside of VP” (Chomsky 1965) (or that “immediately dominated by IP” (Haegeman 1991), which says basically the same thing) and “object” to refer to the noun phrase “dominated by VP”. That is not the sense intended here.

(846) *ŋó biəm cendù.*

[ŋó]_A [bi-əəm]_O [cèn-dùu]_{PRED}
 1.SG 3.SG-ACC know-IPFV
SUB OBJ PRED
 ‘I know him.’

(847) *ŋóm bɿ cendù.*

[ŋó-m]_O [bɿ]_A [cèn-dùu]_{PRED}
 1.SG-ACC 3.SG know-IPFV
OBJ SUB PRED
 ‘He knows me.’

(848) **ŋó bɿ cendù ~ *bɿ ŋó cendù.*

If the predicate head is intransitive (whether it is an intransitive verb or an adjective), the S argument is, like A, always unmarked. This is true whether the S argument of a particular intransitive verb is assigned the same or a similar semantic role to that of the A argument of another, transitive, verb (or transitive sense of the same verb), or, perhaps, the same semantic role as the other verb’s O argument (as with an S=O ambitransitive verb). In (849), the intransitive verb *dá-* ‘feel around, using one’s foot’ seems to subcategorize for (more or less) the same sort of Actor S as we find assigned to the A argument of *úp-* ‘grope, using one’s hands’ (850). This is a semantically quite different role from the Theme S of *ziK-* ‘melt’ (851), but their (lack of) marking is the same.

(849) *ŋó dadù.*

[ŋó]_S [dá-dùu]_{PRED}
 1.SG feel.with.foot-IPFV
SUB PRED
 ‘I’m feeling around with my foot.’

(850) *ŋó iginóm ubdù.*

[ŋó]_A [igin = əəm]_O [úp-dùu]_{PRED}
 1.SG basket.conical.large.dense=ACC grope-IPFV
SUB OBJ PRED
 ‘I’m groping around in the *igin* basket.’

- (851) *ŋó ziddûuku*
 [ŋó]_S [zík-dùu-kú]_{PRED}
 1.SG melt-IPFV-CMPL
SUB PRED
 ‘I’m melting.’

14.1.3.2. Evidence from dependent clause relational marking

In certain dependent clause types, including nominalized/relative clauses (§15.3.1), basic temporal/episodic subordinations (§16.4.3.1) and verbal adverbial subordinations (§16.5.3), the subject (S or A argument) is obligatorily marked in the *Genitive* case. Object arguments are not always case-marked, but if they are, they are marked in the accusative. Only a single example is given for illustration (852); for further examples and discussion, see the sections referenced above.

- (852) *hotəgə̀ îs-tîkò lò ŋûn aalîk ká.*
 [[hotə̀ = gə̀]_S isî-tî-kò]_{PRED.NZD}] = lo ŋunù áa-lîk-káa
 elephant=GEN water-imbibe-NZR:LOC/OBL=LOC 1.PL come-INTO-PF
 ‘We arrived at the place where the elephants (usually go to) drink.’ (IR, B8:42)

14.1.3.3. Evidence from nominalization/relative clause formation

Nominalized/relative clauses make clear reference to stem argument structure; subject nominalizer *-nà* ‘NZR:SUB’ refers to the S or A argument of an intransitive or transitive stem respectively (853)-(854); non-subject nominalizer *-nam* ‘NZR:NSUB’ cannot occur on an intransitive stem; on a transitive stem, it refers to the O argument (855)-(856).

- (853) *hinə̀ níi*
 hí-nà níi
 die-NZR:SUB person
 ‘person who died’ (subject relative based on intransitive verb)

- (854) *dəmnə̀ níi*
 dóm-nà níi
 beat-NZR:SUB person
 ‘person who beat (someone else)’ (subject relative based on transitive verb)

- (855) **hinám níi*

(856) *dəmnám níí*

dóm-**nam** níí

beat-NZR:NSUB person

‘person who was beaten (by someone)’ (object relative based on transitive verb)

See §15.3 for further discussion of nominalization and relativisation.

14.1.3.4. Evidence from predicate marking

There is no standard agreement/argument cross-referencing on Galo predicates *per se*. However, there are certain types of predicate marking which exhibit person-based sensitivities, such as *conjunct/disjunct marking* (§12.5); such sensitivities are always to the *person of the clause subject*, never to another type of noun phrase (857)-(858).

(857) *nó(*ńó/*bî) ńóm/aîiuyám/bîəm dəmtó baré?*

| | | | |
|-------------------------|---------------------------------------|--------------------------------|-----|
| [ńó/ńó/bî] _A | [ńó-m/aîi = əəm/bîi-əəm] _O | [dám-tó-bá(a)] _{PRED} | ree |
| 2.SG/1.SG/3.SG | 1.SG-ACC/self=ACC/3.SG-ACC | beat-PFV-PFV.DRCT | PQ |
| SUB | OBJ | PRED | |

‘Have you beaten me/yourself/him (yet)?’

(858) *bî(*ńó/*nó) ńóm/nóm/bîəm/aîiuyám dəmgée baré?*

| | | | |
|-------------------------|--|---------------------------------|-----|
| [bî/ńó/nó] _A | [ńó-m/nó-m/bîi-əəm/aîi = əəm] _O | [dám-gée-bá(a)] _{PRED} | ree |
| 3.SG/1.SG/2.SG | 1.SG-ACC/self=ACC/3.SG-ACC | beat-PFV.DISJ-PFV.DRCT | PQ |
| SUB | OBJ | PRED | |

‘Has he you beaten me/you/him/himself (yet)?’

Similarly, most types of *hortatives and imperatives* are sensitive to *subject person*; for example, non-inclusive (unmarked) imperatives require a second person subject while inclusive hortatives require a first person dual or plural subject (independent of object type). For discussion and examples, see §9.5.2.

14.1.3.5. Evidence from pivots (cross-clause coreferentiality)

Although Galo does not robustly exhibit the strongly subject-oriented pivots and switch-reference functions in its clause chains which are found in many other clause chaining languages (§16.4.2.2.3), the sets of restrictions and possibilities which do exist appear to always make reference *either* to S/A *or* to a syntactic non-subject.

For example, in an embedded temporal subordination (§16.4.3.2), an ellipsed subject is obligatorily coreferential with the main clause subject (859).

(859) *bɛ̃ saám tɛ̃tóm, ɪŋkása kú.*

[bɛ̃_i]_s [[Ø]_i]_A [háa = əəm]_o [tɛ̃-tó = əəm = əə]_{PRED.TSUB} [ín-káa-kú]_{PRED}
 3.SG tea=ACC imbibe-PFV=ACC.TSUB=TOP go-PF-CMPL
 ‘After Ø_i drinking tea, he_i left.’ (lit., ‘He_i after Ø_i drinking tea, left.’) (ZR, C2:11)

Similarly, a clausal adverbial subordination in Stative imperfective aspect exhibits a “disjunct” constraint against cross-clause subject coreference (§12.5.2.3, §16.5.4.3). In (860), the ellipsed subordinated clause subject must be in a different person from the subject of the higher clause.

(860) *dodó kêebə əmlà, ɲó acín*

[Ø_{i/*j}]_A [dó-dàk-ée = bɔ́ óm-là(a)]_{PRED} [ɲó_{j/*i}]_A [acín]_o
 eat-COS-IPFV.DISJ=SBRD say-NF 1.SG cooked.rice
motò.
 [mò-tó]_{PRED}
 make-PFV
 ‘I made food so that (they/you/*I) could eat.’ (IR, B8:52)

Finally although clause chains are not inherently same-subject, Subsequential and Perfective sequential suffixes *-lèe* ‘SSEQ’ and *-rée* ‘PSEQ’ force cross-clause same-subject readings, in addition to other clause-binding functions (cf. §16.4.4.1, §16.4.4.2) (861).

(861) *ôgo lîglə ató reelà...mɛ̃...jùpto kú.*

[Ø_i ogò lîk-là(a) á-tó-rée-là(a)] [bɛ̃_i jùp-tó-kú]
 ANAP.LOC insert-NF keep-PFV-PSEQ-NF 3.SG sleep-PFV-CMPL
 ‘(He_i) (*I/*you/*someone else) having kept (the frog) in there, he_i...went to sleep.’
 (TR, FS 008)

14.1.3.6. Evidence from constituent order

Unlike in some languages (such as English), constituent order is at best a weak correlate of grammatical relations in Galo. Although the statistically most frequent Galo constituent order is without question A O V, when the O argument is definite and referential – meaning that it is obligatorily marked in the accusative – constituents may be arranged in the most pragmatically useful order. Thus, there is a pragmatic difference between (862)-(863) (in (863), O sounds more focal/contrastive), but there is no grammatical/semantic difference, nor any hint of potential confusion.

(862) *ŋó nó-m cendù.*

[ŋó]_A [nó-m]_O [cèn-dùu]_{PRED}
 1.SG 2.SG-ACC know-IPFV
SUB OBJ PRED
 ‘I know you.’

(863) *nóm ŋó cendù.*

[nó-m]_O [ŋó]_A [cèn-dùu]_{PRED}
 2.SG-ACC 1.SG know-IPFV
OBJ SUB PRED
 ‘I know you.’

Although it is an incredibly rare case in practice – I have certainly never naturally attested anything like this – one might conceivably encounter a case in which two individuated but unidentifiable (and therefore, not case-marked) referents occur in the same transitive clause, in conditions where it would be pragmatically unknowable which was more likely to be understood as the relatively more active/agentive.²⁶⁶ In such a case, although any constituent order is possible, the initial noun phrase is almost always understood by my consultants as more likely to register as agentive (864). This could conceivably be taken as weak evidence for a preferred Subject-Object-Verb order; however, it would be difficult to clearly establish that the interpretation would not in fact be due to some inferred *pragmatic* relations – i.e., that the initial noun phrase is more topical – together with an inferred likelihood that the more topical participant would tend to be more agentive.

(864) *niigó ikîigo gaṇká.*

[ní = go] [ikîi = go] [gám-káa]
 person=IND dog=IND bite-PF
 ‘A man bit a dog.’ (preferred) *or* ‘A dog bit a man.’ (possible) (MN, B5:68)

In sum, evidence for grammaticalization of constituent order as an index of grammatical relations in Galo is weak at best.

²⁶⁶ The imagined contexts within which I elicited such formations on various occasions were one in which a film clip was imagined in which a man entered a roomful of animals, bit a dog, and left, and another in which a legendary historical figure, whose precise identity was unknown, was known to have bit a dog (with supernatural consequences).

14.1.3.7. Non-occurrence of passive

By “passive”, I understand a marked morphosyntactic operation of detransitivization, in which the object is “raised” to subject position, and in which the notional subject (underlying A) is expressed, or is expressible, as an oblique (Dixon 1994: 146). The presence of a passive construction in a language is often taken as strong evidence for grammaticalization of and/or functional use of the grammatical relations of “subject” and “object”. In Galo, however, despite relatively robust evidence for subject as outlined in above sections, there is no marked syntactic construction in which a notional subject is expressed or expressible as a main-clause-level oblique noun phrase, hence no morphosyntactic “passive” as such. There are derivational operations which appear to operate *at the word level* on the argument structure of predicates and the semantic roles which are assigned to them, enabling semantic interpretations which render them functionally similar to passives,²⁶⁷ but none with the precise syntactic consequences outlined above.²⁶⁸

14.1.3.8. O and E arguments and the grammatical relation(s) of “object”

Above subsections reviewed evidence for the grammatical relation “subject” in terms of intransitive and transitive clause types, using “object” as an informal label for the syntactic realization of O. Turning to clause types with extended core argument structures, however, the evidence for “object” becomes somewhat less categorical.

In an *extended transitive* clause headed by a predicate in *zí-* ‘give’ – or else derived by the related Benefactive applicative *-zí-* – *both O and E* arguments are typically marked in the *accusative* (865).

²⁶⁷ Cf. especially the ‘Reversive’ suffix *-kò* (§11.2.5.8), which has the effect of causing the argument roles of A and O to be reversed (schematically, *I hit-ko him*, in which ‘him’ is understood as Agent and ‘I’ as Patient). However, predicate marking in *-kò* seems to have no syntactic consequences at all, hence is not a “passivizing” morpheme.

²⁶⁸ I do not take the absence of a passive in Galo to argue against the *relevance* of passive constructions to the description of grammatical relations in general. Rather, I would say that simply having the grammatical relation “subject” does not in itself *predict* the presence of a passive. Inasmuch as a language may have one or more other means of expressing a transitive non-actor in subject position, as is the case in Galo, there may simply be no functional pressure to grammaticalize a true passive construction.

(865) *deerál gə́áa booló...nibbòm...opôo*

deerá = aló gə́-áa-boolo [nibò = əəm]_E [[opòo
public.hall=DST.LOC.SLEV carry/wear-ALL-COND shaman=ACC liquor
cugrîi əmlàa dopák pohùməm ziréî.

cugrîi əəm] = laa [dopák pohùm] = əəm]_O [zí-ré]_{PRED} = (ə)î
bottle.gourd ACC=NPCNJ snack meal.packet=ACC give-IRR=ETAG
‘When they bring (the basket of boiled rice cakes) to the public hall...they’ll give
[the rice beer gourd and the snack packet] [to the shaman], eh.’ (LN, MF 060)

Although comparatively rare in terms of frequency, E arguments of ‘give’ and of predicates derived in *zí-* may also be marked in the *dative* (866); O arguments may not (not shown).²⁶⁹

(866) *ŋó ŋunûk scrípt bóok ém níi câmjîi gobé*

[ŋó]_A [ŋunù-kè script book əəm]_O [níi câmjîi go = bə́]_E
1.SG 1.PL-GEN script(<Eng) book(<Eng) ACC person CLF:TENS-two IND=DAT
zitobá.

[zí-tó-báa]_{PRED}

give-PFV-PFV.DRCT

‘I gave our Script book to twenty people.’ IIR, EM 04-04-07

External relativisation of zí- ‘give’ in -nam ‘NZR:NSUB’ freely yields either an O or an E denotation (867) (see also §15.3.1.3.2). However, only O is accessible to an internally-headed relativisation; E is not (868).²⁷⁰

(867) *ŋôk zinám pagbò*

ŋó-kè zí-**nam** pagbò
1.SG-GEN give-NZR:NSUB slave.male

‘The male slave I gave (to someone)’ **or** ‘The male slave to whom I gave (something).’ (MN, B5:128)

²⁶⁹ Some speakers claim that dative-marking of E is “more correct” than marking in the accusative, which could represent a relatively recent innovation. That claim notwithstanding, accusative-marking of E arguments in ‘give’ type clauses is overwhelmingly more frequent than dative-marking in my data, and seems quite independent of speaker age or geographical background; of course, a larger and more diverse corpus than is currently available to me could eventually reveal patterned differences in their distribution.

²⁷⁰ Another way of interpreting these data would be to suggest that (868) is not an internally-headed relativization at all, but rather represents a variety of incorporation of the O argument noun phrase into the grammatical predicate. The fact remains that E does not appear to have access to this operation (cf. §15.3.1.3.2).

(868) *ŋók pagbò zínám*

ŋó-kà pagbò zí-**nam**

1.SG-GEN slave.male give-NZR:NSUB

‘The male slave I gave (to someone)’ **but not** *‘The male slave to whom I gave (something).’ (MN, B5:128)

Similar statements can be made with respect to other verb types which appear to be underlyingly subcategorized for E arguments. For example, Goal arguments of motion verbs and Theme arguments of throw verbs are both referenced by non-subject nominalizer *-nam* – as *ín-nam mookò* ‘go-NZR:NSUB place’ ‘place which was gone to’ and *náa-nam ilî* ‘throw.at-NZR:NSUB stone’ ‘stone which was thrown at (something/someone)’. However, their marking at the clause level is quite different; Goal arguments of motion verbs are usually either unmarked for case, or are marked in the locative (although accusative marking is possible in a limited, “experiential” sense; see §14.3.2.3), while Theme arguments of transfer verbs are generally marked as topical instruments (§14.2.2.1.2.1).

In sum, E arguments align with O arguments in some respects (accessibility to Accusative case-marking and Non-subject nominalization) but not in others (consistent Accusative case-marking and accessibility to internally-headed relativization).

At the same time, E arguments are distinct from obliques, despite that their syntactic marking may sometimes overlap. Consider the oblique temporal and mediative noun phrases, which initiate and terminate the sentence in (869).

(869) *ŋókə jaamée ogò...níí gonnà hocərgó aptò.*

[ŋó-kə jaamée ogò]_{OBL} [níí gonà = əə]_A [hocér = go]_O [àp-tó]_{PRED}
1.SG-GENboyhood TMP.RLS person SLCT=TOP deer=IND shoot-PFV

duî nombór lokə.

[dui nombor lokə]_{OBL}

two(<Ind) number(<Eng) INST

‘Back in my childhood...one of the guys shot a deer. With a number two.’ (NyR, MDS 093)

In (869), neither the temporal nor the instrumental noun phrase is required in order to complete the sense of *àp-* ‘shoot’, unlike the obligatory core arguments A and O.

Although not a strict syntactic requirement, they occur on the periphery of the clause syntax, rather than within the clause syntactic core as E arguments tend to (see for

example (866)). Also, neither the temporal nor the viative noun phrase may be coreferential with a non-subject nominalization in *-nam*.

Thus, the picture that emerges is one in which O and E arguments are consistently opposed *both* to subject functions (S and A) *and* to oblique functions, but are *neither* consistent in their alignment *nor* in their opposition to one another. This scenario is schematized in Figure 14.3.

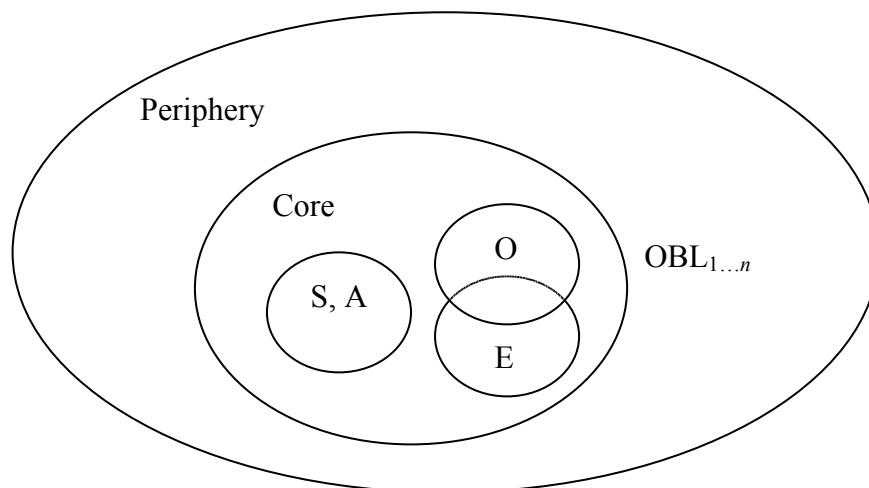


Figure 14.3 – Schematization of the grammatical treatment of Galo argument structures

The question, then, is whether O and E argument types can be said to stand in a single grammatical relation to the predicate (in some contexts at least, such as in nominalization/relativisation), or whether they must be said to stand in different relations (but that this difference is sometimes elided, as in nominalization/relativisation). I leave this question open for future research.²⁷¹

14.1.3.9. Additional lexical-semantic and syntactic properties of E arguments

In addition to the verb and clause types discussed in §14.1.3.8, certain types of *complement clause* might be analysed as an E argument. For example, the *speech reporting* verb *śm*- ‘say (that)’ obligatorily subcategorizes for a direct speech report in

²⁷¹ The “usual suspect” approaches would be to treat the O relation as “direct object” and the E relation as “indirect object”, or else as “primary” and “secondary” objects respectively. I do not see how either approach would be appropriate here. First, “primary” and “secondary” object as defined by Dryer (1986) refers to the grammatical alignment of extended transitive Recipient and transitive Patient in opposition to extended transitive Theme – that is clearly not in evidence here. Regarding “direct” and “indirect” objects – which refers to the consistently different grammatical treatments of O and E, O standing as “direct” object and E as “indirect” object (and in which E may be “promoted” in some constructions to the “direct” object relation) – I hope I have shown that this too is not obviously in evidence (although I do not doubt that a good case in favour of this analysis could be made).

extended atransitive (‘it is said that [REPORT]’), extended intransitive (‘I said that [REPORT]’), and extended transitive (‘I say of this that [REPORT]’) senses alike (§16.7, Table 16.2). The speech report clause is unmarked for accusative (or any other) case, cannot be replaced by an accusative-marked (or any other) pronoun, cannot be referenced by subject or non-subject nominalizations, and therefore appears to fail most tests for S/A or O argument statuses. Still, the strength of association between *ám-* ‘say’ and a clause complement is such that *ám-* has even developed several weakly grammaticalized, anaphorically clause-referencing discourse-continuity functions (§16.7).

Certain types of *adverbially subordinated clause* or *dative noun phrase* (which share the same etymological marking in *bɔ́*, but which differ in terms of their internal structures) may also be understood to realize an E argument, when their presence is required for a particular sense of a verb to properly obtain. For example, several senses of the highly polysemous verb *rɪ̀-* ‘do’ clearly require an E argument, usually with a Translative sense (S/A *become* E); in (870), the (ellipsed) notional subject referent is an area of land which has been cleared for cultivation. In absence of one or both of the appositive phrases marked E, the sentence is borderline ungrammatical, and gives a sense that the area is somehow being construed as an animate actor of ‘do’ (in the intransitive sense) (871).

(870) *izì pə́tá də̀túu dè̀ek*

[izì]_{OBL} [pə́tá = əə də̀túu-dé-e-kò

now bird = TOP soar-STOP/DOWN.S/O-PROS-NZR:LOC/OBL

kaamáa bó...mookó rɪ̀mðə̀ bə̀, rɪ̀ám duukú́.

káa-máa = bó]_E [mookó = əə]_S [rɪ̀mðə̀ = bó]_E [rɪ̀-ám-dùu-kú = ́]_{PRED}

have/exist-NEG=SBRD place=TOP cultivated.area=DAT do-EXH-IPFV-CMPL=NFI1

‘Now this area’s become such that there’s nowhere for the birds to land, such that it’s all just cultivated fields.’ (LN, GMW 062)

(871) ? *izì, mookó rɪ̀ám duukù.*

izì mookó = əə rɪ̀-ám-dùu-kú

now place=TOP do-COLL-IPFV-CMPL

? ‘Now, the places are all doing it.’

Translative E complements of *rɪ̀-* ‘do’ may be replaced by adverbial pronouns such as *əmbə̀* ‘like that’, but are again not accusative-marked and cannot be referenced by

subject or object nominalizations, and so on. Thus, they do not qualify as S, A or O arguments, despite being obligatorily present under this sense of the predicate.

Finally, we can note cases in which certain *applicative* derivations to a predicate stem add an argument to a clause which, although semantically and syntactically obligatory, is not treated as grammatical subject or object. The most frequently and robustly-attested such case is that of *directional* applicatives such as *-lik* ‘INTO’. In (872), the noun phrase marked E is licensed as a goal by the applicative derivation, and would be understood as semantically entailed whether it overtly represented in the clause or not.

(872) *əm aló dəəlîgla morè!*

[əmè aló]_E [dáo-lik-là(a) mò-ré]_{PRED}

fire DST.LOC.SLEV soar-INTO-NF make-IRR

‘I’m going to make (the paper airplane) fly into the fire!’ (KN, OL23:81)

As far as I am aware, all arguments added to the clause via an applicative derivation may be referenced via Non-subject nominalization of the applicative-derived predicate in *-nam*. For further discussion of applicative derivations, see §11.2.5.

14.2. Referentiality and pragmatic marking

14.2.1. Canonical patterns

There are four basic possibilities for marking of the referential status of noun phrases in Galo; all are mutually exclusive:

- a) zero *Ø* (references type)
- b) individuator *go* (references individual as an instance of a type)
- c) Topic marker *əə* (references individual as contrastive with other individuals)
- d) demonstrative (various) (as Topic marker, additionally providing spatial-deictic information)

14.2.1.1. Zero-marking

By *zero-marking*, I mean here presentation of a noun phrase which is unmarked for referential status. There are somewhat different implications for zero-marking of noun

phrases in different syntactic functions, with different phrasal heads, and in different syntactic constructions/clause types.

Uniquely referential noun phrases (i.e., those headed by *pronouns* and *proper names*) are almost always zero-marked in Galo when in subject function (effectively, in Nominative case; see §6.1.2.2.8), although certain pronoun types may also be marked for topicality (§14.2.1.3; see also §6.1.3). *Proper name*-headed noun subject noun phrases are obligatorily zero-marked for referentiality and/or are supported by a following coreferential pronoun (873). Noun phrases definitely referring to known and/or highly discourse topical individuals (such as ‘my father’) may be zero-marked, but may also be marked for topicality when in subject function (§14.2.1.3).

(873) *borík...ŋoí gobəre əmlà, m̥i ɪrgàa bó*

[**borík**]_S ŋoí go = bəree əm-là(a) [**b̥i**]_S ɪrgàa = bó
 NAME fish IND=CJEC tell-NF **3.SG** interesting=AVZR
məráa duunà nà.

məráa-dùu-nà = əə na
 whatever-IPFV-NZR:SUB=COP.IPFV DECL
 ‘**Borik**, thinking there was a fish, **he** quite enthusiastically, you know (leapt in to grab it).’ (RmR, CC 022)

Common nominal-headed subject noun phrases are zero-marked when *non-referential* (and/or referring to a generic concept rather than a concrete individual) (874). Zero-marking is particularly common of the subject of a non-specific existential predication (875).

(874) *aiṇə almáa nə nà*

[**ai-nà**]_{VCS} [aló-máa-nà]_{VCC} na
heavy-NZR:SUB good-NEG-NZR:SUB DECL
 ‘Heavy ones are bad ones, see.’ (KZ, 9:133)

(875) *is̥ doomáa re?*

[**is̥**]_S [dóo-máa]_{PRED} = ree
water LOC.EXIS.INAN-NEG=PQ
 ‘Is there no water?’ (TR, 6:70)

Temporal phrases headed by shifting/deictically-referring time nominals are zero-marked when establishing a *realis* (past-time) temporal context (§5.2.2.16.5).

Finally, *predicate-adjacent/incorporated, non-referential* noun phrases are also zero-marked. This phenomenon is discussed in detail in §14.2.2.2.

14.2.1.2. Indefiniteness and individuation

Individuation of an entity is most often handled by noun phrase enclitic *go*.

Uniquely-referring expressions such as personal pronouns and proper names, inasmuch as they refer *a priori* to well-individuated entities, are never marked for individuation in *go*.²⁷²

The most common use of *go* is in marking common nominals in core argument functions as ‘instances of a type’. As such, *go* often marks *first mentions* of discourse referents (much like an indefinite article) (876).

(876) *ləkîŋ ogò...omêe gò kaató.*

[ləkîŋ ogò]_{OBL} [omêe = go]_S [káa-tó]_{PRED}
time.way.back TMP/EPIS.RLS kid=IND have/exist-PFV
‘Once upon a time...there was **a boy**.’ (TR, FS 003)

Already-established referents whose *type-construal* is under focus (schematically, ‘a [TYPE] one’ are also typically marked in *go*. In (877), the speaker has just been asked for *tamul go* ‘betelnut(<Asm) IND’ ‘some betelnut’, and responds:

(877) *ganám gó naî?*

[gá-nam go]_{VCC} na = (ə)î
pare-NZR:NSUB IND DECL=ETAG
‘One (which has already been) cut, right?’ (LN, OLB7:22)

Individuation in *go* may be of *countable* (876) or *uncountable* types of entity (878). Cases of seeming ambiguity may also emerge, depending on whether focus falls on the individual or some mass from which it is drawn; for example, (877) could either be understood as ‘an instance/exemplar (of betelnut) which has been cut’ or ‘some (portion of the total mass of betelnut) which has been cut’. This is quite different from indefinite/first mention reference to *plural countables*, which is differently marked in a

²⁷² Terms of address may be marked in a seeming reflex of *go* only in the context of a ‘Supplicative’ vocative expression, discussed in §13.6.2; this is not, however, a synchronically individuating function.

special ‘Indefinite plural’ function of Anaphoric ablative demonstrative *əkə* (879) (see §7.4.3.3.2 for further discussion and examples).

(878) *tamí opôo gò motək^wà.*

[**tamí opôo = go**]_O [mò-tó]_{PRED} = káa
millet liquor = IND make-IPTV.ODIR = ADVS
 ‘Make **some millet beer**.’ (TB, OAM 279)

(879) *aló á niiêk duudà bên*

aló áa [**níi = əkə**]_S [dùu-dó(o)]_{PRED} ben = ^
 DST.LOC.SLEV DST.SLEV **person = IND.PL** stay-STAT EVID = NFI2
 ‘There seem to be **some people** over there.’ (IR, FA 014)

Indefinite/interrogative pronouns of content *jòo* and quantity *jad̥* are often marked in *go* when the existence of an individual is known, but some fact about it is not. Thus, while pronoun of content *jòo* is best translated ‘what’ when used alone, and potentially questions the nature of an abstract concept or type (as ‘*what* are you doing’), *jòo = go* ‘what = IND’ is best translated, with individual reference, as ‘which *one*’ or ‘what kind of *thing*’. In (880), note also the use of Individuator *go* following the anaphorically-referring Semblative sense of demonstrative *əkə*. Use of *go* here is required in order to form a properly-referring expression denoting ‘individual(s) of that kind’; without *go*, *əkə* could have *conceptual* reference only (i.e. ‘that *sort* of thing (without reference to an individual exemplar)’). For further discussion of the properties of *əkə*, see §7.4.3.

(880) *jadd̥go ân-namə aarə d̥i,*

[**jadd̥ = go** anə-naməə]_S [áa-rə]_{PRED} d̥i
how.many.EMPH = IND mother-daughter.in.law come-IRR WOND
əkəgò tuubâm hirə.
 [**əkə = go**]_S [tùu-bám-hí-rə]_{PRED}
 ANAP.SEMB = IND prop-COLL-REFL-IRR
 ‘**However many** women come, **that many** (baskets) will be propped up together (against the wall).’ (LN, MF 078)

Individuating properties such as those exhibited by *go* are generally the province of *classifiers* – especially, generic classifiers – in Mainland South East Asian languages,

and the highly-developed individuating functionality of *go* may at least in part explain the usual lack of a generic classifier in Galo (§8.2.2.2.1). Individuation in *go* is also found in the context of *enumeration*, in construction with numerals and, sometimes, classifiers (881).

- (881) *hiidâa daapigò/.kozzúu ogò, adaagó nûm*
 [hiidâa **dâa-nì = go**] [kozzúu ogò]_{OBL} [adâa = go nûm]_O
 stick CLF:STICK-two=IND awhile.ago TMP/EPIS.RLS CLF:STICK=IND DLMT
turtó.
 [túr-tó]_{PRED}
 support.from.below-PFV
 ‘Two sticks/...before, only one stick had been propped against (the door).’ (TR, FA 038)

The individuating functionality of *go* is *extended* to denote a ‘unit’ sense on *temporal and episodic nominals*, often with an adverb-like feel. On *ordinal numbers*, the sense is of numbers of iterations of the event denoted by the predicate (882). On non-deictic time nouns, the sense is of occurrence for one iteration of the denoted time duration (883).

- (882) *porók...ləkêŋ gò ləni gò kogbooló komcíb*
 [porók = əə]_S [ləkêŋ = go]_{OBL} [ləni = go]_{OBL} [kók-boolo]_{PRED} [komcí = bə]_{OBL}
 chicken=TOP once=IND twice=IND crow-COND morning.early=DAT
uudû.
 [úu-dûu]_{PRED} = (ə)î
 awake-IPFV=ETAG
 ‘When the cock crows **once or twice**, we wake up early in the morning, eh?’ (LN, GMW 013)

- (883) *əŋî gò ârə booló (...) oîkəm*
 [əŋî = go]_{OBL} [arə-boolo]_{PRED} oîk = əəm
 year=IND be.subject.to.taboo-COND plant.variety.edible=ACC
domáa rəî.
 dó-máa-rə = (ə)î
 eat-NEG-IRR=ETAG
 ‘If you’re subject to taboo **for a year** (...) you won’t eat oik leaves (during that time), eh.’ (LN, WGD 011)

Finally, in a seemingly extended use, *go* occurs on a handful of *quantity nouns* with a non-referential, adverb-like predicate-modifying sense, as *əŋŋí* = *go* ‘bit=IND’ ‘a little; a bit’ and *azék* = *go* ‘CLF:SLICE=IND’ ‘a smidgen; a dab’. Such forms also have non-modifying uses as the deferential speech-qualifiers so common throughout Asian languages (884).

(884) *m̃ĩ asamizəm menrəm nó takâa todê.*

b̃ĩ asamiz = əəm m̃en-r̃ə = əəm nó takâa-tó d̃ê
 3.SG Assamese(<Eng)=ACC speak-IRR=ACC 2.SG ask-IPTV.ODIR EXHR

ŋó əŋŋí gó neekôo iirə.

ŋó əŋŋí = go neekôo ĩi-r̃ə
 1.SG bit=IND ground.space.around.home descend-IRR

‘If he speaks Assamese you ask him (what the meaning is in Galo), see? I’m going to step outside **a bit** (to urinate).’ (IR, TT 286)

The principal individuating functions of *go* are also handled by speaker- and addressee-proximate Individuating demonstratives *hig̃* and *əg̃*, which apparently represent fusions of *go* with simple Speaker- and Addressee-proximate simplex demonstratives *hi* ‘SPRX’ and *ə* respectively. For additional discussion and examples, see §7.4.4. A reflex of *go* may also be represented in speaker- and addressee-proximate Locative/Temporal-episodic demonstratives *hog̃* and *og̃*, although this is somewhat less certain (see §7.4.5). Finally, there exists a possibility that *go* has given rise to the genitive enclitic *gə*, possibly via earlier functionality as a relator noun.

The etymology of *go* within Tibeto-Burman is currently unknown.

14.2.1.3. Definiteness and topicality

There are few terms in linguistics more embattled than “topic”; although it would seem that a near-consensus is emerging concerning a grammar-independent, cross-linguistically-applicable *pragmatic* definition of topic – i.e., the topic is what a proposition is *about* (Lambrecht 1994) – the step of applying this definition to the determination of sentence form in a given language is a far more complex proposal. Is topic directly “marked” by any particular grammatical structure or structures? Or do

particular grammatical structures – which may or may not have themselves evolved in the specific context of “topic marking”, and/or which may be sensitive to semantic or pragmatic factors other than or in addition to referent topicality – independently interact with a (still pragmatic) concept of “topic”? In what follows, I do not attempt to address these overarching questions, which require a more in-depth study of Galo discourse than has yet been conducted (and would certainly include mention of certain structures, such as zero-marking, which have already been discussed). Rather, the approach here is more closely centered-on more or less consistent structural patterns which exist in Galo grammar – in particular, the behaviour of a noun phrase marker *əθ* – and which appear more or less consistent with topic marking functions (or which might have evolved their present functions at least in part as earlier topic markers). A more comprehensive study is certainly warranted, and remains to be conducted.

The principal function of Topic marker *əθ*²⁷³ is marking of *definite reference* to an already well-individuated, identifiable and “accessible” (i.e., “known” or “given”) entity, generally as it is construed as *contrastive* with other such entities for *establishment as the topic* of a given clause. In the following sequence from a narrative (885)-(889), the clause topics (also in this case all grammatical subjects) are shown in **bold**. In this sequence, there are four well-individuated referents, which all participate to some degree in the events depicted in each mentioned clause – a boy, a dog, a container and a window. Disregarding for the moment the manner in which each referent is introduced, and the *degree* to which each of the four referents might be said to have topic-accessibility, we might say that all four referents are at some or all stages *given* as potential topics, and that topic-marking in consort with overt NP-coding, when it occurs, occurs in *contrastive (re-)establishment* of a particular referent as topic for some duration of ensuing clauses. When the *same* topic is subsequently maintained over a period of two or more clauses, it will tend to be ellipsed (as in the sequence below); or, if the series of clauses is particularly long, it will tend to be coded by (non-topic-marked) resumptive pronouns (see §7.1.5 for discussion and examples of pronoun use in topic-maintenance).

²⁷³ The Topic marker *əθ* both triggers and is subject to morphophonological processes which can obscure its phonetic realization. For a summary of the phonetics and phonology of the Topic marker, see §4.3.

(885) *ók kookhì bə...bupnə...kirkíəm...ləkkôk paalà...*

okə kookhì = bə[**bupnì** = əə]_A²⁷⁴ [kirkii = əəm]_O [lək-kók-pàa-là(a)]_{PRED}

ANAP.ABL back=DAT **3.DL=TOP** window(<Asm)=ACC slide-OPEN-ATTN-NF
kaabók bihî tó.

[Ø]_iS [káa-bók-bì-hí-tó]_{PRED}

look-DOWN/SOUTH.S/O-AS.PAIR-REFL-PFV

‘After that...**the two of them_i** [i.e., the boy and the dog] got the window open and **Ø_i** together looked down.’ (TR, FS 016)

(886) *ám kaabók daglò...ikiə...*

[Ø]_iS əmbə [káa-bók-dàk]_{PRED} = lo [ikìj = əə]_A

ANAP.PADV look-DOWN/SOUTH.DIR.S/O-COS=LOC **dog=TOP**

pətupnə gəbəə tokúlá...kirkí

[pətùp = nè]_O [gə-bəə-tó-kú-là(a)]_{PRED} [Ø]_jS kirkii
container=NAGT carry/wear-CTIN-PFV-CMPL-NF window(<Asm)

akkə olôo kaakú.

akə = əə [ò-lòo-káa-kú]_{PRED}

DST.ABL.SLEV=TOP fall-DOWN/SOUTH.GOAL.S/O-PF-CMPL

‘When **they_i** looked down, **the dog_j**, wearing the container...**Ø_j** fell down from the window.’ (TR, FS 017-018)

(887) *(...) bôl acîbə olôo leekùlá*

[Ø]_j bolò acî = bə ò-lòo-lèe-kú-là(a)

DST.LOC.DOWN harsh=AVZR fall-DOWN/SOUTH.GOAL.S/O-SSEQ-CMPL-NF

pətupə...takkáa kú.

[pətùp_k = əə]_S [ták-káa-kú]_{PRED}

container=TOP be.cracked-PF-CMPL

‘**He_j** having fallen down there with great force, **the container_k** smashed.’ (TR, FS 019-20)

(888) *okká...omêe əcìn maazíb məəkênla*

okkáə [omêe_i əə = cìn]_S maazí = bə [máə-kèn-là(a)]_{PRED}

SCNJ **kid** **TOP=ADD** very.much=AVZR think-GOOD/EASY-NF

biəm gombəə tokú....

[Ø]_iA [bìj-əəm]_O [gòm-bəə-tó-kú]_{PRED}

3.SG-ACC hug-CTIN-PFV-CMPL

‘And so...**the boy_i** hugged him_j (the dog) with great happiness...’ (TR, FS 021)

²⁷⁴ *bupnì* here contrasts with the dog, which had been subject of the previous clause.

(889) *ikîi əcìn...mîəm dadá...ajáa ŋûr tokú.*

[ikîi; əə = cìn]_A [bîi-əəm dada]_O [ajáa-ŋûr-tó-kú]_{PRED}
dog TOP=ADD 3.SG-ACC RCUR love-AS.RECP-PFV-CMPL
 ‘...(and) **the dog**_i also reciprocated his_i love.’ (TR, FS 022)

Topic-marking in Galo thus clearly bears a resemblance to *definiteness*-marking, and there is indeed a significant functional overlap in their prototypical uses (as in the sequence in (885)-(889)). However, noun phrases whose reference is definitely/uniquely restricted by other means – such as through modification by a genitive phrase – are nevertheless obligatorily marked in *əə* when occurring as clause topic (890).

(890) *ŋêək adiə...mêrə-kenlù...êmbə rîlà...rətó.*

[ŋêə-kə **adii** = əə]_S mərò-kenlùu [əmbə rî-là(a) rə-tó]_{PRED}
1.REFL-GEN Adi.tribals=TOP long.ago ANAP.PADV do-NF live/exist-PFV
 ‘**Our Adi (people)**....lived by doing it like that in the old days.’ (LN, GMW 047-048)

Topic-marking is also not restricted to cases of contrastive reference to specific individuals or sets. In (891), ‘small animals’ and ‘wild animals’ refer to *non-specific* sets, but take topic-marking in *əə* when in topic function. Note also the occurrence of *əə* on *both* coordinatively apposed NPs.

(891) *mootûm bá doodêk ogò...maazîi bə...*

mootûm = bá dōo-dàk ogò maazîi = bá
 jungle=DAT LOC.EXIS.ANIM.PERM-COS TMP.RLS very.much.EMPH=AVZR
pətáa-kobuə hottúm-horré maazibə rətó.
 [[pətáa-kobùu = əə] [hottúm-horé = əə]]_S maazîi = bá [rə-tó = ʔ]_{PRED}
bird-rodent=TOP **bear-boar**=TOP very.much=AVZR live/exist-PFV=NF1
 ‘Back when we used to live in the jungle, lots and lots of **wild animals of every kind** were there.’ (lit., ‘small animals and large animals’) (LN, GMW 061)

Although direct topic-marking of *pronouns* is statistically infrequent in Galo, it is possible for all dual and plural personal pronouns, as well as third person singular pronoun *bîi* (but not for first and second personal pronouns *ŋó* and *nó*, nor for most demonstratives when used pronominally), to be marked for topicality.²⁷⁵ Generally

²⁷⁵ This distribution seems to be historically explainable in terms of the respective etymologies of the Topic marker and the individual pronouns, and (therefore) to not have a synchronic functional basis in “SAP/non-SAP” patterning at all, much as it may appear so. For discussion in the related context of accusative-marking, see §14.3.2.1.

speaking, topic-marking of pronouns (when allowed) has a contrastive flavour, as ‘this referent and no other’, and may occur when a speaker wishes to underscore the uniqueness of a reference, as in (892), or when (re-)establishing a referent as a discourse topic, as in (885) (where the second person dual pronoun re-establishes a set of two participants as topic following a clause in which only one of them was mentioned as the subject).

- (892) *ɲunù ɛdîina hôf-hoɲò hìm morôo là,*
 [ɲunù]_A [ɛdîi-nà hotə-hoɲò hì-m]_O [mò-ròo-là(a)]_{PRED}
 1.PL incredible-NZR:SUB elephant-tiger PTOP-ACC make-TERM-NF
ɲunnə.
 [ɲunù = ɛə]_A
 1.PL=TOP
 ‘We wiped out lots of wild animals, we did.’ (NyR, MDS 067)

In conditions of high topic-continuity, when same-subject resumptive pronouns alternate only with coreferential zeros, topic-marking is almost never found.

Topic-marking of genitive pronouns is common, as *ɲó-kə = ɛə* ‘1.SG-GEN=TOP’; however, this is structurally a type of headless noun phrase, hence is quite different from the direct topic-marking of personal pronouns. Topic-marking of ablative demonstratives is seemingly associated with a distinct function (discussed in §14.3.6.2); topic-marking of other demonstrative pronoun types does not occur.

In addition to marking clause-internal noun phrases, Topic marker *ɛə* very frequently marks Backgrounding and Framing *clausal nominalizations*, which occur at the clause periphery to provide information with reference to which, or in light of which, the information contained in a clause is construed to occur (§15.3.2) (893). Other clause-marking functions of the Topic marker include marking the presupposed (non-focal) element of a cleft/focus construction, which obligatorily undergoes nominalization in Galo (§9.4) (894).

(893) *ɸogò...rəlôo nammá...*

[hogò rə-lòo-nam = əə]_{TOP}

SPRX.LOC live/exist-DESCEND-NZR:RLS=TOP

dúk-kostó...əmbə zâa kaamá.

[duk-kostoo]_s

[əmbə

zâa]_{ADV}

[káa-máa]_{PRED}

suffering(<Asm)-difficulty(<Asm) ANAP.PADV REAL have/exist-NEG

‘**Having come down to live here...**(it turns out to be the case that) there’s not much pain and suffering.’ (NyR, MDS 028)

(894) *kozzúu na agkò!*

[kozzúu = na]_{FOC} [agò-kò = əə]_{TOP}

awhile.ago=DECL warm/hot-NZR:LOC/OBL=TOP

‘Just now is **the time when it was hot** (now, however, it has cooled down; how can you say it’s hot?!)’ (MN, OLB4:119)

Multiple non-object referents may bear topic marking in argument-internal appositive coordination, as in (891), as well as in *double-topic constructions*, discussed in §14.2.2.1. O arguments are *never* marked as topics, except to the extent that accusative-marking in *əəm* can be related synchronically to topic-marking – a possible analysis (discussed in §14.3.2.1) which is not, however, the analysis adopted in this work.

Topic marker *əə* patterns as a phrasal enclitic. Following the rule of Triggered foot-strengthening (§4.1.4.6), Topic marker *əə* fuses with preceding light-light ((C)V.CV) phonological words, motivating compensatory medial gemination in the medial consonant (cf. (893) above). Topic-marker *əə* is inaudible when cliticized to a phonological word of Heavy-Light syllable structure, whose final vowel is in *-o* or *-ə* (sometimes including *-u*). For an illustrated summary of the phonetics and phonology of the Topic marker, see §4.3.

Etymologically, Topic marker *əə* seems likely to derive from an *anaphoric demonstrative*, which most probably also exhibits reflexes in Accusative case enclitic *əəm* (§14.3.2.1), as well as in anaphorically-referring demonstratives such as Individuative *əgə* and Semblative/Genitive *əkə* (§7.4.4, §7.4.3). However, that *əə* ‘TOP’ no longer occurs with full demonstrative functionality is demonstrated by its inability to “bracket” a noun phrase; compare (895) with the unacceptable sentence in (896).

(895) *əgə opôo əgə maí tɰkên dù.*

[əgə opôo əgə]_S [maazí = bɔ́]_{ADV} [tɰ-kên-dùu]_{PRED}
 ANAP.IND liquor ANAP.IND very.much=AVZR imbibe-GOOD/EASY-IPFV
 ‘That there rice beer’s really tasty.’ (MN, T17:50)

(896) **əə opôə maí tɰkên dù.*

[əə opôo = əə]_S [maazí = bɔ́]_{ADV} [tɰ-kên-dùu]_{PRED}
 ANAP liquor=ANAP very.much=AVZR imbibe-GOOD/EASY-IPFV

For additional discussion of the noun phrase bracketing function of demonstratives, see §6.1.2.2.4.

Other extended functions of Topic marker *əə* ‘TOP’ (or reflexes of an ancestral form) include use as an *imperfective copula* (discussed in §9.3.2). Topic marker *əə* is by far the most frequently-attested morpheme in my corpus.

Topic-marking is also, although much less frequently, handled by proximate demonstratives such as *hì* ‘PTOP’ and *higɰ* ‘PTOP.IND’. Very generally speaking, they function to mark a topic which a speaker wishes to place in some high immediate relief, as one of particular importance to the current event-line. Proximate topic marking is discussed in §7.4.2.3.

14.2.1.4. Demonstratives

Simple demonstratives have the same basic *definiteness-marking* functionality as Topic marker *əə*, but also exhibit additional deictic and other related referential properties. Complex demonstratives combine these properties with additional functions such as individuation and location. Demonstratives do not generally exhibit the nominalized clause-marking functionality of Topic marker *əə*, however (or at least, not nearly to the same extent).

The semantic and discourse-functional properties of demonstratives are discussed in detail in §7.4.

14.2.2. Structural and functional extensions

The following subsections discuss structural and functional extensions to the canonical patterns of Galo pragmatic marking discussed in §14.2.1.

14.2.2.1. Double topic constructions

“Double topic constructions” are of two types. Type 1 employs a pre-core “topic” slot (§9.2.1.5); in this type, the pre-core noun phrase is not an argument of the clause, but instead stands in some sort of implied relation to the clause or to its subject. In a Type 2 double topic construction, the second topic is itself an argument of the clause, and is indistinguishable from the subject in terms of marking.

14.2.2.1.1. Type 1 (Employing pre-core topic slot)

14.2.2.1.1.1. Existential possession

The simple existential verb *káa-* ‘have/exist’ (§5.2.4.3) takes on a sense of *possession* when a notional possessor is expressed as a pre-core topic. Schematically: [As for me,_{TOP} [a pen exists] (= ‘I have a pen’) (897).

(897) *miríi bə̀ pə̀rsinə̀ pə̀rmeə̀ kaadù.*

| | | | |
|--|-------------------|--------------------------------|---------------------------|
| [miríi = bə̀] _{TOP} | [[pə̀rtín = ə̀ə̀] | [pə̀rmeə̀ = ə̀ə̀] _S | [káa-dùu] _{PRED} |
| TRIBE=DST.DOWN | CLAN=TOP | CLAN=TOP | have/exist-IPFV |
| ‘The Mising down there have the Pertin and Perme (clans).’ (lit., ‘As for the Mising down there, the Pertin and Perme (clans) exist.’) (TB, OAM 176) | | | |

In the Existential possession construction, the notional possessor and the notional possessed may take a variety of pragmatic and relational markers, according to their construed referential values and the polarity of the clause. In positive polarity clauses, notionally possessed noun phrases tend to take either topic marking, as in (897), or, more often, individuation in *go* (if indefinite/new information). In negative polarity clauses, possessed NPs *may* be marked for individuation (898), but are far more often zero-marked in my corpus. A possessed noun phrase *cannot* be marked as a topic in negative polarity (899).

(898) *ŋó orôk gocîn kaamá!*

[ŋó]_{TOP} [orôk go = cîn]_S [káa-máa]_{PRED}
 1.SG dao IND=ADD have/exist-NEG
 ‘I don’t have even/so much as a dao!’ (MN, B3:74)

(899) *ŋó orôk(*ə) kaamá.*

[ŋó]_{TOP} [orôk(=ə)]_S [káa-máa]_{PRED}
 1.SG dao(=TOP) have/exist-NEG
 ‘I have no dao.’ (MN, B3:74)

The notional possessed NP of an existential possession construction is most often zero marked, as in the above examples. It may also be marked in the *genitive* (900), and may be subsequently marked in the locative (901); locative marking *cannot* occur on a *non-genitive-marked* possessor, as **ŋó=lo* ‘1.SG=LOC’. Structurally, such phrases would seem to have the status of *headless NPs*. Locative marking does not produce a strong semantic difference, but seems to bias the expression toward construal of the possession relation as one of existence in a place, or within a domain.

(900) *ŋôk orôk kaamá.*

[ŋô-kə]_{TOP} [orôk]_S [káa-máa]_{PRED}
 1.SG-GEN dao have/exist-NEG
 ‘I have no dao of my own.’ (MN, B3:74)

(901) *ŋoklò orôk kaamá.*

[ŋô-kə=lo]_{TOP/LOC} [orôk]_S [káa-máa]_{PRED}
 1.SG-GEN=LOC dao have/exist-NEG
 ‘I have no dao in my (stock/domain of possessions).’ (MN, B3:74)

Sentences like (900) can in principle be structurally ambiguous between an existential possession construction – in which the possessor NP is expressed as a pre-core topic – and one of simple existence of a possessed entity – in which the possessor NP is expressed as a phrase-internal modifier of the possessed NP (i.e., “my dao doesn’t exist/isn’t here”). However, since definite/known referents (such as a possessed entity) are not generally zero-marked in Galo (§14.2.1.1), in practice the latter interpretation would be disfavoured. Topic-marking of the possessed NP (generally not a possibility in an existential possession construction; see above) causes the expression to be understood unambiguously as a simple existential, and the genitive possessor to be understood as a phrase-internal modifier (902).

(902) *ɲôk orôkə kaamá.*

[[ɲó-kə]_{GENP} oròk = əə]_S [káa-máa]_{PRED}
 1.SG-GEN dao=TOP have/exist-NEG
 ‘My dao isn’t present.’ (MN, B3:74)

14.2.2.1.1.2. Inalienable possession

In the Inalienable possession construction, a notional possessor is expressed as a pre-core topic and a notional possessed is expressed as subject. In this construction, the notional possessed NP must denote some inalienable property or appendage of the notional possessor, such as a body part; it may not be a kinsperson/relative of the possessor. The possessed subject is usually unmarked, but may also be topic-marked in *əə*; in the latter case, the sense is contrastive (i.e., ‘my *head* (not my leg)’). Unlike in an existential possession construction, in which the possession relation is expressed by the predicate *káa*- ‘have/exist’ (§14.2.2.1.1.1), in an inalienable possession construction various predicate types may head the clause, all of which express a function of the subject (notional possessed). The possessor-possessed relation thus seems to be inferred as a function of the construction; genitive marking of the possessor causes it to be understood as an internal modifier of the subject noun phrase, hence a simple clause and not (strictly speaking) an instance of the inalienable possession construction (903)-(904).

(903) *ɲó dumpó(ə) âci dù.*

[ɲó]_{TOP}[dumpó(= əə)]_S [ací-dùu]_{PRED}
 1.SG head(=TOP) be.in.pain-IPFV
 ‘I’ve got a headache.’ (lit., ‘As for me, (my) head is in pain.’) (TZ, 11:19)

(904) *ɲôk dumpó(ə) âci dù.*

[ɲó-kə dumpó(= əə)]_S [ací-dùu]_{PRED}
 1.SG-GEN head(=TOP) be.in.pain-IPFV
 ‘My head aches.’

As mentioned above, the subject referent of an inalienable possession construction must express some *inalienable* possession of the possessor (usually, a body part). Thus, (905) is acceptable (because the possessor is expressed as an internal modifier of the subject noun phrase) while (906) is not (because a house is not inalienable to a person).

(905) *ŋók nammó bəgdûu kú.*

[ŋók-kə namó = əə]_S [bək-dùu-kú]_{PRED}
 1.SG-GEN house=TOP come.apart-IPFV-CMPL
 ‘My house is falling apart.’ (ZR, C2:13)

(906) **ŋó nammó bəgdûu kú.*

[ŋó]_{TOP} [namó = əə]_S [bək-dùu-kú]_{PRED}
 1.SG house=TOP come.apart-IPFV-CMPL

When unmarked for topicality, as is usually the case, the subject of an inalienable possession construction often displays a close, word-like bond with the predicate. Although sentences such as (903) cannot, it seems, be synchronically analysed as predicate-incorporated (inasmuch as a noun-phrase-internal Topic marker can still intervene between subject and predicate, which is impossible under true incorporation) there is evidence that, over time, the preference for subject zero-marking can lead to lexicalization within the predicate grammatical word. Body sensation/disposition adjectives, which form a large adjectival subclass in Galo (cf. §5.2.3.7), presumably derive historically from precisely this type of development. Compare (907) with (903) above.

(907) *ŋó dūmci duukù.*

[ŋó]_S [**dumci**-dùu-kú]_{PRED}
 1.SG headache-IPFV-CMPL
 ‘I have a headache.’ (TZ, 11:19)
 (*dumci* ‘headache’ < PTs **dum* ‘head’ + **ki* ‘pain’)

It would appear that *dumci* reflects a proto-composition ‘head-pain’ which is identical to that of modern Galo *dumpóo aci* ‘head pain’. If correct, this would amount to a striking case of function-driven structural recapitulation, despite the overall differences which seem likely to have existed between Proto-Tani and modern Galo grammatical typologies (cf. §2.1).

14.2.2.1.2. Type 2 (Not employing pre-core topic slot)

14.2.2.1.2.1. Topical instrument construction

In some clause types, a “second topic” occurs which seemingly has extended core (E) argument status, and which generally realizes a semantic Instrument or similar type of entity through which, via which, or by means of which an actor carries out an action. A common use is in marking the Theme argument of a ‘throw’ verb (908).

- (908) *h̥in̥əm ɲó boolé naató*
 [h̥in̥ə = əm]_O [ɲó]_A [bool = əə]_E [náa-tó]_{PRED}
 tree/plant=ACC 1.SG **ball(<Eng)=TOP** throw-PFV
 ‘I threw **the ball** at the tree.’ (IR, B8:54)

Instruments of affect are also usually realized as second topics (909); note also that definiteness does not seem to be a necessary property of the second topic in this construction.

- (909) *márk h̥id̥aə tabbém h̥ikkə ká.*
 [mark]_A [h̥id̥aə = əə]_E [tabə = əm]_O [h̥ík-kə-káa]_{PRED}
 NAME **stick=TOP** snake=ACC whack-DEAD-PF
 ‘Mark whacked the snake dead **with a stick**.’ (MN, B5:116)

Predicates which do not subcategorize for instruments can be derived using an Instrumental applicative (§11.2.5.7); when they are, the added argument is usually marked as a second topic (910). In absence of the applicative derivation, the second topic cannot occur (911).

- (910) *márk gaarió silapatár inné ká.*
 mark **gaarí = əə** silapatár ín-nó-káa
 NAME **vehicle(<Ind)=TOP** PLACE go-INST-PF
 ‘Mark went to Silapatár **by car**.’ (MN, B5:117)

- (911) **márk gaarió silapatár inká.*
 mark gaarí = əə silapatár ín-káa
 NAME vehicle(<Ind)=TOP PLACE go-PF

Topical instruments are referenced via *non-subject* nominalization, again suggesting E argument status, as *ŋó-kə náa-nam il̩h̩* ‘1.SG-GEN throw-NZR:RLS stone’ ‘the stone which I threw’.

14.2.2.1.2.2. Topical source construction

An *ablative* noun phrase marked in *əə* is understood as a semantic *Source*. This type of marking is roughly equivalent to marking with a Locative ablative demonstrative (such as *tolokə* ‘from that place up there’; see §7.4.5), and both markers may occur together, “bracketing” the same NP, or apposed in the same function, as in (912). This is a frequent yet puzzling construction, and it is not entirely clear whether such forms should be treated as compositional (particularly in terms of the functions given) or not. Additional research in this area is required. For further discussion of ablative marking and functions, see §14.3.6.2.

(912) *korûm...tolokə...daar̩h̩ tokkə...ŋûn hôg*

[korûm]_{OBL} [tolokə]_{OBL} [daar̩h̩ tokkə = əə]_{OBL} [ŋunù]_S [hogò]_E
 ancient.times DST.LOC.ABL.UP PLACE DST.ABL.UP=TOP 1.PL SPRX.LOC
il̩là.

[i-là(a)]_{PRED}

descend-NF

‘Long ago...we came down to here from up there...**from up in** Daring.’ (NyR, MDS 002)

14.2.2.2. Prototypically predicate-collocated nominals

As in many Tibeto-Burman languages, as well as elsewhere, it is common in Galo to find *nominals unmarked for case* (and typically free of any other modifiers) occurring immediately *adjacent to a predicate* and often forming a *tight, word-like phonological and conceptual bond* with it. The grammatical status of such forms is not always straightforwardly determined.

In some cases, it seems clear that the nominal in question is an argument of the predicate – often, an O argument – which is not case-marked because it is generic and/or non-referential (§14.2.1.1). In (913), *rák-* is a transitive verb meaning roughly ‘weave or plait using very large strips’, and can take a variety of O argument types, such as, in this case, a ‘mithun pen’.

(913) *hobé luugóo raglâa má.*

[**hobé-luugóo**]_O [rák-là(a)-máa]_{PRED}

mithun-enclosure plait.large-ABIL-NEG

‘(We) can’t make a **mithun pen** (in this area, because the terrain is too flat).’ (LN, MH 044)

In other cases, it may be rare or even borderline ungrammatical to utter a particular predicate type in absence of a particular type of collocated nominal. In (914), the S complement clause predicate head *kú-* denotes a type of fishing traditionally favoured by Galo women, in which a conical basket trap (*raazùu*) is placed between the fisher’s legs, with the mouth facing a large stone. When the stone is lifted, shellfish hiding under the stone are frightened into the basket, which is then raised and drained. *Only* shellfish are caught using this method. In this sense, we can say that *tahúm* ‘shellfish’ denotes a *type of entity prototypically associated* with the event or state denoted by the predicate.

(914) *tahúm kudûubə rîdərè?*

[[**tahúm**]_O [kú-dùu = bə]]_S [rî-dó(o)]_{PRED} = ree

shellfish fish.using.basket.trap-IPFV=SBRD do-STAT=PQ

‘Can (that river) be fished for crawdads?’ (RmR, CC 102)

Prototypically predicate-collocated nominals run a fine line between syntactic argument and compound-element-like or incorporated status (Mithun 1984). For example, predicates in *kú-* *almost always* occur with an adjacent, bare noun *tahúm* ‘shellfish’ as in (914); although I have found it possible in elicitation to mark the noun *tahúm* in the accusative in sentences like (914), thus establishing *kú-* as – potentially, at least – a transitive verb root capable of taking *tahúm* as its O argument head, my consultants assured me they would never actually speak this way. In natural speech, *kú-* would almost never be uttered in absence of collocated *tahúm*, and *tahúm* would almost never be case marked.

In other cases, we find prototypically predicate-collocated nominals occurring with predicate types which are very clear in being able to take a wide variety of S/A or O arguments; in this case, however, collocated arguments may occur as a means of *limiting*

the denotational range and/or fixing a particular sense of the predicate head. For example, no visitor to the Galo area will fail to hear the sentence in (915) before long.

(915) *nó acín dobbé?*

[nó]_A [acín]_O [dó-bée]_{PRED}

2.SG **cooked.rice** eat-EPF

‘Have you eaten/had your meal yet?’

The occurrence of non-case-marked *acín* ‘cooked rice’ in (915) limits the denotational range of *dó-* ‘eat’ to one of its potential senses ‘having a meal’, inasmuch as ‘cooked rice’ is the *prototypical entity* associated with the event type ‘eat a meal’ in Galo culture. As such, it is possible to correctly answer *əəm, dó-bée* ‘yes eat-EPF’ ‘yes, I have’ to (915) even if one has on some rare occasion in fact eaten *roti* bread rather than rice – if the *roti* constituted one’s meal rather than a snack – and one might just as easily ask the question in (915) as a means of making polite conversation even if one were perfectly aware that one’s addressee did not eat rice for his meal, etc.

Thus, one might suppose that *acín-donám* ‘cooked.rice-eat.NZR:RLS’ represents a lexicalized, compound-like association between noun and verb, rather than a clause-level argument-predicate relation per se, and this is certainly true to an extent. But it is always possible to case-mark a prototypically-associated nominal if the sense intended is somehow *contrastive*. So, for example *nó acín = əəm dó-bée?* ‘2.SG **cooked.rice**=ACC eat-EPF’ ‘have you eaten **the rice** ~ have you ever eaten **rice**’ might be asked if a speaker was genuinely wondering if his addressee (presumably a non-Galo) had ever eaten rice before in his life (assuming there to be any number of other unspecified things which he *has* eaten), and/or was aware that the addressee had been served a variety of foodstuffs (as at a banquet) and was wondering if he had eaten the rice yet (as distinct from whatever else was known to be available).

Uses of prototypically predicate-collocated nominals abound in Galo discourse. Although they most commonly reflect an underlying O argument of the predicate, many other types of relation are also attested. For example, in *isì-hú-nam* ‘water-wash.body-NZR:RLS’ ‘to bathe’, *isì* ‘water’ is an underlying *instrument* of the verb, as shown in *ḡó isì = əə alə = əəm hú-rə* ‘1.SG **water**=TOP foot/leg=ACC wash.body-IRR’ ‘I’m going to wash my feet **with water** (as opposed to a chemical solution, etc.)’. In (916) below, the

sense of *lǎa*- ‘take’ is ‘marry’, a transitive sense in which A is ‘(male) marrier’ and O is ‘(female) married (in the sense of having been *taken* into the family)’. Nominals prototypically-associated with the ‘marry’ sense of ‘take’ such as *jímǎ* ‘wife’ can be marked in the accusative if, for example, contrastive with *jamǎǎ* ‘daughter-in-law’ (as when clarifying that one is speaking from the groom’s perspective rather than from the perspective of an elder male of the groom’s family). In (916), however, note that the O argument is realized in the syntax as *kohùk = əəm* ‘dried. *oko*.leaf=ACC’; and yet, the prototypical object *jímǎ* ‘wife’ is retained as an un-case-marked, prototypically-associated nominal. If *jímǎ* ‘wife’ were case-marked under these conditions, it would have to be marked in the *dative*. However, rather than considering *jímǎ* in (916) to occur as a (zero-marked) E or oblique noun phrase, it may be preferable to consider it as weakly *incorporated* into and/or *compounded* to the predicate, in the sense of functioning simply to restrict or disambiguate the sense of ‘take’ intended (without which, it would be understood that the A argument referent ‘took’, i.e. picked up, a dried-up *oko* leaf). The concept of weak “incorporation” is also discussed in §5.3.2.1.

(916) *mǎǎlǎe mǎ...bǎ...kohukəm jím-laato.*

[mǎǎ-lǎe = əəm = əə] [bǎ]_A [kohùk = əəm]_O [jímǎ-là(a)-tó]_{PRED}
 think-SSEQ=ACC.TSUB=TOP 3.SG **dried.oko.leaf=ACC** **wife-take-PFV**
 ‘Thinking about (the fact that he needed to bear children if his lineage was to persist) he...**married a dried up *oko* leaf** ~ took **a dried-up *oko* leaf as a wife.**’
 (NyPB, LAT 008)

Noun phrases with underlying dative functions may also occur as prototypically predicate-collocated nominals; in (917), the predicate-collocated nominal *lampó* ‘mediator’ could *only* be marked in the Dative with the sense intended if it occurred as an independent syntactic phrase.²⁷⁶

²⁷⁶ Note also that use of *lampó* as a predicate-collocated nominal changes the semantic role-assignment of *záp*- from ‘O as addressee’ to ‘O as spoken-on-behalf of’.

(917) “*nóm ɲó...əgə...lampó zaptûu lamà.*”

[nó-m]_O [ɲó]_A əgə [lampó-záp-tûu-là(a)-máa]_{PRED}

2.SG-ACC 1.SG HEST **mediator**-talk-STOP/DOWN-ABIL-NEG

“I won’t be able to speak **as** your **mediator** and (convince him to) stop.” (MK, TT 331)

Notional *locations* may also occur as prototypically predicated-associated nominals, as in *isì-zàa-nam* ‘water-swim-NZR:RLS’ ‘to swim (in water)’. I have yet not identified instances in which a notional A argument is able to occur as a prototypically-associated nominal, however there *may* be cases in which S is. In (918), *amə* ‘body hair’ – the notional S argument undergoer of intransitive *búk-* ‘burst’ – could be analysed as a prototypically predicate-collocated nominal. However, it may also be possible to simply analyse *amə* ‘body hair’ here as the S argument of an Inalienable possession (double topic) construction, as discussed in §14.2.2.1.1.2; this question would require further investigation.

(918) *ɲikám-horám ɲizíí-hokám əədà, âm bugdò*

[ɲikám-horám ɲizíí-hokám əə = da] [amə(-)búk-dó(o)]

wizened.old.woman wizened.old.man TOP=CNTR **hair.body(-)burst**-STAT

benɲò...

ben = ɲo

EVID=CEXP

‘The mature leeches though, it seems they actually have hairs on them.’ (RmR, CC 073)

Ultimately, it would seem that there is a certain fluidity in the extent to which non-case-marked, predicate-adjacent nominals are understood as generic, non-referential syntactic arguments or as elements of a lexicalized collocation with a particular predicate type. In fact, the latter category is probably productively fed by the former, and would presumably directly relate to the existence of culturally prominent, hence frequently-referred-to, sets of activities. This area of the grammar would thus seemingly provide fertile ground for further anthropological-linguistic research.

14.2.2.3. Resemblance

Resemblance constructions are headed by a predicate in *garíí* ‘resemble’, whose lexical class-status remains unclear. Etymologically, it may represent a lexicalized

combination of *gà-* ‘pare; whittle’ + *-rî* ‘(AFFECT) UNIFORMLY’ (i.e., ‘cut the same’), but this is uncertain. Its ability to head a copula complement suggests basic *adjectival* status (919), as does its ability to occur as an underived nominal with the sense ‘resembler; resemblance’ (920).

(919) *nó ací garîè.*

[nó]_S [ací **garî**]_{CC} [=əə]_{COP}
 2.SG **elder.brother resemble**=COP.IPFV
 ‘You **look like Elder Brother.**’ (lit., ‘you are an elder brother resembler’) (ZR, C2:13)

(920) *gîcâa-hîcâəə holúu gacâa garîi gò;*

[gî-câa hîi-câa = əə]_{VCS} [holúu gá-câa **garîi** = go]_{VCC}
 grow-ASCEND live.life-ASCEND=TOP fence scale-ASCEND **resemblance**=IND
gîjêə hîjêə holúu gâi nám garîi gò.
 [gî-jêə hîi-jêə = əə]_{VCS} [holúu gá-îi-nam **garîi** = go]_{VCC}
 grow-KEEL.OVER live.life-KEEL.OVER=top fence scale-DESCEND **resemblance**=IND
 ‘Youth **is like** climbing a fence; growing old **is like** descending the other side.’
 (TR, 14:78 (Galo proverb))

However, as (919) shows, *garî* ‘resemble’ may also take an unmarked, collocated nominal – seemingly as part of its grammatical phrase – which is understood as the Resembled, with the Ressembler standing as subject. This is also true in case *garîi* ‘resemble’ stands as head of a predicative clause (921).

(921) *nôk rinâm donamé majôm garîi dù.*

[nó-kə rî-nam dó-nam = əə]_S [majôm **garîi**-dùu]_{PRED}
 2.SG-GEN do-NZR:RLS eat-NZR:RLS=TOP NAME **resemble**-IPFV
 ‘Your way of acting **resembles** Majom’s.’ (BK, OL10:11)

The Resembled noun phrase can never be marked in the accusative, nor can it take basic referentiality-marking (i.e., it can neither be followed by Individuator *go*, nor by Topic-marker *əə*, whether realized by a pronoun, proper name, common noun or nominalization). Although such constructions have never been naturally-attested, it has been possible to obtain elicited sentences in which the Resembled noun phrase is marked for referentiality via a demonstrative; in this case, however, the demonstrative preferentially *precedes* the predicate, and is strongly dispreferred in post-predicate

position – such patterning is extremely rare in Galo, in which post-nominal position is the statistically most frequent position for a demonstrative (§6.1.2.2.4) (922).

(922) *aə ərəká á ikí(? à) garîi dù.*

[aə ərək = áa] [áa ikíi(=a)] [garîi-dùu]
 HDST.SLEV pig=DST.SLEV DST.SLEV dog(=DST.SLEV)resemble-IPFV
 ‘That pig over there looks like that (there) dog.’ (MN, B7:63)

Thus, while Resembled arguments of resemblance clauses bear some of the hallmarks of prototypically predicate-collocated nominals (§14.2.2.2) – namely, in occurring without marking for case or referentiality – they are unlike the latter in other ways. In particular, they *are* referential, and there is nothing prototypically predicate-associable about them (since the identity of the Resembled referent can vary infinitely, and is not biased in favour of any particular type or individual). Resemblance clauses also bear similarities to Type 1 double topic constructions (i.e., those which make use of a pre-core “topic slot”; see §14.2.2.1.1); however, they differ in that while Type 1 double topic constructions are always interpretable in absence of the pre-core topic – with a different overall denotation – a resemblance construction *always* has two arguments, the Resembler and the Resembled (923).

(923) *majôm garîi dù.*

[majom garîi-dùu]_{PRED}
 NAME resemble-IPFV
 ‘(Something) resembles Majom.’ (*‘Majom resembles.’)

Ultimately, it is at present uncertain whether the resemblance construction can be described as a subtype of some other construction currently identified for Galo, or whether it must be described in terms of a unique clause type. This remains a topic for continuing research.

14.3. Relational marking

14.3.1. Absence of agentive marking

Unlike many other North-East Indian languages, including Meithei (Chelliah 1997), Ao Naga (Coupe 2007) and Turung/Singpho (Morey forthcoming), there is no semantically-oriented “agentive” marker in Galo. On occasion, I have observed that a

definite, highly-individuated referent marked as topic in *əə* may be construed as more agentive or volitional than an unmarked referent, but this seems likely to amount to a pragmatic implication rather than a semantic property of the Topic marker. That said, additional investigation in this area might be warranted (924)-(925).

(924) *boolúp gənə aadûu kú.*

[boolúp gə-nà]_s [áa-dùu-kú]_{PRED}
 hat carry/wear-NZR:SUB come-IPFV-CMPL
 ‘The (unknown) man who (mistakenly) wore my hat is coming.’ (MN, B2:7)

(925) *boolúp gənnà aadûu kú.*

[boolúp gə-nà = əə]_s [áa-dùu-kú]_{PRED}
 hat carry/wear-NZR:SUB=TOP come-IPFV-CMPL
 ‘The one who we know to have (probably purposefully) worn a hat (which was probably his own) is coming.’ (MN, B2:7)

14.3.2. Accusative and nonagentive

14.3.2.1. Allomorphs: distribution and etymology

The Galo *accusative* has suffixal and clitic allomorphs *-m/-əəm* and *əəm*. Table 14.1 summarizes their distribution.

| | <i>-m</i> | <i>(-)əəm</i> |
|---|------------------------|-------------------------------------|
| Singular personal pronouns | ŋó ‘1.SG’ nó ‘2.SG’ | bɛ̃ 3.SG’ |
| Reflexive pronouns | All | None |
| Simple and individuated demonstratives | All | None |
| Other demonstratives | None | All |
| Dual and plural pronouns | None | All |
| Genitive pronouns | None | All |
| Interrogative pronouns | jəə ‘who’ | jòo ‘what’ jadɛ̃ ‘how much/many’ |
| Common nouns | None | All |
| Proper names and nouns definitely referring to humans and other high animates (§14.3.2.2) | None | None |

Table 14.1 – Distribution of accusative allomorphs

The distribution outlined in Table 14.1 appears to have a largely historical explanation in the fusion of an earlier demonstrative **əə* (presumably the common ancestor of modern Galo Topic marker *əə*, see §14.2.1.3) with an earlier object marker **m*, while the *-m*-bearing forms would directly reflect the proto-form, forms in *əəm* reflect structures which would originally have been marked for definiteness and/or identifiability in *əə*. Thus, for example, the second person singular pronoun in (926) bears a direct reflex of **m*, as do *both* iterations of the “bracketing” demonstrative in (927).

(926) *ŋó nóṃ cendù.*

[ŋó]_A [nó-**m**]_O [cèn-dùu]_{PRED}
 1.SG 2.SG-ACC know-IPFV
 ‘I know you.’

(927) *hìgîṃ amó hìgîṃ nà ṇunûk*

[hìgî-**m** amó hìgî-**m**]_O na ṇunù-kà
 SPRX.IND-ACC paddy SPRX.IND-ACC DECL 1.PL-GEN
lètê rəkkò.

là-tà-rə-kò = əə

plant-INCP-IRR-NZR:LOC/OBL=TOP

‘It’s this paddy here that’s the one we’re to plant tomorrow.’ (MN, B5:87)

When a demonstrative form of the Accusative case enclitic *əəm* is employed pre-nominally with anaphoric reference, historical demonstrative + case marker compositionality seems clear; compare (927) to (928).

(928) *əṃ opôəṃ tītə là, parəp tokk^wá.*

[**əəm** opòo = **əəm**]_O tíi-tó-là(a) pá-rəp-tó-kú = káa
 [ANAP.ACcliquor=ACC] imbibe-PFV-NF chop-ICEP-IPTV.ODIR-CMPL=HORT.ADV
 ‘After drinking the liquor, start your killing.’ (TB, OAM 296)

However, the modern form of the Accusative enclitic *əəm* appears to be non-compositional: unlike all true demonstratives, *əə* cannot independently “bracket” an NP (§14.2.1.3); this would suggest that *əə* no longer has full demonstrative status, and would argue against positing *əəm* as a case-suffixed demonstrative in (928). Furthermore, there is never a case when Accusative *-m* occurs on a common nominal in absence of initial

[əə]; for example, *-m* does not occur on indefinite or non-referential NPs (again, see §14.2.1.3). Additionally, in extended functions of accusative case enclitic *əəm*, the full form [əəm] (not [m]) is invariably heard, and “bracketing” does not (ever) occur (§14.3.2.3); this would suggest that the form which was reanalysed by Galo speakers for functional extension was not viewed as a demonstrative-suffix composition, but was rather felt to stand as a unitary form. Similarly, if the analysis in §16.4.3 is accurate, it would seem that in the Temporal clause-subordinating function of the Accusative enclitic, Topic marker *əə* can in fact *follow* the construction; this would seemingly argue against positing *əə* as an initial formative of *əəm*, as it would be hard to see what function could be served by its occurrence twice, in close sequence, within the same phrase. Finally, while most of my consultants are able to recognize a “relationship” between case-suffixed demonstratives and their unsuffixed forms (as in Speaker-proximate individuated demonstratives *higì* and *higì-m*), they do not generally recognize such a “relationship” between Topic marker *əə* and accusative case enclitic *əəm*. In sum, while the accusative case enclitic *əəm* seems likely to reflect a historical fusion of demonstrative and/or definiteness/identifiability marker *əə* + case suffix *-m*, the evidence suggests that it is non-compositional in modern Galo.

To return to the distribution outlined in Table 14.1, in addition to the expected function of marking common noun-headed noun phrases in O function, it is interesting to note that the *əəm* form also marks third person singular, as well as all dual and plural personal pronouns. The reason for this seemingly peculiar distribution again seems to lie in the historical fact that – if the analyses in §7.1.3 are correct – these forms all derive from pronoun + noun compositions (for example, PTP **bà* ‘3’ + **í* ‘self’ > *bí* ‘3.SG’). Assuming that the noun would have initially stood as syntactic head of such a construction, the noun-marking form *əəm*, rather than the pronoun-marking form *-m*, is what we might expect and, in fact, find.²⁷⁷

²⁷⁷ An alternative, synchronic-phonological view of the matter might also be entertained, in which only one underlying form *əəm* marked all nominals, except for monosyllabic forms with short final vowels in which, according to Galo prosody, a suffixed/encliticized vowel *əə* should be inaudible. This solution would it seems to me, handle all data except for the individuated demonstrative set, particularly *əgə* ‘Addressee-proximate individuated demonstrative’. Given a language-wide accusative in underlying *əəm*, the expected reflex of *əgə* = *əəm* would be [əggəm], following the regular pattern of Triggered foot-strengthening

Phonological realization of *əəm* almost always involves reduction of the underlying long schwa, which is generally only heard when standing as head of an independent phonological word. When enclitic to a preceding light-light phonological word ((C)VCV), Triggered foot-strengthening is observed (§4.1.4.6); schwa is not heard if the preceding word-final vowel is *a*, *o* or sometimes *u* – as, e.g. *ŋôk abbóm* ‘my father.ACC’ < *ŋô-kə abó=əəm* ‘1.SG-GEN father=ACC’. For an overview of the phonetic outcomes of encliticization in *əəm* to words of varying syllable structure, refer to **Table 4.13** in §4.3 (substituting *m* for the final *ə* of the exemplified Topic marker).

Anti-agentive marker *nè* patterns as a phrasal enclitic, and has no allomorphs. Its etymology is unknown.

14.3.2.2. Principal functions

The principal function of both the Accusative *-m/əəm* and Non-agentive *nè* in Galo is to *identify the O argument of a transitive clause*. Alternation between Accusative/Non-agentive marking and zero is *pragmatically*-controlled, and is based on the *contrastiveness* or *individuation* which is inherent to or construed of O. Alternation between Accusative and Non-agentive marking is *semantically*-controlled, and is based on the degree of *animacy* which is inherent to or construed of O.²⁷⁸

Noun phrases headed by *inanimate common nouns* are Accusative-marked only when *contrastively referential*. Thus in (929), the zero-marked O NP *acín* ‘cooked rice’ is non-referential, and functions primarily to constrain the denotation of the predicate (cf. §14.2.2.2). In (930), *acín* ‘cooked rice’ definitely refers to a well-contrasted individual, and is accordingly marked in the Accusative.

(§4.1.4.6; cf. *əkə=əəm* ‘Addressee-proximate semblative demonstrative’ > [əkkəm]) – which is not what we find; instead, the attested form [əgəm] confirms underlying *əgə-m*.

²⁷⁸ An opposition has sometimes been adduced with respect to O argument marking in Tibeto-Burman languages between those who, following LaPolla (1992), view it as more *semantically*-oriented, and to relate to the construed *agentivity* of a referent, and those who, following DeLancey (1984) view it as more *pragmatically*-oriented, and to relate to the construed *contrastiveness* of a referent. I submit that, with respect to Galo at least, these views are *not* mutually exclusive, and, that, in fact, they are quite probably *both* correct.

(929) *acín dolâa zu!*

[acín]_O [dó-là(a) = zù]_{PRED}
cooked.rice eat-IPTV.SDIR=HORT.INCL
 ‘Let’s eat (**a meal**, not a snack)!’

(930) *acínóm doʔ ké!*

[acín = əm]_O [dó-tó = kée]_{PRED}
cooked.rice=ACC eat-IPTV.ODIR=HORT.POL
 ‘Eat **the rice** (rather than the *roti*)!’

Similarly, in (931) the first mention of *hîinè* ‘tree/plant’ is generically-construed, and is accordingly zero-marked. The second mention of *hîinè* ‘tree/plant’ definitely refers to an identifiable set of ‘trees/plants’ (those which have been felled), and is accordingly marked in the Accusative.

(931) *acabbó...moodîi-rîk palâ...hîin tælâ...*

[ací-abó = əə]_A [moodii-rîkó]_O [pá-là(a)]_{PRED} [**hîinè**]_O [táə-
 là(a)]_{PRED}
 elder.brother-father=TOP mountain-field chop-NF **tree/plant** chop-NF
okká...(...) ogò, hîinè m tælâa kú...jaakáa gó
 okká ogò [**hîinè_i = əm**]_O [táə-là(a)-kú]_{PRED} [Ø]_S [jaakáa = go]_{RQE}
 SCNJ TMP.SEQ **tree/plant=ACC** chop-NF-CMPL multiplicity=IND
aləbó...heŋkâa kú məərém...

[alə = bó]_{ADV} [hèn-kâa-kú]_{PRED} mǝə-rǝ = əm
 good=AVZR dry.out-PF-CMPL think-IRR=ACC.TSUB
 ‘The men cut (forest to clear space for) jhum fields...chop down **trees**...and (...) then, after chopping down **the trees**...if they feel that **they’ve** dried properly for many (days) (they set fire to it and clear out the residue).’ (LN, GMW 021-022)

Pronouns and all noun phrases marked by *demonstratives* are always definitely referential, and are thus obligatorily marked in the accusative when in O function. I have not found any exceptions to this generalization in my data (932)-(933).

(932) *ŋó nóm cendù.*

[ŋó]_A [**nó-m**]_O [cèn-dùu]_{PRED}
 1.SG **2.SG-ACC** know-IPFV
 ‘I know **you**.’

(933) **ŋó nó cendù.*

[ŋó]_A [nó]_O [cèn-dùu]_{PRED}
 1.SG 2.SG know-IPFV

Non-agentive marker *nè* ‘NAGT’ is used far less frequently than the accusative (in my data, it occurs on fewer than five percent of marked O NPs). *nè* ‘NAGT’ prototypically marks an O argument noun phrase which uniquely refers to a *highly animate entity*. It thus obligatorily marks all O argument noun phrases headed by *human proper names* (934) and most other definitely-referring noun phrases mentioning *known human individuals* (935).

(934) *tukâa nè batám...batám jôo doorém...(…)*

[tukkáa = nè]_O [batam batam jôo dóo-ré = əəm
 blackie=NAGT beam(<Ind) beam(<Ind) and/or.such LOC.EXIS.INAN-IRR=ACC
kaík-rapkòm cindà...allf̥b
 kaík-rapkò = əəm cìn = da allf̥i = bó
 fireplace.shelf.upper-fireplace.shelving.complex=ACC ADD=CNTR well=AVZR
motè kâ əmdûu nà ná.
 mò-tó = káa]_E [óm-dùu]_{PRED}-nà = əə na
 make-IPTV.ODIR=HORT.ADV tell-IPFV-NZR:SUB=COP.IPFV DECL
 ‘I’ve been telling Tuka that...that should there be any (leftover) beams and
 such...(…) that he should also (use them to) make a fireplace shelving complex
 up nicely, you see what I mean?’ (IR, HC 021)

(935) *b̥k̥k̥ abó nè gədù.*

[b̥k̥k̥-k̥ abó = nè]_O [g̥ó-dùu]_{PRED}
 3.SG-GEN father=NAGT carry/wear-IPFV
 ‘(He) takes after his father.’ (MN, OL15:140)

Occasionally, when a definite NP refers to a human individual/group with *low construed animacy* and/or a low degree of active participation in an event, it may be marked in the *accusative* rather than the non-agentive (936).

(936) *acc'ém...akó əmbə menləə là menləə là*

[**ací=əəm**]_O [ako]_{ADV} [əmbə]_{ADV} [mèn-ləə-là(a) mèn-ləə-là(a)]_{PRED}
elder.brother=ACC again(<Asm) ANAP.PADV speak-GRAD-NF speak-GRAD-NF
rĩn mə, purāa, ləbĩ hogò gòo-càa-káa-kú=(ə)ĩ
 do-NZR:RLS=TOPTotally(<Asm) knee SPRX.LOC swell-ASCEND-PF-CMPL=ETAG
 ‘While (she) went on talking to her brothers like that, wah! It went right up to her knee.’ (LN, TG 052)

On the other hand, non-human animates which are humanized (as in a folktale) or which are otherwise construed as thematically important and/or actively participating in an events may be marked in *nè* ‘NAGT’ when in O function. In (937) two NPs headed by common nouns *purùu* and *pəréə* – both of which name bird species in the Galo area – are treated as human-like participants in a folktale, and hence take Non-agentive marking throughout most of the narrative. However, note that the speaker switches to Accusative marking when mentioning *pəréə* for the second time (following a false start in which Non-agentive marking is used). This change in marking accords with the relatively low degree of *pəréə*’s participation at this point in the narrative, in which the focus is more closely on *purùu*.

(937) *purùu nè zihí kaakú má.*

[**purùu=nè**]_O [zí-há]_{PRED} káa-kú-máa
white-crested.laughing.thrush=NAGT give-NZR:IRR have/exist-CMPL-NEG
pəréə nè/...pəréəm zipəkù.
 [**pəréə=nè**]_O [**pəréə=əəm**]_O [zí-pà-kú]_{PRED}
bird.variety=NAGT **bird.variety=ACC** give-PFV2-CMPL
 ‘There wasn’t anything left to give to **White-crested Laughing Thrush**.
Peree...the peree was (the one) given it.’ (MK, TT 123)

Very rarely, an inanimate entity may be marked in *nè* ‘NAGT’ when in O function. My consultants generally disapprove of such sentences, sometimes confidently declaring them to be categorically unacceptable. When asked why, some respond that such sentences amount to treating an inanimate entity as though it were human, or otherwise had an absurdly high degree of animacy. My consultants’ judgements notwithstanding, such uses have been naturally-attested on several occasions; the motivation for such uses of the Non-agentive is not yet clear, but may have to do with a relatively high degree of thematic importance to the referent (938).

(938) *namé ló aalík doolà...dorumé...əráb nè*

namé = lo áa-lík-dó(o)-là(a) dor-úm = əə [əráp = nè]_O
 house=LOCcome-INTO-STAT-NF CLF:ANIM-three=TOP door=NAGT

cííŋ cǝbó là...

[cíí-nó cíí-bó-là(a)]_{PRED}

slap-MOVE.1 slip-MOVE.2-NF

‘They came up to the house and the three of them...knocking on the door (rather than anywhere else on the house)...’ (TR, FA 009)

Also rarely, *double-marking* of Accusative and Non-agentive (always in that order) may be observed on *all types of referential NP* – regardless of animacy. My consultants generally claim there to be “no difference” between marking in the simple Accusative and/or Non-agentive and double-marking in the Accusative-plus-Non-agentive. If one is to surmise, it may be that double-marking increases a sense of referential precision *qua* affected entity and/or to forestall the possibility of uncertainty or doubt that some (probably highly animate and/or thematically important) referent is indeed being expressed in a non-subject function. In (939), the noun phrase headed by *ɲizíŋ* ‘old man’ refers to the main protagonist of the story, the legendary Mising tribal ancestor *tuucík maacík*. Initially marked in the Non-agentive when in O function, the narrator double-marks the noun phrase in a clarifying follow-up, seemingly feeling that his interlocutor may be uncertain that the ‘old man’ was indeed to be understood as the affected entity.

(939) *ɲizíŋ nè...abbó əmlà pamáa jú kʷɔ́.*

[ɲizíŋ = nè]_O [abó = əə óm-là(a)][pá-máa]_{PRED} juu kó
 [man.old=NAGT] [father=COP.IPFV tell-NF] [chop-NEG] REP INFO

ɲizíŋm nè na. tuucík-maacík nè nà.

[ɲizíŋ = əəm = nè]_O na [tuucík-maacík nè]_O na
 man.old=ACC=NAGT DECL NAME NAGT DECL

‘They were said to have not killed **the old man** out of (respect for the fact that he) was a father. **The old man**, that is. **Tuucik-Maacik**, I mean.’ (TB, OAM 237-240)

14.3.2.3. Extended functions

14.3.2.3.1. Temporal phrase-marking and temporal/episodic subordination

In two seemingly related uses, the Accusative and Non-agentive (or their cognates) are both employed in marking of temporal noun phrases and of temporal/episodic clause-subordinations.

Non-agentive marker *nè* ‘NAGT’ marks time nouns which may be construed as relatively punctual, precise, moments in time as *irrealis/non-realized temporal points*, as *allò = nè* ‘tomorrow=NAGT’ ‘tomorrow’ and *izzàa = nè* ‘now=NAGT’ ‘in (just) a moment’).

Accusative marker *əəm* marks time nouns which may be construed as events spanning a temporal duration as *irrealis/non-realized temporal spans* within which, or in regular coincidence with which, the event denoted by the predicate is construed to occur. These include common time nouns and common event nouns, such as *arúm = əəm*

‘evening=ACC’ ‘in the evening’ and *moopín = əəm* ‘harvest festival=ACC’ ‘at the harvest festival’). In rare cases when a temporal noun is capable of either type of construal, either marker can be used (with a semantic difference as described above). For discussion and examples in the context of time noun distribution and temporal phrase marking, see §5.2.2.16.5. *Accusative* marker *əəm* also marks *non-perfective clauses* functioning as *temporal/episodic clause-subordinations*. For discussion and examples, see §16.4.3.

All temporal noun phrases and clausal subordinations capable of marking in Accusative *əəm* may also be *double-marked* in Non-agentive *nè*, seemingly giving a sense of increased emphasis/precision of reference, as *díçí = əəm = nè* ‘winter=ACC=NAGT’ ‘(exactly) in winter...’ (but note that simple **díçí = nè* is unacceptable). Clearly, this distribution structurally mirrors the distribution of object markers described in §14.3.2.2, and there seems to be no doubt that temporal markers *əəm* and *nè* are derived from the Accusative and Non-agentive markers respectively. Semantically, it is difficult to see a connection between Accusative/Non-agentive marking and *irrealis* temporal phrase/clause marking, although it is striking that *both* markers participate in both core argument and temporal phrase-marking paradigms. Whether they should necessarily be viewed as categorically distinct or, on the other hand, might be captured by a superordinate category of some kind remains an open question.

14.3.2.3.2. “Experiential” goals of motion

Goal arguments of Galo motion verbs are usually either unmarked for case, or are marked as Locative (§14.3.5.1; see also §14.1.3.8). However, in a limited and quite rare “experiential” use, *Goals of motion* may be marked in the *Accusative* (never in the Non-agentive). The effect of Goal-marking in the Accusative seems primarily associated with *contrast* and with *experiential accomplishment*. For example, (940) might be uttered when asking a doctor about the various activities which are allowed or forbidden under a particular health regime.

(940) *ŋó moodîəm caalâa rə̀*

[ŋó]_S [moodîi = əəm]_E [càa-là(a)-rə̀]_{PRED} = ì

1.SG **mountain**=ACC ascend-ABIL-IRR=PQ

‘Will I be able to I climb **mountains** (in contrast to all the other things I can’t do)?’ (MN, B2:75)

Similarly, (941) might be uttered when it is known that many houses must be visited, as when soliciting for reciprocal labour. Goal-marking in the Accusative here gives a sense of contrast with the other goals which it is known must be reached, as well as of accomplishment of an anticipated task.

(941) *ŋó b̥k̥ namməm inrə̀*

[ŋó]_S [b̥k̥-kə̀ **namə = əəm**]_E [ín-rə̀]_{PRED}

1.SG **3.SG-GEN house**=ACC go-IRR

‘I’m making **the round to his house**.’ (MN, B2:75)

The above descriptions have been provided by my consultants in the context of elicitation precisely on the topic of variable relational marking in various predicate types. I have not encountered such sentences outside of elicitation, and a number of consultants strongly preferred Locative or zero-marking to marking in the Accusative, even under the conditions described above. That said, none of my consultants determined that sentences such as (940)-(941) were unacceptable. Future research on a larger corpus should be brought to bear on the question of their occurrence or non-occurrence in natural Galo discourse.

14.3.3. Dative

Dative enclitic *bə* ‘DAT’ is the most general and frequently-occurring relational marker other than the Accusative, and most often marks E arguments of extended-transitivity predicates. *bə* ‘DAT’ is homophonous with and probably relatable to Adverbializing enclitic *bə*, discussed in §16.5.1.

bə ‘DAT’ infrequently marks *Recipient/Beneficiary* E arguments of *zí* ‘give’ and/or arguments introduced via the related Benefactive applicative *-zí* ‘APPL:BEN’. Recipient/Beneficiary marking in *bə* ‘DAT’ is more commonly found in higher country than in the foothills, where Recipients more often take the Accusative (942).

(942) *acibə mēnzi ká.*

[**ací = bə**]_E [mèn-zí-káa]_{PRED}
 [elder.brother=DAT] [speak-BEN-PF]
 ‘(I) told (it) **to elder brother.**’ (ZR, C1:131)

bə ‘DAT’ also marks *Translative*²⁷⁹ complements of *rî* ‘do’ in an extended intransitive sense of *rî* ‘become; turn into’ (943).

(943) *okkə, ŋó ticər bə rító kudá.*

okkəə [ŋó]_S [**ticər = bə**]_E [rî-tó-kú]_{PRED} = dá(a)
 SCNJ 1.SG **teacher(<Eng)=DAT** become-PFV-CMPL-ASRT
 ‘Then, I ended up becoming **a teacher.**’ (SM, OL9:31)

bə ‘DAT’ marks *Similative* noun phrases as standards ‘as’, ‘in terms of’ or ‘in imitation of’ which a predicate is true of the subject referent (944).

(944) *márk bə ŋó məətó!*

[mark = **bə**]_E [ŋó]_A [məə-tó]_{PRED}
 NAME=DAT 1.SG think-PFV
 ‘I took (him) **for Mark!** (lit., ‘I thought (of him) **as Mark.**’)’ (IR, OLB3:16)

²⁷⁹ I.e., an entity *into which* another entity transforms or becomes.

bó ‘DAT’ also marks event nominalizations in *-nam* as a *Manner* of the predicate (945). This sense seems clearly relatable to ‘Pro-adverbials’ such as *həmbə* ‘SPRX.PADV’ ‘like this’, *əmbə* ‘APRX.PADV’ ‘like that’, and so on, as well as to adverbials more generally (§7.5; §16.5.2).

- (945) *ə, ɪzi gobə pogbé/...mərá, pognám bó*
 əə [ɪzì gobə]_{OBL} məráa [pók-nam=bó]_{OBL}
 AFF now until HEST **hop-NZR:RLS=DAT**
indûuku nə nə.
 [ín-dûu-kú-nà]_{PRED.NZD} = əə na
 go-IPFV-CMPL-NZR:SUB=COP.IPFV DECL
 ‘Yeah, up to this day it hoply/...you know, goes along **hoppingly**, see.’ (MK, TT 133)

An *Extensive* sense of *bó* ‘DAT’ is found on noun phrases capable of construal in terms of *rough degrees* or *extents* (including levels, quantities, amounts, places, times, and so on), and has the basic sense ‘more or less to/at the level/extent of *N*’ (946)-(947).

- (946) *naahuəm hûɸni joobə molâi*
 [naahûu = əəm]_O [hûu-ɸni jòo=bó]_{OBL} [mò-là(a)]_{PRED} = (ə)î
 granary=ACC CLF:GRANARY-two and/or.such=DAT make-NF=ETAG
 ‘It makes up **around two granaries or so worth** (of paddy), right?’ (LN, GMW 047)

- (947) *ɸipʔkə hogobə iikâa kú.*
 [ɸipək = əə]_S [hogò=bó]_E [ii-kâa-kú]_{PRED}
 non.hill.tribals=TOP SPRX.LOC=DAT descend-PF-CMPL
 ‘The non-hill-tribals came down to (the plains area) **around here**.’ (TB, OAM 131)

Precise degrees or *extents* are marked in the fused postpositions *gobə* ‘LMT.UNIT’ and *lobə* ‘LMT.RANGE’, which obviously bear a reflex of the Dative of extent in their final formatives (§14.3.7.1).

bó ‘DAT’ marks *ordinal numerals*, giving the overall *Iterative/Repetitive* sense ‘for *x* iterations/number of times’ (948)-(949). For the limiting sense ‘for the *x*th time’, the complex/fused form *naabə* (also bearing a Dative reflex) is used (§14.3.7.2).

(948) *poolòm ŋó ləkên-lêni bə caarə.*

[poolò = əm]_{OBL} [ŋó]_S [ləkên-lêni = bə]_{OBL} [càa-rə]_{PRED}
 moon=ACC 1.SG **once-twice=DAT** ascend-IRR
 ‘I’ll come up (to visit you) **once or twice** each month.’ (MN, B2:31)

(949) *ləkên-ləkênbə ŋó hodùm abdù.*

[ləkên-ləkên = bə]_{OBL} [ŋó]_A [hodùm]_O [áp-dùu]_{PRED}
once-once=DAT 1.SG barking.deer shoot-IPFV
 ‘**Sometimes/from time to time** I shoot barking deer.’ (IR, 19:31)

A *Contextual* sense of *bə* marks common nouns which are in turn capable of contextual construals, such as event or state types, temporal contexts/duration types, systems, or (climatic) conditions (950)-(951).

(950) *sitiám ŋêək adîi bə jôo əmrə dî?*

[sitii = əm]_O [ŋêək-kə **adîi = bə**]_{OBL} [jôo]_E [əm-rə]_{PRED} dîi
 letter(<Asm)=ACC **1.REFL-GEN Adi.language=DAT** what call-IRR WOND
 ‘How do you say “siti” **in our Adi (language)?**’ (MK, LW 033)

(951) *kânəbə iilà, ŋûn tolò gulai tolò*

[kânə = bə]_{OBL} [ii-là(a)]_{PRED} ŋunù tolò gulai tolò
darkness=DAT descend-NF 1.PL DST.LOC.UP PLACE DST.LOC.UP

aapég laakúdà.

áa-pék-là(a)-kú = da

come/enter-ALONG.WAY-NF-CMPL=ASRT

‘(Because we were) coming down **by/in the dark**, we stopped by Gulai (village) instead (of coming home directly).’ (RmR, CC 052)

A *Purposive* sense of *bə* ‘DAT’ is found chiefly on noun phrases headed by the relator noun *ləgâa* ‘reason’. Despite the small number of contexts in which it can occur, this is one of the most frequent uses of the Dative in terms of mentions in my corpus.

(952) *bulù bədá...cennâm ləgâa bə... mēepəm kaakáa tó.*

[bulù]_A [bədáa cèn-nam **ləgâa = bə = ’**]_{OBL} [mēep = əm]_O [káa-káa-tó]_{PRED}
 3.PL road know-NZR:RLS **reason=DAT=NFII** map(<Eng)=ACC look-TENT-PFV
 ‘**In order to** find the way, they took a look at the map.’ (IR, FA 010)

Finally, a *Mediative* or *Instrumental-like* sense of *bɔ* ‘DAT’ is found marking referents construed as integral but non-participating (or indirectly participating) components of an event (953)-(954).

(953) *okkɔ...kookêgne...akêgbə rɛr' rûəm*

okkɔ kookèk = nè [akèk = bɔ]_E [rì-nà]_{PRED.NZD} rûu = əəm
SCNJ bird.variety.yellow-chested=NAGT **kidney=DAT** do-NZR:SUB PREC=ACC

“*buppɛ̃ nɪijóm pɪdɔbɔ*

buppɛ̃ nɪi = əəm pɛ̃-dó(o) = bɔ
all person=ACC suffice-STAT=SBRD

ɪntə ká!”

ɪn-tó = káa

cut.by.sliding.across.fixed.blade-IPTV.ODIR=ADVS

‘And...as for Kookek...the kidney specialist (lit., ≅ ‘the one who specifically did **with/for the (mithun) kidney**’) (he was told), “cut (the kidney) such that it’s enough for everyone.”’ (MK, TT 193)

(954) *bɛ̃ aɪg kusɛ̃bə aɔ kəəhí baahí dù.*

[bɛ̃]_S [aɪ = gə kusɛ̃ = bɔ]_{OBL} [aɔ]_{OBL} [kəə-hí báa-hí-dùu]_{PRED}
3.SG self=GEN **liberty(<Ind)=DAT** HDST.SLEV boil-REFL bake-REFL-IPFV

‘He just went on casually (lit., ≅ ‘**of/following his own freedom**’) cooking away over there.’ (IR, FA 100)

The Mediative Dative contrasts subtly with the more frequent Mediative Ablative; for examples of the latter, see §14.3.6.3.

The numerous uses of the Dative, and the seemingly different syntactic statuses of the phrases it marks, of course raises the question of whether we are dealing with one form here or with several. My sense is that there is (at least) an overall *semantic* unity to the various Dative uses, which seems to relate to *indirectness* or *imprecision*. However, the question must ultimately be left to a more precise study.

The most likely candidate etymology for dative *bɔ* would seem to be in an earlier relator noun PG **bɔ* ‘way’ (cf. Lare *bədáa* ‘road; way’); schematically, *I gave it his way* > *I gave it to him* or *I did it jumping way* > *I did it jumping-ly*. For further discussion, see also §16.5.

14.3.4. Beneficiary

A rare and possibly obsolescent marker $-əp(ə)$ has been found to mark *semantic Beneficiaries*, usually E arguments of ‘give’-type caseframes or of predicates expanded in Benefactive applicative $-zɪ$ ‘BEN’. $-əp(ə)$ may have originally occurred as the pronoun-suffixed allomorph of Dative $bə$ (§6.1.3), although there is also a chance that $-əp(ə)$ reflects an earlier Dative enclitic $*pə$ (presumably cognate with Mising $pə$ ‘DAT’), which was later replaced by Dative $bə$ in common noun phrases. If the etymology suggested in §14.3.3 is correct, the segmental resemblance between new Dative $bə$ and old Dative $*pə$ could be simply coincidental, or, if it is wrong, it may also be that old Dative $*pə$ became new Dative $bə$ via lenition (again, only at the phrase level). This would require further cross-linguistic research.

In modern Galo, $-əp(ə)$ has rarely been found to mark some nominals (unlike other pronominal case suffixes). (955)-(956) were both obtained in elicitation; no non-elicited examples exist in my corpus, with semantically-comparable attestations usually in the relator noun construction $x=gə\ ləgàa = bə$ ‘ x =GEN reason=DAT’ ‘for x ’s purpose/benefit’ (cf. §14.3.3).

(955) *hîm ŋopə rè?*

hî-m **ŋó-əp(ə)** = əə ree
 SPRX-ACC **1.SG-BEN**=COP PQ
 ‘Is this **for me**?’ (MN/LN, B3:68)

(956) *əɾək əpə acín molâa kuzù.*

əɾək = **əp(ə)** acín mò-là(a)-kú = zù
pig=BEN cooked.rice make-IPTV.SDIR-CMPL=INCL
 ‘Let’s make food **for the pig**.’ (MN/LN/KN, B3:69)

14.3.5. Locative

14.3.5.1. Basic functions

Locative postposition *lo* ‘LOC’ is the basic and most frequent marker of semantic Locations in Galo. It occurs as an etymological formative of Distal locative demonstrative postpositions such as *bolò* ‘DST.LOC.DOWN’ and *tolò* ‘DST.LOC.UP’ – it does not occur in the proximate set – as well as of general ablative postposition *lokə* and dumessive *lobə* ‘until’ (§14.3.7). However, like all true postpositions and unlike all true demonstratives, *lo* cannot “bracket” a noun phrase.

All oblique noun phrases which are construed as *static spatial locations* at, on or within which an event is construed to take place (i.e., both *Inessive* and *Superessive* functions) are obligatorily marked by *lo* ‘LOC’ or by a related demonstrative postposition such as *bolò* ‘DST.LOC.DOWN’. The only semantic difference is that the demonstrative postposition contains additional deictic information (957).

(957) *innəmə...caatūu bolò... “hoé!”*

[ín-nam = əə]_{TOP} [caatūu bolò]_{OBL} [[hoe]_E
 go-NZR:RLS=TOP **slope.rising DST.LOC.DOWN** whew!
ənnəmə bə...udúm
 [ám-nam]_{PRED.NZD}CC[= əə]_{COP} [bə]_{OBL} [udúm
 be.said-NZR:RLS=COP.IPFV DST.DOWN **cane.container.lidded.cylindrical**
arāa lò, “hoé!” əmmíŋ gəzzāa dū arù.
arāa = lo_{OBL} [hoe]_E [ám-mín-gə≡záa≡dūu]_{PRED} aru
interior=LOC whew! be.said-JOIN-COMT≡CERT≡IPFV CONC.CEXP(<Asm)
 ‘As he was going along...**down on the hill**...having said ‘whew!’, down
 there...(from) **inside the container**, ‘whew!’ was actually in fact echoed.’ (NyPB,
 LAT 279-281)

Lative/allative goals of motion are also usually marked in the locative. In this usage, which generally realizes the E argument of an extended intransitive or transitive verb, the locative marker alternates with a simple distal demonstrative, as well as with zero (§9.2.2.4.1) (958).

(958) *ŋó likabalí (ló/aló/áa) inrɔ́.*

[ŋó]_S [likabali (ló/aló/áa)]_E [ín-rɔ́]_{PRED}
 1.SG PLACE (LOC/DST.LOC.SLEV/DST.SLEV) GO-IRR
 ‘I’m going to Likabali.’ (TR, 14:5)

Locative postposition *lo* occurs in most Tani languages and seems to be well-established in a locative function at the Proto-Tani stage (with no clearly discernible Tani-internal etymology). Within Tibeto-Burman, *lo* may be relatable to Tibetan locative *la* (DeLancey 1997: 58) (PTB **a* > PT **o* is not thoroughly regular, but it is common enough) and/or to Lahu “literary locative” *lo* (Matisoff 1973: 162).

14.3.5.2. Extended functions

Extended locative functions are available only to the simple locative postposition *lo*, not to locative demonstratives. The locative postposition alternates with other postpositions in some of the functions discussed below, but not with zero.

In metaphoric extensions of the core spatial sense, locative postposition *lo* marks common or proper, non-deictic time nouns, as well as relator nouns and common nominals which are more or less construable as coincident events or durative contexts within which an event occurs (959). In contextual functions, the locative often alternates with contextual senses of the dative (§14.3.3), with very little semantic difference; this may perhaps be compared to English *at night* versus *by night* (960). In irrealis contexts (‘*next* January’), *lo* alternates with the Accusative and Non-agentive in their extended temporal phrase-marking functions (§14.3.2.3).

(959) *ŋunù, maazí bɔ́, hək̀k̀əm...ɲidáa lo lagí dú.*

[ŋunù]_A [maazí=bɔ́]_{ADV} [hək̀k̀əm=əəm]_O [ɲidáa=lo]_{OBL} [lagí-dùu=’]_{PRED}
 1.PL very.much=AVZR SPRX.SEMB=ACC marriage=LOC want/need-IPFV=NFII
 ‘We really need this sort of thing (i.e., rice beer) **at weddings**.’ (LN, OPO 007)

(960) *òk kook̃i lo... kiil̃i lo...arə́kú əi?*

[òk̃ kook̃i=lo]_{OBL} [kiil̃i=lo]_{OBL} [á-rə́-kú]_{PRED} əi
 ANAP.ABL time.after=LOC jar=LOC keep-IRR-CMPL ETAG
 ‘**After that**...they’ll then store it in a jar, right?’ (MN, OPO 032)

The locative in *lo* also has a few clause-marking functions, among which is its interesting use in marking locative clausal nominalizations in *-kò*; the overall function of this construction is to denote a procedural event-context in which another event is construed to take place, and among other things is used to produce comitative senses ‘with someone’ (lit., ‘**on/in** someone (else)’s (activity)’ (961). For additional discussion and examples, see §15.3.1.3.3.

(961) *jə̀ək iŋkolò là ìntə duukò?*

[jə̀(ə)-kə̀ ìn-kò = lo laa] [ìn-tà-dùu-kò = ə̀ə]
who-GEN **go-NZR:LOC/OBL=LOC** CQ go-INCP-IPFV-NZR:LOC/OBL=TOP
 ‘Who are you going to go (to Silapatar) with?’ (lit., ≅ ‘**On/in whose going** are you going to go?’) (MN, B5:102)

Finite, non-perfective clauses are also temporally subordinated in *lo*, generally producing a *concurrent* reading (§16.4.3.1) (962). Complement clauses of intention are also optionally marked in *lo*, with a semantic ‘distancing’ effect (i.e., something like *thinking of/on/about*, rather than *thinking that*); for examples and discussion, see §16.6.2.2.

(962) *ləjĩ́ə na! jòo rìdaglò jòo rìdaglò.*

ləjĩ́ = ə̀ə na [[jòo rì-dàk] = lo] [[jòo rì-dàk] = lo]
 similar=COP.IPFV DECL what happen-COS=LOC what happen-COS=LOC
 ‘Whatever happens, it’s all the same.’ (IkR, HC 009)

14.3.6. Genitive and ablative

The Galo Ablative appears to reflect a basic *Locative* + *Genitive* composition *lo* + *kə̀*. Although this is seemingly not a productive synchronic composition, in many clause-level functions Genitive and Ablative postpositions are interchangeable and semantically close, with Ablative marking usually adding only deictic and/or other spatial information. In following subsections, we first discuss basic Genitive functions, followed by basic Ablative functions (in which their functions do not overlap), and proceed to discuss extended functions in which they pattern together.

14.3.6.1. Basic genitive functions

The Galo genitive in *gə* (with pronominal suffixal allomorph *-kə*²⁸⁰) has the primary function of marking noun phrase-internal *nominal subordination* (§6.1.2.2.3). The semantic content of a nominal subordination may be of *possession* (963), *attribution* (964), and/or similar/related functions.

(963) *nôk aminə jôowə là?*

[[**nô-kə**]_{GENP} amín = əə] jòo = əə laa
 2.SG-GEN name=TOP what=COP.IPFV CQ
 ‘What is **your** name?’

(964) *rənəmə izà...duniáa gə nījə aadûu kú.*

rə-nam = əə izzàa [[**duniáa = gə**]_{GENP} níi = əə]_{NP} áa-dùu-kú
 exist-NZR:RLS=TOP now **world(<Hin)=GEN** person=TOP come-IPFV-CMPL
 ‘Living here (in the Assam plains-bordering area), now people **from all over the world** are coming.’ (NyR, MDS 025)

The genitive in *gə/-kə* also marks the subject of a nominalized clause, and therefore the subjects of relative clauses and nominal complement clauses (which are nominalization-based). Only a single example is given here; for full discussion of nominalized clauses, see §15.3.1 (965).

(965) *moopín anəgə cáagənəm*

[[**moopín anə = gə**]_A [càa-gə-nam]_{PRED}]_{RELC}
festival.harvest mother=GEN ascend-COMT-NZR:NSUB
rîlîi-bonjòm laadûu nà naî.
 rîlîi-bonjo = əəm]_O [lâa-dùu-nà]_{PRED} = əə = na = (ə)î
 unseen.force=ACC take-IPFV-NZR:SUB=COP.IPFV=DECL=ETAG
 ‘They take the Rili-Bongo spirit, (the one) that is brought **by the Mother of Moopin.**’ (LN, MF 089)

Similarly, the genitive marks subjects of Basic temporally-subordinated clauses (966) (§16.4.3.1), as well as of verbal (uninflected, predicate stem-based) adverbial subordinations in *bə* (§16.5.3). Genitive subject-marking in temporally and adverbially-subordinated clauses possibly relates to the historical origin of these constructions in

²⁸⁰ The [kə] form is seemingly conservative, and is reflected in Mising (*kə*) *kə* ‘GEN’. The [gə] form may have emerged via lenition at the phrase level only, although this would require additional research.

nominalizations, although they seem not to be analyzable as such in modern Galo. Again, only a single example is provided here for reference.

(966) *b̥h̥k iidəkəm, sâ molâana.*

[[~~b̥h̥~~-k̥ə]_S ìi-dàk = əəm]_{TSUB} hàa mò-laanà
3.SG-GEN descend-COS=ACC.TSUB tea make-IPTV.SOFT
 ‘When he comes down, make (him) some tea (lit., ‘On **his** coming down, make some tea).’ (ZR, OLC2:10)

The question might be raised of whether genitive marking in Galo nominalized/subordinated clauses is analyzable as dependent clause *ergative* marking (on the one hand) or as *passive/oblique subject* marking (on the other). Although both of these possible analyses are worth taking seriously, I reject both of them in the context of modern Lare Galo, for the following reasons:

Regarding the ergativity analysis, we should first be reminded that ergativity refers to the *fully grammaticalized* alignment of S/O as opposed to A in all applicable conditions (i.e., all possible configurations within a particular subdomain of the grammar – say, of a particular subordinate clause type – or possibly in the grammar taken as a whole). However, dependent clause genitive marking is in fact a *subject* (S/A) function in Galo. It is sometimes not easy to see this, since some argument types may not be representable in some conditions; for example, subject nominalizations contain an obligatory, nominalized predicate-coreferential gap, meaning that genitive marking of subjects is usually only witnessed in the context of *object* nominalizations (in which A is marked in the genitive, in opposition to O). However, *oblique* nominalizations, in which S *may* be represented, make the case for genitive marking as a subject property plain: compare (965), in which a transitive object nominalization exhibits genitive subject marking, with (967), in which an intransitive locative nominalization *also* exhibits subject genitive marking.

(967) *hodûmgə rəkò mookò kaadù.*

[[**hodûm** = gə]_S [**r̥ə-kò**]_{PRED.NZD}]_{RELC} mookò]_S [k̥aa-dùu]_{PRED}
barking.deer=GEN **live/exist-NZR:LOC** place have/exist-IPFV
 ‘There’s a place (there) **where barking deer live.**’ (IR, B8:42)

Regarding the *passive/oblique subject* analysis, although it might be argued that object relatives such as in (965) *background* the actor, they only do so inasmuch as the *entire event* is backgrounded through expression as a relative clause. There is no

construction in Galo which permits the notional actor of a simple main clause to be expressed as oblique, hence, I argue, no true syntactic passive in Galo (see also §14.1.3.7).

Then, if all this is true, why *are* many types of Galo dependent clause subjects marked in the genitive? It seems to me that this occurs for one ultimate reason and one only: because the subject is opposed in these functions to a *nominalized predicate* (whether currently or at some earlier stage of the language), and genitive marking is the normal way of establishing a subordinate relation between one nominal and another in Galo. Genitive subject-marking may *subsequently* be assigned the functional value of disambiguating the lower clause subject from the higher clause subject; or, on the other hand, it may simply be retained as an inherited feature of the construction, with no direct functional value at all. Although a full investigation exceeds the scope of this work, I would suggest that much might be learned from a future study which addresses this question.

14.3.6.2. Basic ablative functions

The basic Ablative postposition *lokə* ‘ABL’ seemingly reflects *lo* ‘Locative postposition’ + *-kə* ‘Genitive pronominal suffix’. In basic ablative functions, *lokə* is usually interchangeable with Ablative demonstratives; however, whereas Ablative postposition *lokə* occurs as a simple noun phrase enclitic only, Ablative demonstratives provide additional spatial-deictic information, as well as (like all demonstratives) the ability to stand as an ablative pronoun as well as to “bracket” a noun phrase (see §7.4.6); simple Ablative postposition *lokə* ‘ABL’ cannot stand as a pronoun, and cannot bracket a noun phrase.

When coding the *spatial source* of a motion predicate (or similar predicate type), Ablative-marked noun phrases are *secondarily marked in əə* ‘TOP’ (968)-(969). Since there is never an intervening nominal, the ABL=TOP sequence always reflects the rule of Triggered foot-strengthening (§4.1.4.6), hence always occurs with a medial geminate [kk].

(968) *tatíkə...pə̀tùp arúu lokkə...nendû kulà...kekka kú.*

[tatík = əə]_S [pə̀tùp arúu lokkə = əə]_{OBL} [nèn-dùu-kú-là(a)]_{PRED} [kéK-káa-kú]_{PRED}
 frog=TOP container hole ABL=TOP exit-IPFV-CMPL-NF flee-PF-CMPL
 ‘The frog...climbed out of the container hole and escaped.’ (TR, FS 010)

(969) *looká gó dūutə reekú là...ŋún tokkə*

[lóo-ká = go]_{OBL} [dūu-tó-rée-kú-là(a)]_{PRED} [ŋunù]_S [tokə = əə]_{OBL}
 CLF:DAY-six=IND stay-PFV-CONJ-CMPL-NF 1.PL DST.ABL.UP=TOP
inráp kunəmə nə.

[ín-ráp-kú-nam]_{PRED.NZD} = əə na

go-ICEP-CMPL-NZR:RLS=COP.IPFV DECL

‘After staying for six days...we set off **from up there**.’ (RmR, CC 089)

Temporal sources are also marked by the sequence ABL=TOP; however, only the simple Ablative postposition *lokə* ‘ABL’ or proximate Ablative demonstratives *hokə* ‘SPRX.ABL’ and *okə* ‘APRX.ABL’ mark temporal sources; distal Ablative demonstratives do not handle temporal functions. In (970), note the subsequent locative marking of the Ablative phrase; this has the additional semantic effect of casting the period ‘since’ the time of speaking as a *range*, but does not alter the basic ablative functionality. In (971), note the Genitive marking of the nominal head, a common pattern licensing ablative marking of proper nouns (including proper names) and shifters, and which possibly derives from ellipsis of an intervening head (schematically, *from this morning’s time*).

(970) *ŋunúk díin hokkəə lə (...) əkkəm*

[[ŋunú-kə diin hokə = əə] lo]_{OBL} əkə = əəm
 1.PL-GEN day(<Asm) SPRX.ABL=TOP LOC ANAP.SEMB=ACC
cēŋku maarəí?

cən-kú-máa-rə = (ə)í

know-CMPL-NEG-IRR=ETAG

‘In (the period dating) **from our present time** (the children of modern Galo women) won’t know about those sorts of things anymore, see?’ (LN, FYG 020)

(971) *hə́gə lokkə ŋó acín domá.*

[hířə = gə lokə = əə]_{OBL} [ŋó]_A [acín]_O [dó-máa]_{PRED}
 this.morning=GEN ABL=TOP 1.SG cooked.rice eat-NEG
 ‘I haven’t had food **since this morning**.’ (MN, OL23:47)

Ablative noun phrases may also occur as adnominal *locative-attributive* modifiers (i.e., *person from India*). This patterning possibly owes to the Ablative origin in *Genitive* marking, and could potentially be analysed synchronically as a compositional genitive-locative. In locative-attributive functions, the noun phrase head is often *ellipsed* (schematically, *he’s a-person from India*) (972).

(972) “*aaté ká! nunù jôo lokkêê là.*”

áa-tó = káa [nunù]_{CS} [jòo **lokè** Ø]_{CC} [=əə]_{COP} la
 enter-IPTV.ODIR=ADVS 2.PL what **ABL** =COP.IPFV CQ
 “Come on in! **Where** are you **from**?” (IR, FA 050)

This tendency to frequent locative-attributive head ellipsis creates potential analytical confusion between locative-attributive Ablative functions and *source-marking* Ablative functions. However, whereas in locative-attributive functions a head noun can *always* be inserted between the ablative marker and other phrasal dependents (specifically, the Topic marker and/or Imperfective copula əə, as in (973)), a head noun can *never* be inserted between the ablative marker and other phrasal dependents in source-marking functions (i.e., no nominal may occur between the ablative and Topic markers in (968)-(969)).

(973) *nó jôolòk níjé là?*

[nó]_{CS} [[jòo = **lokè**]_{NMOD} ní]_{CC} [=əə]_{COP} laa
 2.SG what=**ABL** person=COP.IPFV CQ
 ‘Where are you from?’ (lit., ‘you are a person **from what/where**’) (IR, B8:76)

Locative-attributive phrases modifying *indefinite*, *unidentifiable* or *generic* nominals, which cannot be marked by an ablative demonstrative, are obligatorily in simple Ablative *lokè* (974)-(975) (cf. also (972)-(973)). Definite nominals whose locations are known, however, may take ablative demonstratives in attributive functions (976).

(974) *namé golòk lóu gò uulên doobé.*

[[**namé go** = **lokè**]_{GENP} lòu = go]_S [úu-lên-dó(o) = bə]_{PRED}
house IND=**ABL** light=IND shine-OUT-STAT=**SBRD**
 ‘**From a house**, a light was as though emerging.’ (TR, FA 006)

(975) *móok-mooké lokè níi-níi adák-adák dù.*

[[**mookó-mookó lokè**]_{GENP} níi-níi]_S [adák-adák-dùu]_{PRED}
place-place **ABL** person-person different-different-IPFV
 ‘People **from different places** are different.’ (LN, WGD 038)

(976) *ŋôk tokà êzigo lâazi takè!*

[[[ŋó-kà]_{NMOD} tokà]_{GENP} ezà = go]_O [làa-zí-tà(a) = kée]_{PRED}
 1.SG-GEN DST.ABL.UP clothing=IND take-BEN-MOT=HORT.POL
 ‘Go get my clothes **from/which are up there!**’ (LN, TG 002)

Medial gemination of ablative demonstratives is perhaps not the most salient of cues, but it is robustly attended to by native Galo speakers and has clear semantic consequences which reflect underlying differences in phrase structure. Compare (976), in which lack of gemination signals a noun phrase-internal function, with (977), in which its presence signals a clause-level function.

(977) *ŋôk tokkà êzigo lâazi takè!*

[[[ŋó-kà]_{NMOD} tokkà = əə]_{OBL} [ezà = go]_O [làa-zí-tà(a) = kée]_{PRED}
 1.SG-GEN DST.ABL.UP=TOP clothing=IND take-BEN-MOT=HORT.POL
 ‘**From (your position in) my place up there,** go get some clothes!’

14.3.6.3. Extended genitive-ablative functions

A number of extended noun phrase-marking functions are handled by both Genitive and Ablative postpositions, and, sometimes, also by Ablative demonstratives. This syncretism seems to owe to the origin of Ablative-marking in Genitive-marking of Locative phrases (§14.3.6.2).

An instrumental-like *mediative* sense marking the semantic *means* by which an event is carried out occurs in the Genitive (978), as well as the simple Ablative (979). When there is a difference, the Ablative may signify a higher degree of involvement on the part of the marked referent. Ablative demonstratives are unattested in mediative function, which may be related to the usually non-spatial nature of mediative referents.

(978) *âlə gə inlâa zù.*

[alə = gə]_{OBL} [ín-là(a) = zù]_{PRED}
foot/leg=GEN go-IPTV.SDIR=HORT.INCL
 ‘Let’s go **on/by foot.**’ (MN, OL17:61)

(979) *kocâk lokà hîîtûm rá.*

[kocâk lokà]_{OBL} [hîî-túm-rá]_{PRED}
leaf.fragments ABL press-CLOSED-IRR
 ‘I’ll stop up (the container) **with torn leaves** (to prevent any liquor from spilling our).’ (RmR, OL15:74)

In a possibly related sense commonly found to associate with the Instrumental applicative *-na(a)* (§11.2.5.7), *semantic accompaniments* are marked in the Ablative (980).

(980) *ŋoí lokə ŋó acíném doné dù.*

[ŋoí lokə]_E [ŋó]_A [acín = əəm]_O [dó-na(a)-dùu]_{PRED}

fish ABL 1.SG cooked.rice=ACC eat-APPL:INST-IPFV

‘I’m going to eat rice **with fish** (instead of vegetables, so you can finish the rest of them yourself).’ (KZ, 10:96)

A *perlative* sense (‘through’ or ‘via’) of the Genitive and all Ablative forms is found marking spatial or spatially-located referents construed as *waypoints*. In the sequence in (981)-(982), note that the initial use of the Speaker-proximate ablative *hokə* ‘SPRX.ABL’ in *əə* ‘TOP’ (981) marks an ablative *source*, while the second use (not in *əə*) (982) marks a perlative waypoint.

(981) *hokkə aló googâr aló minlên là,*

[hokkə = əə]_{OBL} [aló googâr aló]_E [mín-lên-là(a)]_{PRED}

SPRX.ABL=TOP DST.LOC.SLEV PLACE DST.LOC.SLEV chase-OUT-NF

googâr gə hilí mináa là.

[googâr = gə]_{OBL} [hilí]_E [mín-áa-là(a)]_{PRED}

PLACE=GEN PLACE chase-SPRX.ALL-NF

‘I chased (the deer) **from here** over to Googar, and **via Googar** chased it back to Sili.’ (NyR, MDS 095)

(982) *hilí gə hokə, akə, hibûu gə*

[[hilí = gə hokə]_{OBL} [akə]_{OBL} [hibûu = gə]_{OBL}

PLACE=GEN SPRX.ABL DST.ABL.SLEV river=GEN

minlôo kunəmə.

[mín-lôo-kú-nam]_{PRED.NZD}CC[= əə]_{COP}

chase-DOWN-CMPL-NZR:RLS=COP.IPFV

‘**Via Sili here, through that (place) there**, I chased it down **along the river**.’ (NyR, MDS 096)

Finally, a *partitive* sense of the Genitive and Ablative postpositions occurs on noun-phrase-internal Genitive and Ablative pre-head modifying phrases denoting sets from which a member (the modified head) is drawn (983). Ablative demonstratives are as yet unattested in this function.

(983) *bupp̃ĩ lòk aɲɲí jaarûu nà...kənók zâab*

[[**bupp̃ĩ** **lokə**]_{NMOD} aɲɲí-jàa=rúu=nà = əə]_S [kənók=zâa = bə]_{ADV}

all **ABL** little-INTS=CERT=NZR:SUB=TOP enthusiastic=REAL=SBRD

jupkà.

[jùp-káa]_{PRED}

sleep-PF

‘The smallest **of all** (of them)...was just sleeping away enthusiastically. (IR, FA 074)

14.3.7. Complex and fused postpositions

In §14.3.6.2, it was noted that Ablative *lokə* ‘ABL’ probably reflects fusion of Locative postposition *lo* ‘LOC’ with Genitive pronominal suffix *-kə* ‘GEN’, and it was also suggested that while some of the functions of *lokə* ‘ABL’ – such as noun-phrase-internal locative attribution – may relate directly to functions of its etymological formatives, other functions – such as clause-level ablative source-marking – seem less straightforwardly attributable to etymological functions. In fact, there are numerous postpositions in Galo which appear to reflect *relatively recent fusions of phrasal operators*, although most are less functionally versatile and, therefore, are less frequently-attested than the Ablative forms. Those attested to date are summarized and exemplified in sections below. It is not always easy to determine the extent of continuing compositionality, but some conclusions will be drawn in passing, where possible.

| Form | Composition | Function | Section |
|----------------------------|--|---|-------------|
| <i>gobə</i> | <i>go</i> ‘IND’ + <i>bə</i> ‘DAT’ | Non-numeral limiting, quantity (‘until (a total)’) | §14.3.7.1 |
| <i>lobə</i> | <i>lo</i> ‘LOC’ + <i>bə</i> ‘DAT’ | Non-numeral limiting, range (‘up to (a point)’) | §14.3.7.1 |
| <i>naabə</i> | <i>na</i> ‘NUM AZR?’ + <i>bə</i> ‘DAT’ | Ordinal limiting, iterations (‘for <i>n</i> times, for the <i>nth</i> time’) | §14.3.7.2 |
| <i>naanà</i> | <i>naa</i> ‘NUM AZR?’ + <i>-nà</i> ‘NZR:SUB’ | Cardinal limiting, order (‘ <i>nth</i> ’) | §14.3.7.2 |
| <i>naakò</i> | <i>naa</i> ‘NUM AZR?’ + <i>-kò</i> ‘NZR:LOC/OBL’ | Numeral limiting, range (‘within’) | §14.3.7.2 |
| <i>gona</i> ~ <i>gonna</i> | <i>go</i> ‘IND’ + <i>na</i> ‘SLCT’ (+ <i>əə</i> ‘TOP’ ?) | Temporal subsequence (‘next’) | §5.2.2.16.5 |

Table 14.2 – Complex/fused postpositions, their compositions/etymologies and contemporary functions

14.3.7.1. Non-numeral limiting

Postpositions *gobə* and *lobə* are semantically and compositionally similar, both seemingly deriving from fusions of the Dative enclitic *bə* with Individuator *go* and Locative postposition *lo* respectively. Both are often best translated by English ‘until’ or ‘up to’, and mark a concrete, spatial or temporal/episodic NP whose referent is construed as constituting a *limit* or *extent*. However, while *gobə* tends to focus on the limiting referent as a *unit whole*, *lobə* focuses on the limiting referent as a *point/location within a field or progression* (most often, of space, time, or episodic sequence). In the minimal pair in (984)-(985), *gobə* marks an *igìn* basket as a quantifying unit of measurement, while *lobə* marks the same referent as a limiting case in a sequence of gifts.

- (984) *igîn gobă zilâa ké!*

[igɪn gɒbə]_{OBL} [zí-là(a)=kée]_{PRED}
basket.conical.large.dense LMT.UNIT give-IP.TV.SDIR=HORT.POL
'Give me an *igin* basket's worth (of paddy)!' (MN, 25:19)

- (985) *igîn lobá zilâa ké!*

[igìn lobə]_{OBL} [zì-là(a) = kée]_{PRED}
basket.conical.large.dense LMT.RANGE give-IPTV.SDIR=HORT.POL
'Give me everything up to and including an *igin!*' (MN, 25:19)

Examples such as (984) could potentially be seen as compositional, with *igin* = *go* ‘a large, densely-woven conical basket’ simply marked in the extensive sense of the Dative (§14.3.3), but in other contexts non-compositionality is clear; in (986), note that the marked temporal noun *izi* ‘the present; now’ *cannot* occur in simple *go* ‘IND’.

- (986) *îzi gobá puulúu kambáə duukù nà.*

[ɪzì gɒbə]_{OBL} [puulúu-kám-báo-dùu-kú]_{PRED} na
now LMT.UNIT white-PERS-DUR-CMPL DECL
 ‘It’s still remained white **to this day**.’ (MK, TT 162)

Similarly, *gobə* is found marking generic referents, which it does not serve to individuate (*cèn-nam = go* ‘know-NZR:RLS=IND’ would mean ‘an instance of knowing’) (987).

(987) *cennâm gəbdá, mazi cendù.*

[cèn-nam gobə = dá(a)]_{TOP} [maazi]_{ADV} [cèn-dùu]_{PRED}

know-NZR:RLS LMT.UNIT=CNTR very.much know-IPFV

‘(He can’t speak very well), but **when it comes to (conscious) knowledge**, he knows a lot.’ (lit., ≡ ‘(when we consider matters) **up to knowledge**, he knows a lot’) (MN, OLT13:54)

Similar arguments may be adduced for the synchronic non-compositionality of *lobə*; for example, *lobə* is able to modify locative expressions, where simple locative marking in *lo* would be redundant, and is unattested in my data (988).

(988) *ŋó hōgə lobə ŋûm tírə.*

[ŋó]_A [hōgə lobə ŋûm]_{OBL} [tí-rə]_{PRED}

1.SG SPRX.LOC LMT.RANGE DLMT imbibe-IRR

‘I’ll just smoke it **up to here** [i.e., a point on the cigarette to which the speaker is pointing].’ (MN, OL23:112)

14.3.7.2. Numeral-limiting

Ordinal numbers marked in a postposition *naabə* ‘NLMT.ITER’ take on an *iteration-limiting* sense (‘(for) *n* times; for the *n*th time’) (989).

(989) *hîm gaanəm ŋó ləpî naabə tadù.*

[hî-m gaan = əəm]_O [ŋó]_A [ləpî naabə]_{OBL} [tá-dùu]_{PRED}

PTOP-ACC song(<Hin)=ACC 1.SG **second** NLMT.ITER listen-IPFV

‘This is the second time I’ve heard this song.’ (lit., ‘I’m listening to this song **for the second time**.’) (KN, B2:27)

Cardinal numbers, or noun phrases modified by postposed numerals, when marked in a postposition *naanà* ‘NLMT.ORD’ take on an ordered sense (‘the *n*th one’).

(990) *bî ŋokə áo aŋŋó naanà.*

[bî]_{CS} [ŋó-kə àò aŋŋó naanà]_{CC} [= əə]_{COP}

3.SG 1.SG-GEN child **five** NLMT.ORD=COP.IPFV

‘She is my **fifth** child.’ (MN, B2:33)

Numerals marked in a postposition *naakò* take on a *range-limiting* sense (‘within *n* (days, years...)’). The resulting phrase seems to have the syntactic status of a nominal, and to be obligatorily followed by Locative postposition *lo* ‘LOC’ (991).

- (991) *looŋó nâakə lò*
 lóo-ŋó **naakò** = lo
 CLF: DAYS-five NLMT.RANGE=LOC
 ‘**within** five days’ (IR, T15:10)

It is fairly certain that the second formatives of numeral-limiting postpositions *naabə*, *naanà* and *naakò* reflect Adverbializer/Dative postposition *bə* ‘DAT’, Subject nominalizer *-nà* ‘NZR:SUB’ and Locative/oblique nominalizer *-kò* ‘NZR:LOC/OBL’ respectively. However, the status of the first formative *naa* is unclear, since it cannot seem to occur alone in modern Lare. Given the grammatical statuses of the following formatives and the phrase types they derive, it would seem likely that *naa* has the (synchronic or diachronic) status of a *numeral adjectivalizer*. Thus, for example, the detailed phrase structure of (991) would be as in Figure 14.4.

[[[[[lóo-ŋó]_{NUM-naa}]_{ADJ}]-kò]_{N=lo}]_{NP}.

Figure 14.4 – Possible underlying structure of a range-limiting construction

At the same time, since *naa* cannot stand alone to derive an adjectival numeral, it has not been possible to test this theory in all conditions. For the present then, we must continue to treat *naabə*, *naanà* and *naakò* as numeral phrase-marking postpositions with the functions given above, and leave a fuller investigation to further research.

14.3.7.3. Set-selective

‘Set-selective’ particle or postposition *na* (possibly related to Declarative particle *na* (§13.3.2.2.1) and/or Subject nominalizer *-nà* ‘NZR:SUB’ (§15.2)) very rarely marks enumerated noun phrases which are construed as *members* or *subsets* drawn or selected from a larger *set*. In practice, this construction may be limited to the numeral *one* (992).

(992) *akên nê acín môpə lagè...akên ná...*

[akên = **na**]_A [acín]_O [mò-pə lage]_{PRED} [akên = **na**]_A
 one=**SLCT** cooked.rice make-CTZR:IRR/OBLG NEC one=**SLCT**
məráa môpə lagè, əgè, ohó...
 [məráa]_O [mò-pə lage]_{PRED} əgè ohó
 HEST make-CTZR:IRR/OBLG NEC HEST rope
 ‘One **of (you)** has to make dinner,...one **of (you)**...has to make, you know...like, rope.’ (RmR, CC 197-198)

Far more commonly, set-selective expressions occur in *gona* ‘SLCT’, a marker which seems to derive from the composition *go = na* ‘IND=SLCT’. However, note that *go* ‘IND’ cannot normally occur within a definite noun phrase marked in *əə* ‘TOP’ or *əəm* ‘ACC’ (according to NP function; see §14.2). Accordingly, it seems necessary to recognize *gona* ‘SLCT’ as a fused postposition. Unlike *na* ‘SLCT’, which has restricted distribution, *gona* ‘SLCT’ can follow common nouns (construed as individuals drawn from a set) (993) or qualifying nouns (construed as subsets) (994)-(995).

(993) *pukkôo zinəmá...rogzír*

[púk-kòo-zí-nam = əə]_{TOP} [rogzír
 operate.cover-MAKE.HOLE-BEN-NZR:RLS=TOP **chicken.adolescent**
gonnà dokáa kú manè!
gona = əə]_A [dó-káa-kú]_{PRED} mane
SLCT=TOP eat-PF-CMPL that’s.to.say(<Asm)
 ‘(He) having opened (the container) up for them...**one adolescent female of the** (chickens) ate (his fly) right up!’ (NyPB, LAT 098)

(994) *ôg atúu gonnà kudà, dumpáa compíglo*

[ogò]_{OBL} [atúu **gona** = əə kú = da]_S [dumpáa compík = lo]_E
 TMP/EPIS.SEQ **some** **SLCT**=TOP CMPL=CNTR pillow underside=LOC
ɲəəlík ká.
 [ɲəəl-lik-káa]_{PRED}
 crawl-INTO.GOAL-PF
 ‘And then again **some of the** (animals)...crawled under the pillow.’ (IR, FA 088)

(995) *mĩ...adáa gonnám, palôo gərə lá...təktáa ká.*

[bĩ]_A [adáa **gona** = əəm]_O [pá-lòo-gərə-là(a) tək-táa-káa]_{PRED}
 3.SG **half**(<Asm) **SLCT**=ACC chop-DESCEND-ACNC-NF hack-AGAIN-PF
 ‘He...after cutting down **half of** (his head), (he) chopped it up again.’ (MK, TT 183)

15. Nominalization and nominalization-based constructions

15.1. Theoretical preliminary to nominalization in Galo

As is by now well-known, it is common in Sino-Tibetan languages to find extensive grammatical exploitation of structures which are synchronically analysable as nominalizations, derive historically from nominalizations, or else derive from a third, diachronically prior structure which also developed separately into a nominalization (Matisoff 1972; Genetti 1992; Noonan 1997; Bickel 1999; DeLancey 2002; Yap and Matthews in press).

The most commonly-identified type of structure is what I will here call a *nominalized clause*. A nominalized clause is here defined as a marked derivation of a predicate and/or clause, such that the resulting structure is able to stand as head of an argument noun phrase within a second, higher clause. Usually in Sino-Tibetan languages, nominalized clauses may also stand as *clausal adnominal modifiers*, i.e. relative clauses and nominal complements. Often, we also find what are here described as *clausal nominalizations* (a.k.a. “standalone” nominalizations). Clausal nominalizations generally resemble main clauses – they are not subordinated to any higher syntactic constituent – and yet they exhibit nominalizing morphology (or morphology which also has nominalizing functions), or otherwise in some way resemble a nominalization. Finally, and seemingly more rarely, *non-clausal adnominal modifiers* such as genitive phrases are often viewed as participating in the same overall syncretism, usually because they are marked by morphology which also performs nominalizations and/or relativizations (Matisoff 1972; Noonan 1997). As far as I can see, all of these structural types potentially fall within the descriptive scope of Bickel’s (1999) term “Standard Sino-Tibetan Nominalization (SSTN)”, which has gained wide if not universal acceptance. In Galo, we find extensive exploitation of all of these grammatical structures, with the exception that Genitive marking and/or non-clausal nominal subordination do not generally seem to relate synchronically to Galo nominalization processes. The Galo genitive marker *gə/-kə* is not relatable to any attested Tani nominalizers, does not itself mark predicates which are not independently nominalized.

An exhaustive review of the theoretical questions which arise in the course of determining the synchronic grammatical status of nominalization-derived structures falls outside the scope of this work (more detailed discussion will be found in Post (in

preparation-b)). However, for the purpose of grounding the presentation to follow, a few key points should be established.

The first is that I take in this work a conservative and literal view of the concept of “nominalization”. In this view, the term “nominalization” strictly denotes all and only those members of a set of grammatical operations in which a term which may be treated as a nominal by the grammar of a language is derived from a term which cannot be so treated. Although there may be some semantic or even pragmatic values that also adhere to a given type of nominalization (such as “reification” or “backgrounding”), these values are neither necessary nor sufficient criteria to the designation of any particular structure as a nominalization.

The second point has to do with synchronic versus diachronic dimensions of analysis. As many previous works have already noted, the fact that a given structure resembles a nominalization morphologically does not necessarily indicate that it has the synchronic grammatical status of a nominal (see e.g. Genetti (1992)). That is, although a particular structure may employ morphology which is elsewhere employed in the function of nominalization, if it cannot be directly employed in a prototypical nominal function (particularly, as head of an argument noun phrase), it is not a clear candidate for analysis as a synchronic nominal, whatever its internal form and historical origin. In addition, when a nominalizer resembles a form with some other type of functionality – say, a noun-subordinator – this does not necessarily indicate *either* that they represent a single synchronic form-class (polyfunctional or not) *or* that any one function has evolved *directly* from any other. It is equally possible that some earlier form gave rise *separately* both to nominalizing functionality and to some other type of functionality. Certainly, structural and functional resemblances will exist in such cases, but resemblances do not count as evidence either of an active synchronic relationship or of a *direct* historical relationship (i.e., of the form $*A \rightarrow B$).

In sum, I count a structure as a synchronic nominalization *if and only if* it licenses treatment of a non-nominal as a nominal by the grammar. This is not to say that the task of identification is necessarily easy or straightforward, but it is set as an overall goal. As to the diachronic dimension, it is not assumed that any one type of structure necessarily or even naturally evolves from or is diachronically relatable to any other type of structure; rather, the question of precedence (i.e. of a nominalizing or some other type of structure/function) is left open to demonstration via comparative analysis and morphosyntactic reconstruction.

15.2. Nominalizers

Galo nominalizers are divided into *Primary* and *Secondary* sets, according to semantic and distributional criteria. Primary nominalizers occur in the widest range of construction types, are semantically relatively more abstract, and are relatively high in text-frequency; Secondary nominalizers have relatively limited functionality, are semantically relatively more specific and are relatively less frequent in my corpus (Table 15.1-Table 15.2).

| Form | Value | Abbreviation |
|------|---|-----------------------|
| -nà | ‘Subject (S/A)’ | NZR:SUB |
| -nam | ‘Realis event and Nonsubject core (O/E)’ | NZR:RLS; NZR:NSUB.RLS |
| -há | ‘Irrealis/obligative event and Nonsubject core (O/E)’ | NZR:IRR; NZR:NSUB.IRR |
| -kò | ‘Locative/oblique’ | NZR:LOC/OBL |

Table 15.1 – Primary nominalizers

| Form | Value | Form | Value |
|-------|---|------|-------------------------------------|
| -góo | ‘Area around/within which; Beginning point of (motion)’ | -zèn | ‘Partner in doing (in general)’ |
| -dò | ‘Range of’ | -jǎ | ‘Partner in having done (one time)’ |
| -rò | ‘Place of origin of’ | -pén | ‘Left out member of O set’ |
| -tùu | ‘Place of stopping of’ | -mó | ‘Accompaniment in’ |
| -tér | ‘Spatial endpoint of’ | -kée | ‘Material for’ |
| -lám | ‘Point along path of (motion)’ | -ŋóo | ‘Remainder of’ |
| -hùk | ‘Point of beginning of (event)’ | -túu | ‘Half of length resulting from’ |
| -rép | ‘Point of inception of; Iteration of’ | -zék | ‘Section resulting from’ |
| -dí/ó | ‘Time of’ | -mùr | ‘Mistake resulting from’ |
| -róo | ‘Temporal point of completion of’ | -dín | ‘Reason to/for’ |
| -pìn | ‘Temporal point of stopping of’ | -kór | ‘Manner of’ |
| -kùr | ‘Instance of returning as (motion)’ | -pée | ‘Habit of’ |
| -həə | ‘Level of’ | | |

Table 15.2 – Secondary nominalizers

15.2.1. Productivity and affixation

All *Primary nominalizers* productively suffix to any type of *uninflected predicate stem*, although not all senses are available on all types of stem (for example, Non-subject nominalization of an adjective or intransitive verb stem is not usually possible; see §15.3.1.3.2). Primary nominalizers may also occur on *inflected predicate words*, in some

but not all types of nominalization-based construction; these will be discussed in passing below.

Secondary nominalizers attach to *uninflected verbal or adjectival stems only*; they may *not* attach to inflected predicate words under any circumstances. They are in general productive, but also usually exhibit semantical and/or grammatical restrictions. For example, while *tí-túu* ‘imbibe-NZR:HALF.LENGTH’ ‘half-smoked cigarette’ (literally, ‘half of a length resulting from imbibing’) is fine, *?jùp-túu* ‘sleep-NZR:HALF.LENGTH’ is odd.²⁸¹

Also, while some Secondary nominalizers may occur on adjectives, such as *adók-dín* ‘different-NZR:REASON’ ‘reason to be/for being different’, many others do not, as **ahòo-pée* ‘long/tall-NZR:HABIT’; in such cases, it is often (though not always) possible to employ an Adjectival root-combining construction (§5.3.2.2), as *ahòo hòo-pée* ‘long/tall RDUP-NZR:HABIT’ ‘habit of being long/tall’; this construction functions to license a morphosyntactically *verbal* predicate head by repeating the second syllable of an adjective in a morphosyntactically verbal predicate (root) slot. In this way, the structurally verb root-suffixing requirements of the nominalizer are satisfied, at the same time that semantic headship of the lexical adjective is preserved.

Certain patterns of nominalization inevitably become conventionalized, such as *làa-dí/ó* ‘take-NZR:TIME’ ‘harvest time’, and *donám-tíinám* ‘eat.NZR:NSUB.RLS-imbibe.NZR:NSUB.RLS’ ‘food and drink; (means of) sustenance’. However, there are few if any clear examples of semantic shift potentially reflecting an advanced process of *lexicalization* of deverbal or deadjectival nominalizations; accordingly, most if not all such forms can be fairly treated as synchronically compositional.

15.2.2. Etymology and relationships to other form-classes

Most of the *Secondary nominalizers* found to date have probable cognates elsewhere in the language, mostly among Manner, Result or Directional predicate derivations (§11.2.1-§11.2.2), and/or among (other) sub-lexical roots; for example, *-zèn* ‘NZR:PARTNER’ as in *tí-zèn* ‘imbibe-NZR:PARTNER’ ‘drinking buddy’ almost certainly reflects the sub-lexical root *zèn-* as in *azèn* ‘friend’. Similarly, *-rép* ‘NZR:ITERATION’ as in

²⁸¹ Unless, as one consultant tells me, one sleeps with such force and intensity that by the end of the night, the bed has been partly eroded-away; *jùp-túu* could then be used to denote the bed.

ín-rép ‘go-NZR:ITERATION’ ‘trip’ probably relates to the Predicate derivation *-rép* ‘INCEPTIVE’ as in *ín-rép-dùu* ‘go-ICEP-IPFV’ ‘starting to go’. Accordingly, Secondary nominalizers are analysed in this work as a *subclass of predicate derivations*; the semantics and co-occurrence possibilities of the individual forms are thus discussed and exemplified in the broader context of predicate derivations in §11.2.4.1. Like other predicate derivations, Secondary nominalizers present challenges with respect to their *lexical* vs. *functional* (or “root” versus “suffixal”) status (see §11.1.7 for additional discussion). Given their frequent semantic complexity, it is very likely that most if not all Secondary nominalizers will be reconstructible as proto-lexemes, whether at the Proto-Tani stage or some other; however, due to scarcity of comparative data, very few reconstructions are actually possible at this point.

Primary nominalizers are even more difficult to etymologize. The most important Primary nominalizers *-nà* ‘NZR:SUB’ and *-nam* ‘NZR:RLS/NSUB’ seem likely to reconstruct in some form to Proto-Tani, although some inconsistencies in the comparative data make it difficult both to reconstruct their proto-functions and (in turn) to determine whether or not they were synchronically relatable at the PT stage.²⁸² Ultimately, it seems possible that PT **nam* could reflect **na* ‘General nominalizer’ + **m* ‘Object marker’, although segmental and tonal reflexes in Galo and Apatani don’t unreservedly support this hypothesis.²⁸³ Even more speculatively, it may be that ‘General nominalizer’ **na* – if it existed – derived from an earlier free form **na* ‘Article (?)’, which gave rise *separately* to both nominalizing and non-nominalizing functions. Support for this view would come

²⁸² The main difficulty surrounds the fact that the regular Apatani reflex of PT **nam* is in either *nĩ* or *nĩ̃*, while **na* is reflected in *ni* or *nĩ̃*. Unfortunately, however, the available sources are wildly inconsistent both in transcription of vowel nasalization and in distinction of *i/ĩ*. For example, in Abraham (1985: 118) we find a form *anĩ̃* ‘coming’, which would regularly reflect PT **vaɲnam* ‘coming’ – so far so good – however, in many other places in the same volume we find phrases such as *móka akunĩ̃* ‘his coming’ (without nasalization over the vowel *ɨ*). Accordingly, since it is possible in the Apatani sources to find agentive, patientive and action nominalizations in *-nĩ̃*, it is impossible at present to discern whether this reflects the existence of a general nominalizing function to *-nĩ̃* in Apatani – possibly reflecting a single proto-form **na*, with **na-m* presumably a post-Proto-Tani composition – or whether this may simply be the result of multiple errors or inconsistencies in transcription of the data.

²⁸³ Put simply, Galo tonal reflexes are wrong (if *-nà* is internal to *-nam*, then *-nam* should also be low, but it is not), and the Apatani accusative marker and action nominalizer don’t regularly correspond. Either of these facts could be explained in terms of irregularities related to grammaticalization and subsequent phonological erosion, but additional evidence should nevertheless be sought prior to advancing this etymology in any serious way. Note that if it can indeed be supported, then this etymology would also suggest a diachronic precedence to the Non-subject (or Object) nominalizing function over the Event/action nominalizing function.

from the existence of phonologically similar but non-nominalizing forms found in Galo, such as Declarative particle *na* (§13.3.2.2.1) and Selective postposition *na* (§14.3.7.3).²⁸⁴

Locative/oblique nominalizer *-kò* seems to directly reflect PT **ko* ‘Locative nominalizer’. It has a plausible partial cognate in the sub-lexical root *kó-* ‘place’, as in *mookó* ‘place’ and *kopík* ‘eroded area’, although tonal correspondences do not directly support this theory.²⁸⁵ I have no good etymology for *-há* ‘Irrealis/obligative event/non-subject nominalizer’, and have found no clear potential cognates in any other Tani languages.²⁸⁶

15.3. Nominalization-based constructions

15.3.1. Nominalized clauses

15.3.1.1. Overview

Nominalized clauses, relative clauses and nominal complement clauses are based on the same set of morphological processes and syntactic structures in Galo; in what follows, this overall construction will be referred-to as a “nominalized clause” for short, with references made to subtypes as required.

The core of a nominalized clause is a *predicate nominalization* via suffixation of a *Primary* or *Secondary nominalizer* to an *uninflected predicate stem*, as *ín-nam* ‘go-NZR:RLS’ ‘to go; the action of going’ or *ín-dín* ‘go-NZR:REASON’ ‘reason for going’. A nominalized clause minimally consists of a single nominalized predicate, but may also include several additional constituents. Nominalized clause constituents generally resemble main clause constituents in terms of syntax and constituent structure/marking,

²⁸⁴ Although regular cross-language correspondences have not yet been determined, it is perhaps worth noting some potential cognates in the Athpare article/singular nominalizer *-na* (Ebert 1997; Bickel 1999) (note however that DeLancey (2002) suggests that this form has a language-internal etymology), the Kham General nominalizer *-na* (Watters 2002: 199), and/or the Mongsen Ao ‘Agentive case’ marker *nə* (Coupe 2007).

²⁸⁵ Grammaticalization effects are in this case highly unlikely (since proto-high would not be expected to attain the more marked low realization in the course of grammaticalization); thus, it is perhaps more plausible that *-kò* and *kó-* could reflect a much older derivation-based alternation; cf. §2.4.2.5.

²⁸⁶ The only potential non-Tani cognate I have yet found is in Athpare General nominalizer *-(k)ha(k)* (Bickel 1999), although the chances of such a good segmental correspondence at such a great genetic depth seem small. Lhasa Tibetan *sa* (Mazaudon 1978) seems like a segmentally plausible relation, but may be semantically doubtful.

with the important exception that *subjects* are obligatorily marked in the *Genitive*, as *ŋó-kə̀ tolò ín-nam* ‘1.SG-GEN DST.LOC.UP go-NZR:RLS’ ‘my going/having gone up there’ or *ŋó-kə̀ tolò ín-dín* ‘1.SG-GEN DST.LOC.UP go-NZR:REASON’ ‘my reason for going up there’. Genitive marking is *not* a property of main clause subjects in Galo.²⁸⁷

Nominalized clauses can be subdivided into *gapped* and *full* subtypes. *Gapped* nominalized clauses contain a syntactic zero (Ø) or “gap”, representing an *ellipsed underlying constituent* which is *coreferential with the nominalized predicate*. Gapped nominalized clauses may stand alone as an argument noun phrase head, or they may be pre-posed to a noun phrase head as an adnominal modifier; in the latter case, the “gap”, the nominalized predicate, and the modified noun phrase head are all simultaneously coreferential. Gapped nominalized clauses which stand alone as an argument noun phrase head are usually referred to in the literature as *headless relative clauses* (1996), while those which function as pre-posed modifiers are also called *externally-headed relative clauses* (1997). It is also possible for a nominalized clause to be *postposed* to a coreferential head. Such constructions are often identified as *internally-headed relative clauses* in the literature on Sino-Tibetan nominalization (for example Bickel (1999)), although they are also described as postposed appositives (as in DeLancey (2002)). With respect to Galo at least, there is potential support for both interpretations; both possible analyses are given in (1998); additional discussion will be found in subsections below.

(1996) *okkə́ kudá...əŋŋiín əmcìn lâatə ké.*

okkə́ə kú=da [[Ø_i əŋŋi-nà_i] əm=cìn]_{NP} làa-tó=kée
 SCNJ CMPL=CNTR **little-NZR:SUB** ACC=ADD take-IPTV.ODIR=POL
 ‘After that, get the **small one** also.’ (IR, MPO 005)
(headless relative)

(1997) *okkə́, aə́ biscôk nə́ ðĩə̀m laakâa tó.*

okkə́ə [aə́ [Ø_i bissòk-nà_i] ðĩĩ_i=ə̀m]_{NP} làa-kâa-tó
 SCNJ HDST.SLEV **striped-NZR:SUB** **stone=ACC** take-TENT-IPTV.ODIR
 ‘And get that **striped stone** over there.’ (IR, MPO 069)
(externally-headed/preposed relative)

²⁸⁷ Note also that genitive subject-marking in Galo nominalized clauses is *not* a manifestation of dependent clause ergativity, since genitive subject-marking is an *S/A* property – *not* an *S/O* or *A* property. For additional discussion, see §14.3.6.1.

(998) *bh...hâk acín âgo nâmb domá.*

1. bh [həkə] [acín_i agò-nà]_i = əəm]_{NP} dó-máa
 2. bh [həkə] [acín]_i [Ø_i agò-nà]_i = əəm]_{NP} dó-máa
- 3.SG PTOP.SEMB **cooked.rice** **warm/hot-NZR:SUB=ACC** eat-NEG
 ‘He...didn’t eat this sort of **rice which was hot.**’ (TB, OAM 012)
 (1. internally-headed/2. postposed appositive)

Gapped nominalized (relative) clauses may be further divided into *subject*, *non-subject core* and *locative/oblique* subtypes, according to the identity of the predicate nominalizer and the syntactic status of the gapped constituent. These subtypes are discussed in §15.3.1.3.1-§15.3.1.3.3.

Full nominalized clauses potentially host all of their underlying constituents, containing no syntactic “gap”. Full nominalized clauses may stand alone as an argument noun phrase head, or they may be apposed to a distinct NP head as an adnominal modifier. Full nominalized clauses which stand alone as an argument noun phrase head are often referred to in the literature as *event* or *action nominalizations*²⁸⁸ (999). Those which function as apposed modifiers are often described as *noun* or *nominal complements* (1000).

(999) *mñ....tatík manəməm...əmbə zâab*

- bh [[**tatík-má-nam**]_{NOM} = əəm]_{NP} əmbə = zâa = bô
 3.SG **frog-search.for-NZR:RLS=ACC** ANAP.PADV=CERT=AVZR
məəjâa kumá.
 móə-jâa-kú-máa
 think-COMP-CMPL-NEG
 ‘He...in fact didn’t pay much attention to the **frog-searching.**’ (TR, FS 028)

(1000) *tatík kaanám doojî əi?*

- [[**tatík-káa-nam**]_{NMOD} [**doojî**]_{NOM}]_{NP} (?ə)_i
frog-look-NZR:RLS **story** ETAG
 ‘(So it’s) **the story of looking at the frog**, eh?’ (TR, FS 002)

The following subsections expand on these basic subtypes, in the order of Full nominalized clauses (§15.3.1.2) followed by Gapped nominalized clauses (§15.3.1.3). Since nominalized clauses based on Primary nominalizations are more frequently attested in a wider range of functions, it will be simplest to focus the exposition on them; nominalized clauses based on Secondary nominalizations are discussed in a later summary section §15.3.1.4.

²⁸⁸ Or, more colloquially perhaps, as “infinitives”.

15.3.1.2. Full nominalized clauses

15.3.1.2.1. Event (action) nominalizations

Event (action) nominalizations are in *-nam* ‘NZR:RLS’ or *-há* ‘NZR:IRR’: *-nam*

‘NZR:RLS’ derives *Realis* event nominals; these denote an event construed as real, whether because a particular iteration has been realized at a specific point in past time, or because such events are regularly realized and/or construed as a general feature of the world

(1001). Realis event nominalizations in *-nam* ‘NZR:RLS’ function as *citation forms* in Galo

as in most Tani languages, as *ín-nam* ‘go-NZR:RLS’ ‘going; to go’ and *dó-nam*

‘eat-NZR:RLS’ ‘eating; to eat’.

(1001) *izigə hogkù...ərapəm cínám kaakumá.*

izì = gə hogò = kú [əráp = əəm cínám]_S [káa-kú-máa]_{PRED}
 now=GEN TOP.TMP=CMPL door=ACC slap-NZR:RLS have/exist-CMPL-NEG
 ‘There was no more **knocking on the door** like just now.’ (IR, FA 076)

-há ‘NZR:IRR’ derives *irrealis* or *obligative* nominals denoting events construed as pending, not-yet realized, and/or which an actor is under obligation to bring about, as *dó-há* ‘eat-NZR:IRR’ ‘eating-to-be-done; eating which someone has to do’; in (1002), note that the noun phrase in *əráp* ‘door’ is an underlying argument of the nominalized clause in *kulí* ‘open’, despite the surface intervention of the higher clause subject *bulù* ‘3.PL’.

(1002) *ərapəm bulù kulí háam bohí leəmə*

[əráp = əəm] bulù [kulí-há = əəm] bohó-lèe = əəm = əə
 door=ACC 3.PL open(<Asm)-NZR:IRR=ACC fear-SSEQ=ACC.TSUB=TOP
ahíg jûpko lò accôbə doodù.
 ahí = gə jûp-kò = lo accòo = bó dóo-dùu
 self=GEN sleep-NZR:LOC/OBL quiet=AVZR lie.down-IPFV
 ‘Being afraid of **the door (potentially) being opened**, they laid quietly in their own bed.’ (IR, FA 037)

Event nominalizations standing as argument noun phrase heads have their underlying subjects marked in the Genitive (1003). Marking of underlying non-subject

NPs generally resembles that of main clauses (cf. the Accusative-marked O argument NPs in (1001)-(1002)).

(1003) *nók rənəmém nó allîbə rəmə booló,*

[**nó-kə** **rə-nam=əəm**] nó allî = bə rə-máa-booló
 2.SG-GEN live/exist-NZR:RLS=ACC 2.SG well=SBRD live/exist-NEG-COND
nó injoí ká î.

nó ín-jó = (ə)í = kaa (ə)î
 2.SG go-PROH=EMPH=ADVS ATAG
 ‘If you don’t live **your life** properly, you absolutely mustn’t go (to the sacred Moopin festival), eh!’ (LN, MF 045)

15.3.1.2.2. Nominal complements

Nominal complements are event nominalizations which function as preposed modifiers to a distinct noun phrase head (cf. ex. (1000) in §15.3.1.1). They are very rare in my corpus, although if relator nouns are analysed as synchronic noun phrase heads, overall frequency would appear considerably higher; note that, unlike common nouns and pronominals, event nominalizations which are preposed to a relator noun such as *ləgàa* ‘reason’ do *not* occur in genitive case (1004).²⁸⁹ For discussion of the syntax and semantics of relator noun constructions, see §8.1.

(1004) “*hogoí doré kú*” *əmnám ləgàa bə...*

[[[**hogò = (ə)í** **dó-rə-kú**]_E **əm-nam**]_{NOM} [ləgàa]_{RN} = bə]_{NP}
 SPRX.LOC=EMPH eat-IRR-CMPL say-NZR:RLS reason=DAT
 ‘Because of (her) saying “I’ll eat it right here”...’ (LN, TG 032)

15.3.1.3. Gapped nominalized clauses

15.3.1.3.1. Subject nominalizations/relative clauses

Subject nominalizations are headed by an adjectival, intransitive or transitive predicate stem suffixed in *-nà* ‘NZR:SUB’. A predicate nominalized in *-nà* ‘NZR:SUB’ is always coreferential with its underlying subject (S or A), whatever the underlying semantic role of the S/A argument or the semantics of the predicate stem. Importantly,

²⁸⁹ Contrast for example *bî-kə ləgàa = bə* ‘3.SG-GEN reason=DAT’ ‘for his benefit’, in which Genitive marking on the pre-posed pronoun is obligatory.

then, *-nà* ‘NZR:SUB’ is *not* a semantic “agent(ive)” or “actor” nominalizer, as it is equally capable of deriving semantic agents, undergoers or attributees:

| | | |
|----------------|-------------------|---|
| <i>tú-nà</i> | kick-NZR:SUB | ‘kicker; person who kicked/kicks (something)’ |
| <i>hí-nà</i> | die-NZR:SUB | ‘dier; person who died/dies’ |
| <i>ahòo-nà</i> | long/tall-NZR:SUB | ‘tall/long one; one who is/was tall/long’ |

Subject nominalized clauses in *-nà* ‘NZR:SUB’ may stand alone (headless relative clause) (1005) or they may be preposed to a distinct noun phrase head (externally-headed relative clause) (1006) (postposed/internally-headed subject nominalizations will be discussed shortly). In either case, the subject nominalized clause contains a syntactic gap which is coreferential with the nominalized predicate, as well as with the external noun phrase head (if present).

(1005) *tà, hotàgò makoragò maazí nagò*

tà hotà = go makora = go [[Ø_i **maazí-nà_i**]_{RELC} [Ø_i]_{NOM} = go]_{NP}
 DST.UP elephant=IND fiend(<Asm)=IND **very.much-NZR:SUB=IND**
rədù.
 rá-dùu
 live/exist-IPFV
 ‘Up there lives an elephant, a nasty one, a **huge one**.’ (RmR, CC 176)

(1006) *maazí nêə hîrêk gokú né!*

[[Ø_i **maazí-nà_i** = ^]_{RELC} [**hîrêk_i**]_{NOM} go]_{NP} = kú né
very.much-NZR:SUB=EXPR banyan IND=CMPL ADM
 ‘A **maaassive banyan**, I’m telling you!’ (RmR, CC 062)

Non-subject constituents of a subject nominalized clause, if overt, generally precede it. Typically, referential and relational marking of non-subject constituents of a subject nominalized clause resembles that of main clauses. In the following examples, an Accusative-marked O argument of the nominalized predicate occurs within the subject nominalized clause in (1007), while adverbials occur within the nominalized clause in (1008); in (1008), note that the adverbials in each case are clearly modifying the *nominalized* predicate, and so are not analysable as constituents of the higher clause.

(1007) *aré! ɲunnəm dodée nagò aât dù bərə*

aré [[**ɲunù**=əəm **dó-dée-nà**]=go] áa-tà-dù bəree
 oh! **1.PL=ACC eat-PROS-NZR:SUB=IND** come-INCP-IPFV CJEC
 “Whoa! **Something** seems to be coming **which may eat us!**” (IR, FA 048)

(1008) *alák gó kajâa-kajâabʳ rîñə gò, maí*

alák = go [[**kajâa-kajâa**=bó **rî-nà**]=go] [[**maazí**
 hand/arm=IND **black-black=AVZR do-NZR:SUB=IND** **very.much**
kaí nagò, âm jaajâa bó rîñə gò...əɾəpém
kaí-nà]=go] [[**amə** **jaajâa**=bó **rî-nà**]=go] əɾáp = əəm
big-NZR:SUB=IND **hair.body** **much/many=AVZR do-NZR:SUB=IND** door=ACC
nîdâa nîrâa nîkôk ká.
 nî-dâa nî-râa nî-kók-káa
 nudge-WITHOUT.STOPPING.1 nudge-WITHOUT.STOPPING.2 nudge-OPEN-PF
 ‘An arm, a **dark black one**, a **really big one**, a **really hairy one**...pushed the door
 right open.’ (IR, FA 077)

When functioning as a headed relative clause, subject nominalizations usually precede the head as in (1006), but they may also follow it. Such constructions are often described as *internally-headed relative clauses* (Bickel 1999), or else as post-head appositives (DeLancey 2002). In example (1009), note that *ərtàk* ‘bamboo fragment’ is the head of the construction, and yet appears to occur in the canonical S argument position with respect to the nominalized adjectival predicate in *kaí* ‘big’ (i.e., it fills the syntactic “gap”). Note also that, unlike in an event (action) nominalized clause, no distinct head noun may intervene between the nominalized predicate and the demonstrative (i.e., it cannot form a nominal complement construction, unlike a nominalized clause in *-nam* ‘NZR:RLS’; cf. §15.3.1.2.2).

(1009) *okkə bə...ərtàk...kainə bə,*

okkə bə [ərtàk **kaí-nà**] bə
 SCNJ DST.DOWN **bamboo.fragment** **big-NZR:SUB** DST.DOWN
pampôo là ɲnəm tentəə doobə.
 pəm-pôo-là(a) ɲn = əəm tentəə-dó(o) = bó
 prop-BREADTHWISE-NF two=ACC be.on.direct.path-STAT=SJNC
 ‘And that...**big bamboo fragment** down there, prop it breadthwise (against the stone) and (make it) such that both of them are lying on a straight path.’ (IRw, MPO 116)

At the same time, the subject of an internally-headed relative clause such as *ərtàk* in (1009) does *not* behave like other nominalized clause arguments. Namely, while other arguments of a subject nominalization are *phrasal*, and have the potential to take phrasal enclitics (such as the Accusative marker *əəm* in (1007) and Adverbializer *bɔ́* in (1008)), internal heads of a subject nominalization *cannot* take phrasal enclitics (such as Topic-marking in *əə* or Individuation in *go*); this restriction renders the internal head of an internally-headed subject relative clause unlike all true Galo main clause subjects (cf. §14.2.1). Thus, although I do not wish to discount the internal head analysis completely, unless the restricted marking of the “internal head” can be independently explained, it would seem that a potentially preferable alternative would be to treat a noun such as *ərtàk* ‘bamboo fragment’ in (1009) not as “internal” to the relative clause, but rather as the surface head of the higher NP itself. Under this analysis, the subject nominalization would be viewed as a noun phrase-internal *post-head modifier*, and it would be left to identify two subtypes of externally-headed relative clause, pre-posed and post-posed.²⁹⁰

Postposition of subject nominalizations to a noun phrase head is common when the nominalized clause predicate is intransitive as in (1009); however, when the nominalized clause predicate is *transitive*, potential ambiguities are created. That is, although it is possible for the O argument of a subject nominalization to be case-marked as in (1007), it is more commonly unmarked.²⁹¹ In the latter case, it may be difficult to distinguish an unmarked O argument from the nominalized clause head. In (1010), analysis 1. gives an “O argument” reading, while analysis 2. gives an “internal head” reading.

(1010) *ŋó omée cōonə gò kaató.*

1. *ŋó* [[*omée*]_O [*cóo-nà*]_{RELC}][*Ø*]_{NOM} = go]_{NP} *káa-tó*
2. *ŋó* [[*omée*]_{NOM} [*cóo-nà*]_{RELC} = go]_{NP} *káa-tó*
- 1.SG kid steal-NZR:SUB=IND look-PFV
1. ‘I saw a child thief (stealer of children).’ (preferred)
2. ‘I saw a child thief (child who steals).’ (possible) (IR, B8:41)

It is possible to disambiguate reading 1. from reading 2. as follows: reading 1. could be established via insertion of an “external” subject head such as *ɲí* ‘person’ in (1011).

²⁹⁰ The same argument would lead to questioning of the “appositive” analysis, inasmuch as true appositives should, in principle, independently refer, and (therefore) take independent referential marking – despite their being ultimately coreferential. For discussion of noun phrase apposition in Galo, see §6.3.

²⁹¹ For discussion of variation in accusative or zero-marking of O arguments in a general context, see §14.3.2.

Reading 2 could be established by preposing the nominalized clause before the noun, as in (1012).

(1011) *ŋó omée cōonə ɲiigó kaató.*

ŋó [[**omée**]_O **cóo-nà**]_{RELC} [**ɲí**]_{NOM} = go]_{NP} káa-tó
 1.SG **kid** **steal-NZR:SUB** **person**=IND look-PFV
 ‘I saw a person who stole children.’ (*‘I saw a person who was a stealing child.’)

(1012) *ŋó cōonə omée gó kaató.*

ŋó [[**cóo-nà**]_{RELC} [**omée**]_{NOM} = go]_{NP} káa-tó
 1.SG **steal-NZR:SUB** **kid**=IND look-PFV
 ‘I saw a stealing child.’ (*‘I saw a stealer of children.’)

15.3.1.3.2. Non-subject core nominalizations/relative clauses

Non-subject core nominalizations (non-subject for short) are in *-nam* or *-há*; they derive Realis and Irrealis/Obligative non-subject nominalizations respectively, as *ŋó-kə rík-nam* ‘1.SG-GEN wash.clothes-NZR:NSUB.RLS’ ‘my washed (clothes)’ vs. *ŋó-kə rík-há* ‘1.SG-GEN wash.clothes-NZR:NSUB.IRR’ ‘my to-be-washed (clothes); (clothes) which I must wash’.

Non-subject core nominalizations are licensed by *transitive* or *extended intransitive/transitive* predicates only;²⁹² they derive a nominal which is coreferential with the underlying predicate O or, in the case of extended caseframes, possibly also the E argument (1013)-(1014). Further discussion and examples illustrating O and E argument denotations are found in §14.1.3.3 and §14.1.3.8 respectively.

(1013) *ogò, panəməm palà.*

ogò [[**pá-nam**]_{RELC} [Ø]_{NOM} = əm]_{NP} pá-là(a)
 TMP/EPIS.SEQ **chop-NZR:NSUB.RLS**=ACC chop-NF
 ‘Then, some of them were killed.’ (lit., ‘**chop-ees** were chopped.’) (TB, OAM 158)

²⁹² Suffixation of *-nam* or *-há* to an intransitive predicate can only yield an event (action) nominalization (§15.3.1.2.1).

pí-zí-nà = əə com tíi-kúm-dùu-nà = əə máa
pour-BEN-NZR:SUB=COP.IPFV GUES imbibe-SENSELESS-IPFV-NZR:SUB=TOP NEG
pizí nammó com tìikúm duunà!
[[pí-zí-**nam**]_{RELC} [Ø]_{NOM} = əə]_{NP} com tíi-kúm-dùu-nà = əə
pour-BEN-**NZR:NSUB.RLS**=COP.IPFV GUES imbibe-SENSELESS-IPFV-NZR:SUB=TOP
'I can't tell whether it's the pourer or the **pouree** who's drunk!' (MN,
OLB1:98)²⁹³

internal to the relative clause at all, or might not be better analysed as the noun phrase head (with the relative clause postposed as a modifier).

(1017) *nók agóməm takâa nàm*

[nók-kə agóm = əm takâa-nam]

2.SG-GEN speech=ACC ask-NZR:RLS

‘your asking of the question’ (*‘the question that you asked’) (event (action) nominalization)

Genitive marking of subjects in a non-subject nominalization can create potential ambiguities which are not generally found in other nominalized clause types. This is because the syntactic position of the genitive-marked subject of a nominalized clause – generally, at or close to the leftward periphery of the nominalized clause – is very close to the syntactic position of a *Genitive phrase* constituent of the higher noun phrase.²⁹⁴ This is schematized as in Figure 15.1, and exemplified in (1018).

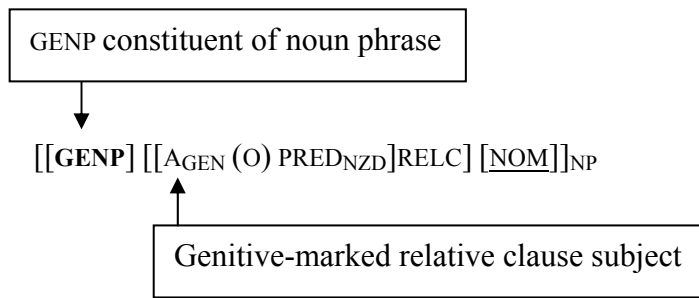


Figure 15.1 – Ambiguity arising from contiguity of nominalized clause subject with noun phrase GENP constituent

(1018) *ηók mōkə nàm ərək*

1. [[[ηók-kə]_A [mò-kə-nam]_{PRED}]_{RELC} [ərək]_{NOM}] ← GENP is RELC subject
2. [[[ηók-kə]_{GENP} [mò-kə-nam]_{PRED}]_{RELC} [ərək]_{NOM}] ← GENP is NP constituent
 - 1.SG-GEN make-DEAD-NZR:NSUB.RLS pig
 1. ‘the pig that I killed’ (preferred)
 2. ‘my pig that was killed (by someone)’ (possible)

A similar problem attends nominalization of extended transitive clauses. Although the unmarked order of extended transitive clauses in Galo is A E O V (§9.2.2.4), this order cannot operate effectively inside a non-subject nominalization. This is because the

²⁹⁴ This is not a problem in the case of subject nominalizations, because the subject is either ellipsed or an unmarked “internal” head, nor in the case of event nominalizations, seemingly because events are not as easily construed as possessed. The ambiguity *may* exist in locative/oblique nominalizations, although it has not been robustly-attested due again to the difficulty of construing many locative/oblique semantic types as possessed. The prominence of this potential ambiguity among non-subject nominalizations can perhaps then be explained by the ready ability for non-subject nominalizations to denote concrete, possessible entities.

A argument – being in genitive case – is almost always interpreted as having *possessive scope* over the E argument (i.e., it is analysed as a noun phrase of the form [GENP NOM]) (1019). In order to get around this problem, E is almost always *fronted* (1020). Note that (1020) is still subject to the ambiguity exemplified in (1018); however, reading 2 seems quite marked to speakers, and is unlikely to be felt as a possibility given any amount of context.

(1019) *ɲók acinè pagbó zinəmə*

1. [[[**ɲó-kə**]_{GENP} ací] = nè]_E [pagbó]_O zí-nam = əə]
 2. [[[**ɲó-kə**]_A [ací = nè]_E [pagbó]_O zí-nam = əə]
- 1.SG-GEN elder.brother=NAGT slave give-NZR:NSUB=TOP

áa kunà.

áa = kú na

DST.SLEV=CMPL DECL

1. ‘The slave that was given to **my** elder brother (by someone) is that one.’ (preferred)
2. ‘The slave that **I** gave to (someone’s) elder brother is that one.’ (possible) (MN, B5:128)

(1020) *acinè ɲók pagbó zinəmə*

1. [ací = nè]_E [**ɲó-kə**]_A [pagbó]_O zí-nam = əə
 2. [ací = nè]_E [[**ɲó-kə**]_{GENP} pagbó]_O zí-nam = əə
- elder.brother=NAGT 1.SG-GEN slave give-NZR:NSUB=TOP

áa kunà.

áa = kú na

DST.SLEV=CMPL DECL

1. ‘The slave that **I** gave to my/your elder brother is that one.’ (preferred)
2. ‘**My** slave (the slave of mine) that was given to my/your elder brother is that one.’ (possible) (MN, B5:128)

15.3.1.3.3. Locative/oblique nominalizations/relative clauses

-*kə* ‘NZR:LOC/OBL’ most often derives locative nominalizations, which may be understood as concrete locales (1021), as well as more diffuse spatial types such as trajectories (1022).

(1021) *namsûu rǎ, bulùk rǎkkò maazíb*

namsûu-rǎ [bulù-kǎ rǎ-kò] = əə maazí = bó
 stinky-IRR 3.PL-GEN live/exist-NZR:LOC/OBL=TOP very.much=AVZR
namsûu rǎ.
 namsûu-rǎ
 stinky-IRR
 ‘They sure will stink, **their dens** will be really stinky.’ (or, ‘**their living places/the places where they live**’) (AO, CC 141)

(1022) *bulùk kâako lò ɲó t̪imáa rǎ.*

[bulù-kǎ káa-kò] = lo ɲó t̪imáa-rǎ
 3.PL-GEN look-NZR:LOC/OBL=LOC 1.SG imbibe-NEG-IRR
 ‘I won’t smoke in front of them (elder women).’ (lit., ‘in their **(line of) seeing**’)
 (MN, OL15:136).

-kò ‘NZR:LOC/OBL’ also derives temporal or episodic nominals, usually with a ‘process’ sense (1023).²⁹⁵

(1023) *ó kâako lò, higì máí aldù.*

[ó kǎa-kò] = lo higì maazí aló-dùu
vegetable cook.by.boiling-NZR:LOC/OBL=LOC SPRX.IND very good-IPFV
 ‘When (I’m) cooking, this is really useful (of a headlamp).’ (lit., ‘in my **(process of cooking...)**’) (IRw, OLB2:56)

-kò ‘NZR:LOC/OBL’ may also derive nominals with a sense of ‘method’ or ‘means’ (1024), as well as with a sense of ‘reason’. The latter sense in particular may be in the process of developing (or may have already developed) some distinct constructional properties. In (1025), note that the subject is *Nominative* (unmarked) rather than in Genitive case.

(1024) *ɲó “má” əmdée kòêi kaamá!*

ɲó [máa əm-dée-kò] = eí káa-máa
 1.SG **no** say-PROS-NZR:LOC/OBL=HEMP have/exist-NEG
 ‘I’ve got no **way to say no!**’ (IR, OLC1:94)

²⁹⁵ This sense has also developed into a locative-based *comitative* construction with the basic sense ‘in *x*’s (process of) *V*-ing’ (i.e., ‘*V*-ing with *x*’); for discussion, see §16.3.5.2.

(1025) *bɛ̃ takâa kolò, ɲó ɛmʔ bá ɛmbə̀.*

[bɛ̃ takâa-kò] = lo ɲó ɛm-tó-bá(a) ɛmbə̀
 3.SG ask-NZR:LOC/OBL=LOC 1.SG say-PFV-PFV.DRCT ANAP.PADV
 ‘Because he asked me, (that’s why) I said it like that.’ (lit., ≅ ‘On his asking...’)
 (TR, 6:139)

Locative/oblique nominalizations usually stand alone as noun phrase heads (headless relative clauses), but may also stand as adnominal modifiers (externally-headed relative clauses) (1026)-(1027). There are no examples of internally-headed locative/oblique nominalizations in my data, leaving this a question for further research.

(1026) *hodumgə̀ rəkò mookó kaadù.*

[[hodùm = gə rə-kò]_{REL} [mookó]_{NOM}]_{NP} káa-dùu
 barking.deer=GEN live/exist-NZR:LOC/OBL place have/exist-IPFV
 ‘There’s a place (there) where barking deer live/where there are barking deer.’
 (IR, OLB8:42)

(1027) *bɛ̃ iigòo abúóm kaapâa kò doolúu lo duudù.*

bɛ̃ [[iigòo abú = ɛm káa-pàa-kò]_{REL} [doolúu]_{NOM} = lo]_{NP} dùu-dùu
 3.SG PLACE river=ACC look-ATTN-NZR:LOC/OBL village=LOC stay-IPFV
 ‘He stays in the village from which the Igo River can be seen.’ (IR, B8:42)

As with most other types of nominalized clauses, the subject of a locative/oblique nominalization is most often in the genitive (1021)-(1022), and non-subject core arguments are optionally case-marked as in a main clause (1023), (1027). However, as was mentioned in passing above, subjects of a locative/oblique nominalization sometimes lack genitive case (1025); in a few instances, consultants have accepted both genitive and nominative subject realizations. The reason for this variability is not yet clear, but it may in at least some cases reflect a process of further grammaticalization of certain types of Locative/Oblique nominalization-based construction.

15.3.1.4. Secondary nominalized clauses

Secondary nominalizers, like Primary nominalizers, derive nominalized clauses through direct suffixation to an uninflected predicate stem. Internally, they also exhibit a genitive subject; the underlying O argument of a transitive secondary nominalized clause may be marked in the accusative, but is much more frequently unmarked for case. Adverbials and oblique noun phrases may occur within a Secondary nominalization (though they only rarely do); their marking is not different from that at the main clause

level. Here we discuss only the syntactic properties of Secondary nominalized clauses; the semantic properties of individual Secondary nominalizers are discussed in §11.2.4.1.

Secondary nominalized clauses generally stand as argument noun phrase heads, and have been attested in all core argument functions (S, A, O, E, (V)CS, (V)CC), as well as in oblique functions (most often, locative or temporal phrases). Noun phrases headed by a Secondary nominalized clause exhibit most ordinary noun phrase properties with respect to demonstrative usage, case-marking, and the occurrence of post-head modifiers like relator nouns, quantifiers, and post-head relative clauses. However, pre-head modifiers such as modifying nominals and pre-head relative clauses do not usually occur in an NP headed by a Secondary nominalization, since they would be difficult or impossible to distinguish from nominalized clause constituents; similarly, pre-head genitive modifiers are usually indistinguishable from nominalized clause subjects.

The following examples (1028)-(1032) illustrate the use of Secondary nominalized clauses in S, O, CS, CC and oblique functions respectively. Genitive marking of nominalized clause subjects is illustrated in (1030), non-case-marked and case-marked realizations of nominalized clause O arguments are illustrated in (1029) and (1032) respectively, and nominalized clause-internal realization of an adverbial is illustrated in (1030). In the examples, NP constituents which are *not* constituents of the nominalized clause head include demonstratives and post-head relative clauses (1029), referential and relational enclitics including the Accusative in (1029), Topic marker in (1030) and Dative in (1032), as well as a relator noun (1032).

(1028) *okká, adîi gêm...aô gaddê...domô*

okkáə adîi gə = əəm aò gadê = əə [[dó-mô]_s
 SCNJ Adi.people GEN=ACC child group=TOP **eat-NZR:ACCOM**
kaamáa lêek^wómô bâa^P dokáa kú.

káa-máa-lêe-kú]_{PRED} = əəm = əə]_{SBRD} báa-là(a) dó-káa-kú
 have/exist-NEG-SSEQ-CMPL=ACC.TSUB=TOP bake-NF eat-PF-CMPL
 ‘And, the Adi’s (writing)...the children...not having **anything to eat (rice) with**,
 roasted and ate (it).’ (MK, LW 049)
(S function)

(1029) *ám əə gatú kainàm.*

[[á-m]_{DEM} [[əə]_O [gá-túu]_{PRED.NZD}]²⁹⁶ [kaí-nà]_{RELC = əə}]_O

DST.SLEV-ACC **bamboo** pare-NZR:PART big-NZR:SUB=ACC

laakâa tokú dà.

[làa-kâa-tó-kú da]_{PRED}

take-TENT-IPTV.ODIR-CMPL CNTR

‘Go ahead and get the big **whittled-off hunk of bamboo** again.’ (IRW, MPO 047)
(O function)

(1030) *nôk əmbə mēdīnə jôowə là?*

[[nó-kə]_S [əmbə]_{ADV} [mēn-dín]_{PRED.NZD}] = əə]_{CS} [jòo]_{CC} [= əə]_{COP} laa

2.SG-GEN APRX.PADV **speak**-NZR:REASON=TOP what=COP.IPFV CQ

‘What’s **your reason for talking like that?**’ (MN, OL19:1)

(CS function)

(1031) *doddə kù.*

[dó-də]_{CC} [= əə = kú]_{COP}

eat-NZR:TIME=COP.IPFV=CMPL

‘It’s time to eat.’ (IR, OL22:85)

(CC function)

(1032) *əəm dorô kookî bəkú...bûl attîə...*

[[əəm]_O [dó-ròo]_{PRED.NZD}] [kookî]_{RELN} bə = kú]_{OBL} bulù attîr = əə

ANAP.ACC **eat**-NZR:CMPL backside DAT=CMPL 3.PL group=TOP

doogəə akênlo...akên gobó, jublè dootó.

doogəə akên = lo akên go = bə jùp-là(a) dóo-tó

bed one=LOC one IND=DAT sleep-NF lie.down-PFV

‘After finally **finishing eating that**...they all...in one bed...all as one, they lied down to sleep.’ (TR, FA 083)

(OBL function)

Unlike primary nominalized clauses, Secondary nominalized clauses only rarely stand as clausal adnominal modifiers (relative clauses and/or clausal nominal complements). This seems mainly to be due to the prevalence of abstract denotations among Secondary nominalizers and to the general lack in the Galo lexicon of abstract nouns with which a Secondary nominalized clause could be potentially be coreferential; for example, there are no Galo nouns meaning ‘reason’, ‘time’, or ‘manner’ which could stand as head to an apposed nominalization in *-dín* ‘NZR:REASON’, *-dî/ə* ‘NZR:TIME’

²⁹⁶ Note that ‘bamboo’ cannot be analysed as NP-head, since ‘big’ modifies ‘hunk’, not ‘bamboo’.

or *-kór* ‘NZR:MANNER’.²⁹⁷ However, Secondary nominalized clauses with *concrete* denotations usually *are* able to stand as adnominal modifiers; in (1033), *ŋó-kə tʃí-túu* ‘your half-smoked thing’ stands as an object relative clause, whose gap is coreferential with head noun *birii* ‘cigarette’.

(1033) *nôk tʃítúu biridəm*

[[*nó-kə* Ø_i *tʃí-túu*]_{RECL} [*birii*]_{NOM = əəm}]_{NP}
 2.SG-GEN imbibe-NZR:HALF.LENGTH cigarette(<Ind)=ACC

zilâa ké.

zí-là(a) = *kée*

give-IPTV.SDIR=HORT.POL

‘Give me the rest of your cigarette.’ (lit., ‘**your half-smoked cigarette**’) (KN, OLB5:111)

15.3.2. Clausal nominalizations

15.3.2.1. Overview

Clausal nominalizations in Galo differ principally from nominalized clauses in being more clause-like in terms of both structure and discourse functions. That is to say, while the nominalized clauses reviewed in §15.3.1 generally function as noun phrase heads or as noun phrase-internal modifiers – either referring to an entity or concept in the world or modifying such a reference – the constructions discussed in this section more closely resemble *clauses* in terms of their usual functions of depicting whole *events*.

Clausal nominalization is *not* open to Secondary nominalizers (§15.3.1.4); *only* primary nominalizers may occur in a clausal nominalization. Also unlike nominalized clauses, in some subtypes of clausal nominalization, the nominalizer may suffix to an *inflected predicate*, as well as to an uninflected predicate stem. However, nominalizers which occur on an inflected predicate do *not* follow predicate/clause-final particles; this would suggest that they retain their basic status as predicate suffixes, and do not function as clause-level operators per se – despite the more clause-like function of the structure they mark. Finally, and again unlike nominalized clauses, subjects of clausal nominalizations are *not* (ever) marked in the genitive; instead, subjects of clausal

²⁹⁷ In fact, the prevalence of Secondary nominalizers capable of deriving abstract nominals quite likely in part *explains* the absence of such nouns in the lexicon.

nominalizations – like other constituents – generally resemble and behave like those of a non-nominalized main clause.

15.3.2.2. Final clausal nominalizations

Final clausal nominalizations closely resemble main clauses in terms of both structure and functions. They may be *uninflected* or *inflected*.

15.3.2.2.1. Uninflected

Uninflected Final clausal nominalizations based on *participant nominalizations* generally have the form of a *copula clause*, and the sense of an equative predication. The underlying subject of the nominalized predicate is expressed as surface CS, and the nominalized predicate (plus any other clause constituents) fall within the scope of CC (1034). The CC argument has the internal status of a nominalized clause (headless relative clause). It is also possible to express CC as an externally headed relative clause, with the nominal head overt (1035).

(1034) *ŋó dorrí patə̀nà.*

[ŋó]_{CS} [dór-rí pá-tà-nà]_{CC} [=əə]_{COP}
 1.SG CLF:HIGH.ANIMAL-ten chop-INCP-NZR:SUB=COP.IPFV
 ‘I am one who is to sacrifice ten (mithuns).’ (IIR, EM 05-09-07)

(1035) *ŋó dorrí patə̀ nà nījé.*

[ŋó]_{CS} [dór-rí pá-tà-nà **nii**]_{CC} [=əə]_{COP}
 1.SG CLF:HIGH.ANIMAL-ten chop-INCP-NZR:SUB **person**=COP.IPFV
 ‘I am **a person** who is to sacrifice ten (mithuns).’ (IIR, EM 05-09-07)

However, it is also possible to encounter participant nominalizations of the same form which do not obviously have an equative sense, but rather have a sense closer to that of a main predicative clause, sometimes with a factitive overtone. (1036) is uttered as an aside, for the purpose of re-establishing a frame of reference for the events the narrator is recounting.

(1036) *taní anə...dûuna maadî.*

[taní anə]_{CS} [dûu-**nà**]_{CC}[= əə]_{COP} maadii
 NAME mother LOC.EXIS.ANIM-NZR:SUB=COP.IPFV isn't.it
 'Is it not the case that Tani's mother...was still alive.' (MK, TT 056)

Uninflected Final clausal nominalizations based on *event nominalizations* are even more common. In this case, although the clause as a whole still has the overall syntactic form of a copula clause, there is no hint of an equative or attributive sense (unlike most copula clause types in Galo); rather, the sense is of information being presented as an established, backgrounded and unquestionable fact. In (1037), the speaker is stating as a conclusion what is known to be a fact – that the plains peoples managed to retain written language (while the hill peoples are believed to have lost it). In (1038), the speaker reacts to an addressee's (seemingly naïve) uncertainty underlying a previous question 'do you have to go today' both by admonishing the addressee (via clause-final particle *né* 'DECL.ADM') and presenting the information as a fact.

(1037) *bulù sítíəm bəəkú nammə.*

[bulù]_{CS} [sití = əəm bəə-kú-**nam**]_{CC}[= əə]_{COP}
 3.PL letter(<Asm)=ACC carry/hold-CMPL-NZR:RLS=COP.IPFV
 'They held onto (their) writing (system).' (MK, LW 016)

(1038) *mərûm nensâa né.*

[mərûm nèn-**há**]_{CC}[= əə]_{COP} né
 last.evening exit-NZR:IRR=COP.IPFV DECL.ADM
 'Actually, I had to go yesterday (but I didn't, so I absolutely must go today).' (MN, OLB4:116)

15.3.2.2.2. Inflected

Inflected Final clausal nominalizations exhibit a complex set of patterns, some of which have yet to be fully worked-out. All forms currently attested seem to exhibit person-based restrictions which may be related to attribution of knowledge. The most common by far involves predicate nominalization in *-nà* 'NZR:SUB', followed by an Imperfective copula *əə*. The sense is of a strong assertion, as 'I'm telling you that I know this to be the case'. In (1039), the speaker is predicting that he will sacrifice ten mithuns, an event over which he has direct control; a parallel clause with a third person subject is not accepted by my consultants (1040).

(1039) “*ḡó dorrġ pātə rənnà.*”

ḡó dór-rġ pá-tà-rə-nà = əə
 1.SG CLF:HIGH.ANIMAL-ten chop-INCP-IRR-NZR:SUB=COP.IPFV
 ‘I am going to sacrifice ten (mithuns)!’ (MK, TT 035)

(1040) **“bġ dorrġ pātə rənnà.”*

bġ dór-rġ pá-tà-rə-nà = əə
 3.SG CLF:HIGH.ANIMAL-ten chop-INCP-IRR-NZR:SUB=COP.IPFV
 *‘He is going to sacrifice ten mithuns.’

Non-first person subjects of an inflected Final clausal nominalization in *-nà* ‘NZR:SUB’ are accepted only when the speaker has first-hand, experiential knowledge of the matter at hand. In (1041), the speaker is reporting his friend’s exclamation that a snake was about to bite him; thus, although the snake is in fact the (ellipsed) subject of *ḡām*- ‘bite’, the information is asserted as the speaker’s knowledge.

(1041) “*ḡóm ḡamdāa rənnà î*” *əmlà!*

ḡó-m ḡām-dāa-rə-nà = əə = (ə)î óm-là(a)
 1.SG-ACC bite-SWIFLY-IRR-NZR:SUB=COP.IPFV=ATAG say-NF
 ‘“(The snake) would have bitten me like a flash!” he said.’ (RmR, CC 026)

Although an inflected Final clausal nominalization resembles an uninflected Final clausal nominalization in terms of surface syntax, it is not identical. In particular, although the nominalized predicate in a participant clausal nominalization has nominalized clause status – and can therefore act as a relative clause modifier of an external head noun (cf. §15.3.2.2.1) – this is *not* possible in an inflected clausal nominalization; compare (1042) with (1039) and also (1034)-(1035).

(1042) **ḡó dorrġ pātə rēnə nġijə*

ḡó dór-rġ pá-tà-rə-nà nġi = əə
 1.SG CLF:HIGH.ANIMAL-ten chop-INCP-IRR-NZR:SUB person=COP.IPFV
 *‘I am a person who is going to sacrifice ten mithuns.’

Inflected Final clausal nominalizations in event nominalizer *-nam* ‘NZR:RLS’ are rare in imperfective aspects, but can seemingly occur in either first or second/third person subjects. However, *perfective* Final clausal nominalizations in *-nam* ‘NZR:RLS’ exhibit a conjunct/disjunct marking pattern – again, this may relate to a concept of direct or indirect

speaker knowledge of the information presented; for discussion and examples in the broader context of conjunct/disjunct marking, see §12.5.2.

Inflected final clausal nominalizations in Irrealis/Obligative event nominalizer *-há* ‘NZR:IRR’ are attested in negative polarity only. It is not currently known whether they may occur inflected in positive polarities or not. More often than not, the copula used in Irrealis/Obligative Final clausal nominalization is the Perfective copula *ee* ‘COP.PFV’. The overall sense of the expression is future speculative; it occurs commonly in conditional coordinations (1043).

(1043) *nííjé meemáa booló, mĩlòè*

[níi = əə méé-máa-boolo] [mĩlòè = əəm

person=TOP be.many-NEG-COND roof=ACC

kabɣám maahaè.

káp-ɣám-**máa-há = ee**]

shingle-EXH-NEG-NZR:IRR=COP.PFV

‘If there aren’t many people, we won’t be able to fully shingle the roof.’ (MN, B3:137)

Inflected Final clausal nominalizations in *-kò* ‘NZR:LOC/OBL’ are attested in interrogative moods only; such clauses are extremely infrequent, and may in fact represent “casual” pronunciations of cleft/focus constructions (§9.4.2), with the focus particle ellipsed (1044).

(1044) *nó jòo ləgàa bó lagí duukò?*

nó jòo ləgàa = bó lagí-dùu-**kò = əə**

2.SG what reason=DAT want/need-IPFV-NZR:LOC/OBL=COP.IPFV

‘Why do you want it?’ (MN, OLB5:84)

15.3.2.3. Backgrounding clausal nominalizations

Backgrounding clausal nominalizations, like Final clausal nominalizations, occur in both uninflected and inflected forms. Backgrounding clausal nominalizations occur *clause-internally* – not as a structural clause constituent – but rather as an *aside*, generally providing some background information which the speaker believes will enhance the main information presented in the clause. However, while Final clausal nominalizations are structurally *copula* clauses, and can take either of the Imperfective or Perfective copulas (§15.3.2.2), Backgrounding clausal nominalizations are instead marked as *topics*.

Although the Topic marker and Imperfective copula are homophonous, and probably share a common etymology (§9.3.4), note that in a Backgrounding clausal nominalization the Perfective copula can *not* occur (suggesting that this may *not*, in fact, be a copula-headed construction).

Backgrounding clausal nominalizations make use of both participant and event nominalizations. Participant nominalizations generally give supplementary information concerning a particular argument, and occur adjacent to that argument in the syntax. In (1045), note that despite the relative clause-like structure, and the translation as a relative clause in English, it is *not* possible to add an external head noun in the Galo construction.

(1045) *okkə ikii əkú dá...immíŋ gənná...*

okkəə [ikii əə = kú = da]_A [ín-mín-gə-nà = əə]_{BNZN}
 SCNJ dog TOP=CMPL=CNTR **go-JOIN-COMT-NZR:SUB=TOP**
əgə̀m...irgàa jaabə̀ mə̀mə́ gərə́ mə́...
 [əgə̀-m]_O [irgàa-jàa = bə́]_{ADV} [mə́ə-máa-gərə́ = əəm = əə]_{PRED}
 APRX.IND-ACC interesting-COMP=AVZR think-NEG-ACNS=ACC.TSUB=TOP
 ‘And now the dog, on the other hand...**who was (supposed to be) searching along with him...**didn’t actually pay much attention to it [instead gazing intently at a bunch of bees].’ (TR, FS 026)

Backgrounding clausal nominalizations also commonly make use of realis event nominalizations in *-nam*, generally to comment on some background event which supports the predicate thematically (1046).

(1046) *aadə̀ là bulù...gokkáa nammə́, níi gogríg má.*

[áa-dó(o)-là(a)] [bulù]_S [gók-káa-nam = əə]_{BNZN} [níi]_O [gók-rík-máa = ʔ]_{PRED}
 come-STAT-NF 3.PL **call-TENT-NZR:RLS=TOP** person call-MEET-NEG=FI
 ‘Having gone there, they...**having called out**, didn’t find anyone.’ (IR, FA 017)

15.3.2.4. Framing clausal nominalizations

“Framing” clausal nominalizations are statistically the most frequent use of any nominalization-based construction in my corpus by far;²⁹⁸ they are generally (possibly only) built on event nominalizations in *-nam* ‘NZR:RLS’. Functionally related to the so-called “tail-head linkage” (de Vries 2005) or “recapitulative” constructions (de Vries

²⁹⁸ This is certainly due in part to the relatively high concentration of *narrative* texts in my corpus. Framing clausal nominalizations are considerably less frequent in face-to-face conversation, although they do occasionally occur.

2006) found commonly in the clause-chaining languages of Papua New Guinea, as well as elsewhere, Framing clausal nominalizations in Galo very often serve to *summarize preceding events in a discourse*, generally by presenting a nominalized repetition or recapitulation of a preceding predicate, possibly including one or two additional constituents. The basic function of a Framing clausal nominalization, so used, seems to be to signal *episodic transition*, marking the preceding discourse episode as effectively terminated, and simultaneously serving as a “frame” for the new episode to follow (1047).

(1047) *bulù arâalə aaká. arâalə aanəmə...*

[bulù arâa = lo áa-káa]_{FINAL.CLAUSE} [arâa = lo áa-nam = əə]_{FNZN}
 3.PL inside=LOC come-PF **inside=LOC come-NZR:RLS=TOP**
 ‘[After looking around a bit,] they went inside. **Having gone inside...**[they found that no-one was there].’ (IR, FA 023)

Very often, a Framing clausal nominalization is based upon a “light verb” such as *rî-* ‘do’ or *ám-* ‘say; tell’ (in an anaphorically-referring, non-speech-act related function; see §16.7). Referring only very loosely to preceding events, such constructions are often best translated by sentence connectives such as (*so*) *anyway*. Framing clausal nominalizations based on light verbs occur so frequently in narrative discourse that they appear highly conventionalized, are very often heavily phonologically reduced, and may well be in the process of lexicalization/grammaticalization as dedicated syntactic clause linkers (Post under review) (1048).

(1048) *borík jôo! acín dokò zâa lò upái kaamá.*

borík jôo acín dó-kò zâa = lo upái káa-máa!
 NAME what cooked.rice eat-NZR:LOC/OBL CERT =LOC means(<Asm) have-NEG
rîr̥mə, ŋûn nám hogò iilâa kú...
 [rî-nam = əə]_{FNZN} ŋunù namó hogò ìi-lâa-kú...
do-NZR:RLS=TOP 1.PL house SPRX.LOC descend-NF-CMPL
 ‘Borik, oh, man! When it comes to eating rice, there’s no stopping him! **Anyway**, we came back down here and...’ (lit., ‘**that having happened being the case...**’) (RmR, CC 051)

However, Framing clausal nominalizations are *not necessarily recapitulative*; that is, they need neither employ a predicate used in a previous clause nor an anaphorically-referring “light verb”. Instead, with a semantic value very closely resembling that of a Backgrounding clausal nominalization – in effect, differing only in terms of syntactic position and discourse function – a Framing clausal nominalization can predicate a *new*

event while simultaneously presenting it as a thematic background to the main clause event to follow. In (1049), note that ‘looking’ has not occurred previously in the narrative, but instead is cast as background to the relatively more focal event depicted in the main clause – namely, that nothing was seen.

(1049) *mulù...aumé...əráb nè níkôg là aadóo mó...*

bulù aúm = əə əráp = nè ní-kók-là(a) áa-dó(o) = əəm = əə
3.PL three=TOP door=NAGT push-OPEN-NF come-STAT=ACC.TSUB=TOP

kaarʰmó...namló jêəcin duumà.

[**káa-nam = əə**]_{FNZN} namé = lo jêə = cìn dùu-máa

look-NZR:RLS=TOP house=LOC who=ADD LOC.EXIS.ANIM-NEG

‘They three pushed open the door and came in and...**looking**...(they saw that) there was nobody in the house.’ (TR, FA 011-012)

15.3.2.5. Clausal nominalization and cleft/focus constructions

Clausal nominalizations form an obligatory constituent of declarative and interrogative *cleft/focus constructions*, although with a semantic value and discourse function which is quite distinct from the clausal nominalization-based constructions reviewed above. The full range of primary nominalizers are made use of by cleft/focus constructions, in both uninflected and inflected predicate types. Only a single example is given here for reference (1050); cleft/focus constructions are discussed in more detail in §9.4.

(1050) *jêəl zukkáa pokkáa tarê kunnà.*

[jêə = laa]_{FOC} [**zúk-káa** **pók-káa-tà-ró-kú-nà = əə**]

who=CQ **run-APPL:AT/ON** **hop-APPL:AT/ON-INCP-IRR-CMPL-NZR:SUB=TOP**

‘Who will be **the one to run to him** (in his hour of need)?’ (NyPB, LAT 078)

16. Multi-clause constructions (not based on local nominalizations)

The present chapter discusses multi-clause constructions which are not based on synchronically productive local nominalizations (in the sense outlined in §15). Following an overview in §16.1, appositive coordination is discussed in §16.2, followed by marked coordination in §16.3. Clause-chaining and Temporal subordination are discussed in §16.4. §16.5 discusses adverbial subordination, and is followed by §16.6 on complementation and related structures. A final section §16.7 discusses, from a more general perspective, the linking functions of a weakly grammaticalized sense of speech reporting verb *ém-* ‘say; tell’.

16.1. Overview

Most types of non-nominalization-based multi-clause construction found in Galo are fundamentally types of *appositive coordination*, *clause chaining*, *subordination* or *complementation*, as schematized in Figure 16.1.

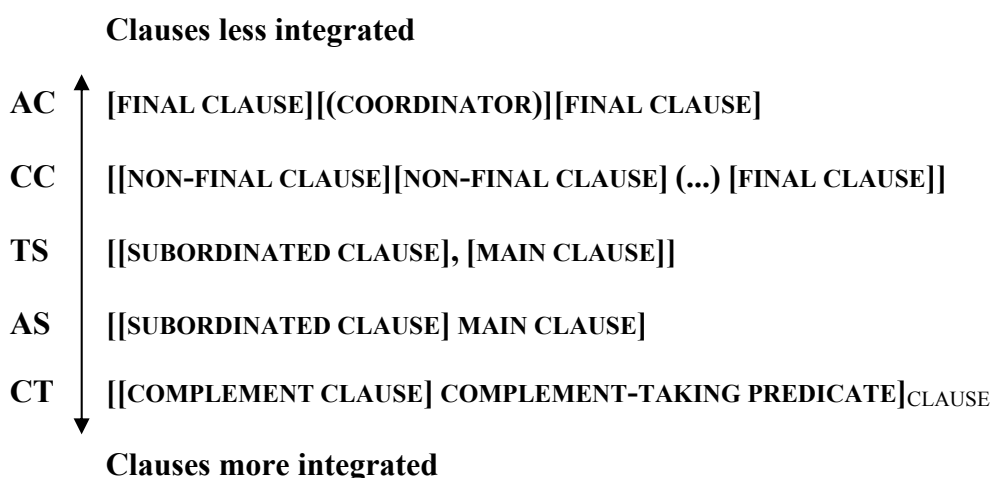


Figure 16.1 – Galo multi-clause construction and the hierarchy of clause-integration (AC = Appositive Clause-coordination; CC = Clause Chaining; TS = Temporal Subordination; AS = Adverbial Subordination; CT = Complementation)

As Figure 16.1 also suggests, Galo multi-clause constructions differ in terms of a hierarchy of clause integration. *Appositive coordination* takes place between two finite, (potentially) independent clauses, and involves extremely little formal or functional integration; in some cases it involves nothing more than a prosodic indicator to the effect that something more is to be said. *Clause-chaining* involves a clearly marked dependency relation, yet entails a relatively low degree of clause-integration, enabling speakers to

represent multiple interrelated events in often lengthy sequences of relatively (though not entirely) independent clauses. *Temporal subordination* involves a tighter construction involving postpositional subordination of one otherwise potentially final clause to another. *Adverbial subordination* then entails a still higher degree of clause-integration, and consists of the embedding of one “lower”, dependent clause within a “higher”, main clause; in this construction, the dependent clause is not an obligatory element of the main clause (i.e., it is not a core argument) but is instead used to provide some additional, supplementary information; however, like any other syntactic adverbial, it has the potential to occur embedded within the clause syntax and need not occur outside or apposed to the main clause. Finally, *complementation* entails a very high degree of clause-integration; in this type of construction, the complement clause is an obligatory element of the main clause, occurring as a core argument of a complement-taking predicate.

It must be noted that while they are useful, the above distinctions are not completely watertight. For example, in at least some uses, constructions which are marked as clause chains exhibit TAM- and argument-sharing constraints as well as semantic/functional characteristics which might cause them to very closely resemble adverbial subordination; similarly, certain types of adverbially-subordinated clause bear relationships to at least some commonly-used predicate head types (or senses thereof) which suggest that they may be, if not obligatory, at least highly conventionalized in their association with a particular predicate argument structure (if only in a clause-level constructional sense). Therefore, although following subsections are primarily organized to reflect formal distinctions among Galo multi-clause constructions, a certain amount of functional overlap is inevitable.

Finally, we must acknowledge the analytical problems which periodically arise as a result of ongoing and pervasive processes of *desubordination* in Galo.²⁹⁹ I have generally taken a conservative approach here in trying to analyse desubordinate constructions as much as possible in terms of the source construction, which in some sense *explains* their behaviour and distribution. As a result, however, the reader may find information on functionally monoclausal constructions contained in this chapter which might be more properly treated elsewhere in the grammar, were a less diachronically-oriented approach consistently followed.

²⁹⁹ By “desubordination”, I mean to indicate a process through which main clause predicate-ellipsis (presumably, following principles of economy) leads to reanalysis of subordinated clause predicates as main clause predicate heads, together with functional transference of the erstwhile matrix predicate semantics onto the remaining construction. Schematically: ~~I wish~~ that he would leave!

16.2. Appositive coordination

Appositive clause-coordination is based on a *structural apposition* between *two finite, potentially independent* clauses (Figure 16.2).

[FINAL CLAUSE] [(COORDINATOR)] [FINAL CLAUSE]

Figure 16.2 – Appositive coordination

16.2.1. Parallel structures

The most basic type of appositive clause-coordination is based on *structural parallelism* among two apposed final clauses. Minimally, this consists of *shared final predicate marking* (including TAM specification), and often also includes shared or similar argument structures and/or adverbial modifications, as well as similar or thematically relatable predicate semantics. In absence of any other marking and when both clauses are *matched in polarity*, the function derived from parallel-structured apposition is generally *restatement*, as when providing an alternative or supplementary view on the same event. In (1051), a character in a folktale is describing the disappearance of a chicken liver which had been entrusted to her care. The liver's *falling* and *loss* are thus two ways of viewing that same event, and are each expressed by way of an individual clause. Note that both predicates are headed by intransitive verb roots, and that they share the same subject, Completive aspectual marking and Direct (experienced) perfective aspectual marking.

(1051) “*roksíné olôo eekú bá, ηeekú bá.*”

[roksín = əə ò-lòo-ée-kú-bá(a)]_{FINAL.CLAUSE} [ηée-kú-bá(a)]_{FINAL.CLAUSE}
chicken.liver=TOP fall-DESC-IPFV.DISJ-CMPL-PFV.DRCT be.lost-CMPL-PFV.DRCT
“(I experienced) that the chicken liver fell; (I experienced that) it got
lost.” (NyPB, LAT 338)

When parallel-structured *interrogative* clauses contrast in polarity, the derived function is *closed disjunction* (1052). For further discussion of disjunctive coordination, see §16.3.1.2.

(1052) *hilòo-məròo, ɲə̀ək omeə zabdâɲ nà bəre*

[hilòo-məròo ɲə̀ək-kə omèe = əə záp-**dàk**-nà = əə bəree]
 today-yesterday 1.REFL-GEN kid=TOP talk-COS-NZR:SUB=COP.IPFV CJEC
zabmáa nà bəre?

[záp-**máa**-nà = əə bəree]

talk-NEG-NZR:SUB=COP.IPFV CJEC

‘Nowadays, do you reckon our kids are (capable) speakers (of Galo) or not?’ (MN, FYG 012)

16.2.2. Prosodic marking

Particular coordinative functions are also achieved in Galo through distinct types of clause-level *prosodic marking*, whose markers are phonetically realized on the *final syllable nucleus* of the *last phonological word* of a *final clause*. Such prosodic marking is notable for *overriding* both the lexically-specified tone of a particular phonological word and the “boundary” (lowering) tone which by default marks the termination of most Galo final clauses (§4.2.2.3.2).

16.2.2.1. Non-final intonation type 1: “list” intonation

“List” intonation consists of a marked *rise* (without fall) in pitch, symbolized $\acute{_}$ and glossed NF1 (Non-Final Intonation type 1). The function of list intonation is to indicate that the information contained in the marked clause is but one of several related information units (for example, micro-activities within an overall macro-task, or individual existential predications of entities which are construed to occur as a set); most often, list environments also exploit parallel syntactic structures (§16.2.1) (1053).

(1053) *okkə́ dól-í-gə̀ rə̀lâ...acín modú́...*

okkə́ə dólə́ í-gə̀rə́-là(a) [acín mò-dùu = $\acute{_}$]
 SCNJ paddy pound-ACNC -NF cooked.rice make-IPFV=NF1
opô modú́...əəm mogə̀ rə̀lâ...(etc.)

[opòò mò-dùu = $\acute{_}$] əəm mò-gə̀rə́-là(a)

liquor make-IPFV=NF1 ANAP.ACC make-ACNC-NF

‘And after pounding the paddy...they prepare food (**and**)...they (**also**) prepare rice beer (**and so on**)... After doing that...(etc.)’ (LN, GMW, 005-007)

In (1053), note that the lexically-specified intonation contour of *modù* ‘make-IPFV’ is *downward*, but that this is overridden by the list intonation marker. Note also that

the sentence-bounding phonological word in each of the list-marked clauses is not subject to boundary-related *downstepping* (§4.2.2.3.2). Finally, note both that parallel predicate (syntactic and thematic) structures are exploited by the construction, and that the speaker, in not terminating the “list” with a final clause in declarative sentence intonation, implies that more such clauses could well be stated (i.e., that the referenced actors in fact engage in many more, similar, activities, which the speaker here declines to mention).

16.2.2.2. Non-final intonation type 2: “follow-on” intonation

“Follow-on” intonation consists of a marked *rise-and-fall* in pitch, symbolized $\hat{_}$ and glossed NFI2 (Non-Final Intonation type 2). Its function is to indicate that the information contained in the *marked* clause has a specific implication, which is to be mentioned in the *following* clause (1054).

(1054) *ogò, “paadámé aaré nâ.”*

ogò [paadám = əə áa-ré-nà = əə = $\hat{_}$]

TMP.SEQ Paadam.tribe=əə come-IRR-NZR:SUB=COP.IPFV=NFI2

“*pâtə rənnà,*” *əmdûuku.*

[pá-tà-ré-nà = əə] óm-dùu-kú

chop-INCP-IRR-NZR:SUB=COP.IPFV say-IPFV-CMPL

‘Then, “the Paadam will surely come; **[accordingly,]** they’ll kill us,” he said.’

(TB, OAM 280-281)

Follow-on information intonation is phonetically identical (if spoken in isolation) to the “rising-falling” intonation characterizing the “pitch peak” of a low/tense phonological word in Galo (§4.2.2). However, since the normal conventions of Galo prosody never lead to a full (non-downstepped) realization of a rising-falling pitch over the final syllable of an utterance, follow-on intonation is always prosodically contrastive. Note that the construction exemplified in (1054) also exploits parallel morphosyntactic structures, however this is not necessary (1055).

(1055) *aló áa níîk duudó bên.*

[aló áa níî = əkə dùu-dó(o) ben = ^]
 DST.LOC.SLEV DST.SLEV person=IND.PL stay-STAT EVID=NFI2
ál aakáe zukà.

[aló áa-káa-ée zù = káa]
 DST.LOC.SLEV come-TENT-AWAY INCL=HORT.ADVS
 “There seem to be some people over there; [wherewith/accordingly,] let’s go take a look.” (IR, FA 014-015)

16.3. Marked coordination other than clause chaining

The following subsections discuss *morphosyntactic* marking of final clause coordination. It is divided into two major subsections, based on a structural distinction between coordination via free syntactic operators and operators which bind to the predicate.

16.3.1. Coordination by free syntactic operators

16.3.1.1. Conjunctive/additive coordination

The most frequently-used conjunctive/additive (‘x and (also) y’) coordinator is *okkəə* (phonetically realized [okkəə ~ okə ~ ók ~ ‘kə]). *okkəə* appears to derive historically from, and could potentially be argued to remain relatable to, a collocation *okə* ‘ANAP.ABL’ + *əə* ‘TOP’ (with the overall sense ‘from that previously mentioned thing, now this:’) (§7.4.6.3).

Typically, *okkəə* conjoins two final clauses, in which the second, focal clause is construed as thematically and temporally subsequent to the first, supporting clause.³⁰⁰ *okkəə* is best analysed as a structural element of the clause it introduces (1056).

³⁰⁰ The semantic terms “focal clause” and “supporting clause” are discussed in Dixon (under review).

(1056) *əm hottúm gə nám òg attírə jupká kú.*

[əmbə hottúm gə nám ogò attír = əə jùp-káa-kú = ^]
 ANAP.PADV bear GEN house APRX.LOC group=TOP sleep-PF-CMPL=NFI2
okkə, árə gon òg bulù aɦ-ahg namló iɦkáa kú.
 [okkə arò gona ogò bulù aɦ-aɦ = gə nám = lo ín-káa-kú]
 SCNJ morning SSEQ TMP.LOC 3.PL self-self=GEN house=LOC go-PF-CMPL
 ‘Like that they all slept together in the bear’s house. **And** the next morning they went back to their own homes.’ (IR, FA 110)

Although in examples like (1056) *okkə* may be said to establish a clear relationship of thematic and temporal continuity between two clauses and the events they code, in other cases *okkə* functions more loosely as a simple indicator that the speaker has something more to say and is about to say it. There are no discernible grammatical constraints in terms of argument structure or TAM-sharing which obligatorily hold between clauses coordinated in *okkə*. In (1057), note that none of the three clauses coordinated in *okkə* share any arguments, and that the third clause contains an aspectual specification which contrasts with that of the first two clauses.

(1057) *mɦ...adâa gonnàm, palô gərəlâ...*

[mɦ adâa go = na = əəm pá-lòo-gərə-là(a) = ^]
 3.SG half(<Asm) IND=SLCT=ACC chop-DOWN-ACNC-NF=NFI1
təktáa kà. okkə...əmb ríkà. okkə...kookêgne...
 [tək-táa-káa = ^] [okkə əmbə rì-káa] [okkə kookèk = nè
 hack-ADD-PF=FI SCNJ ANAP.PADV happen-PF SCNJ bird.variety=NAGT
akêgbə rɦ rûəm, “buppɦ niijəm pɦdóbə
 akèk = bó rì-nà rûu = əəm buppɦ ní = əəm pɦ-dó(o) = bó
 kidney=DAT do-NZR:SUB SUPR=ACC all person=ACC suffice-STAT=SBRD
ɦntə ká!” (...) əmdûuku.
 ɦn-tó = káa ém-dùu-kú]
 cut.by.sliding.across.fixed.blade-IPTV.ODIR=ADVS say-IPFV-CMPL
 ‘He (the grasshopper)...after cutting off half of (his head), hacked it up together (mixing it with the meat). **And so**...that was that. **And (then)**...as for Kookek...the kidney-manager, “cut it such that it’s enough for everyone” (...) he was told.’ (MK, TT 183-185)

Clause-coordinations in *okkə* may also occur in Additive constructions (schematically, ‘x is the case; **and** y is also the case’). In this case, the added element of the focus clause is obligatorily marked by Additive particle *cìn* ‘ADD’ (§13.2.2.2) (1058).

(1058) *ap̃h̃! tokkə...iināa nà. caināa. ʔkə...*

[app̃h̃ tokkə = əə ìi-nà = əə na caina] [okkəə
all DST.ABL.UP=TOP descend-NZR:SUB=COP.IPFV DECL China(<Eng) SCNJ
mirí gâd hig̃ cìn tók iinà.
mirí gad̃ hig̃ cìn tok̃ ìi-nà = əə]
Mising.tribe group PTOP.IND ADD DST.VIA.UP descend-NZR:SUB=COP.IPFV
‘All (the Galo clans) came down from up there. (From) China. **And**...these Mising
also came down via the north.’ (TB, OAM 144-146)

okkəə also typically marks clausal coordination in an Additive co-participant construction, consisting of two usually parallel-structured clauses in which *both* co-participating referents are obligatorily marked in *cìn* ‘ADD’ (1059).

(1059) *hibûu goló ol̃g nammə, ik̃i əəcìn ol̃k ká...*

[hibûu go = lo ò-l̃k-nam = əə] [ik̃i əə = cìn ò-l̃k-káa]
river IND=LOC fall-INTO-NZR:RLS=TOP dog TOP=ADD fall-INTO-PF
okkə om̃e əəcìn ol̃k ká.
[okkə om̃e əə = cìn ò-l̃k-káa]
SCNJ kid TOP=ADD fall-INTO-PF
‘Having fallen into a river, the dog fell in and the boy **also** fell in.’ (TR, FS 065)

For additional discussion of Additive functions, see §13.2.2.2.

16.3.1.2. Disjunctive/alternative coordination

Closed disjunctive coordination among Galo *interrogative clauses* (‘x or y?’) may be obtained through *apposition* of *structurally parallel* clauses with *contrasting semantic values* (§16.2.1). This construction may be additionally supported through marking in *máa*. In the main a Negative polarity particle, and basically homophonous with the Negative polarity predicate suffix *-máa* (§12.2) and the Negative interjection *máa ~ má?* ‘no’ (§13.7.3), in disjunctive function *máa* marks a *polar (closed) alternation* between two coordinated interrogative clauses. The marked clauses may themselves contrast in polarity, or they may not. When two clauses are coordinated as in (1060), disjunctive *máa* tends to pattern prosodically with the supporting clause, although it is important to note

(1062) *turgí kaamáe daram, arúm goda túrla*

[turgí káa-máa = ee daram] [[arúm go = da túr-là(a)
 roofpost have/exist-NEG=COP.PFV CNCS.DISJ evening IND=CNTR be.alive-NF
rəkáalà əmlâ məədàk.

rə-káa-là(a)] əmlâa móə-dàk]
 live/exist-TENT-NF CTZR think-COS

‘**Although** I’ve got nothing left to lean on, (seeing you) I think I’ll try to make it through one more night.’ (Martó Kamdak, Drinking Song from *Ane ge Nyoodé*)

The concessive construction in *daram* may be compared with the non-final concessive constructions in *-dakkòm* and *-la(a)cìn* discussed in §16.3.2.2. *daram* also occurs as an argument noun phrase-marking particle with a related semantic value, as discussed in §13.2.2.6.

16.3.1.4. Contrastive coordination

Simple *contrastive coordination* (‘*x*; however/but, *y*’) is not well-grammaticalized in Galo. The most frequent functional contrastive coordinations are periphrastic, based on a repetition of the preceding predicate root or a light verb *rì-* ‘do; happen’, marked with a concessive coordinating suffix such as *-dakkòm* or *-la(a)cìn* (§16.3.2.2) (1063).

(1063) *əmbə rínəmè, tokkə, iinè takâamə*

[əmbə rì-nam = əə] [tokə = əə ìi-nà takâm = əə
 ANAP.PADV do-NZR:RLS=TOP DST.ABL.UP=TOP descend-NZR:SUB every.one=TOP
çigì...çogò...izà, dâarīgə âminəm

hīgì hogò izzàa daarì = gə amìn = əəm
 SPRX.IND SPRX.LOC now Daring.village=GEN name=ACC

gədù, rídâkkom, çilí əmdûuku, çigì.

gə-dùu] [rì-dakkòm] [hilí əm-dùu-kú hīgì]

carry/wear-IPFV do-CONC Sili.village call-IPFV-CMPL SPRX.IND

‘So, everyone who came down from up there, here, now (still) they carry the name of Daring, **however**, this place is called Sili, this one.’ (NyR, MDS 089)

In foothill areas, some speakers (relatively infrequently) borrow the Assamese disjunctive coordinator *kintu* ‘but’ (1064).

(1064) *má, má! aló, izîg á əmbə ná, kíntʰ*

[máʔ máʔ aló izî = gə áa əmbə na] [kintu]
no no DST.LOC.SLEV now=GEN DST.SLEVAPRX.PADV DECL **but(<Asm)**
adîr doobó né.

[adîr-dó(o) = bə né]
rectangular-STAT=SBRD DECL.ADM
'No, no! (Put it) there like before, **but/except** so that it lies upright on its side, for goodness sake.' (IR, MPO 041)

16.3.1.5. Reason clause-linking

Reason clause-linkages ('because (of) *x*, *y*') occur in two major construction types; the first is based on an event (action) clausal nominalization followed by relator noun *ləgàa* 'reason' (§8.1.2), as [[NZN (*gə*)] [*ləgàa*] [= *bə*]]_{NP} '[[NZN (GEN)] [*reason*] [=DAT]]_{NP}'

(1065). The second is based on a functional variant of the verb root *əm-* 'say; tell' in non-final form, with a basic sense 'that being thus' (see §16.7 for discussion and examples).

(1065) "*hogóí doré kú*" *əmnám ləgàa bə (...)*

[hogò = (ə)í dó-ré-kú əm-nam **ləgàa = bə**]
SPRX.LOC=EMPH eat-IRR-CMPL say-NZR:RLS **reason=DAT**

ilîi taajòo kajjî kolò naanám-acínóm bìi

[ilîi taajòo kajjî-kò = lo naanám-acín = əm bìi
stone top huge-NZR:LOC/OBL=LOC bridal.rice=ACC 3.SG

dotokû.

dó-tó-kú = ^]

eat-PFV-CMPL=NFI2

'**Because** of (her) saying "I'll eat it right here", she ended up eating the bridal rice on top of a huge rock.' (lit., 'for her saying-I'll-eat-it-right-here reason') (LN, TG 032-033)

16.3.1.6. Additional periphrastic clause-linking constructions

Additional clause-linking functions which are handled periphrastically, often via predicate restatement in a non-final or subordinated clause or via nominalization and embedding in an adjunct or preclausal slot, include phrases with Reason and Temporal functions (Table 16.1).

| Function | Form | Composition | Gloss |
|-------------------|-----------------------|--------------------------|--|
| Reason | N (gə) ləgàa = bə | N (GEN) reason=DAT | ‘because of/due to N...’ |
| Reason | FINAL CLAUSE ém-là(a) | FINAL CLAUSE say-NF | ‘It being the case that CLAUSE...’ |
| Reason/Addition | ém-nam = əə | say-NZR:RLS=TOP | ‘So/that being the case...’ |
| Reason/Addition | əmbə rì-nam = əə | ANAP.PADV do-NZR:RLS=TOP | ‘Anyway/that having happened...’ |
| Temporal/Addition | əmbə rì-là(a) | ANAP.PADV do-NF | ‘So/following that...’ |
| Temporal | N kookh = lo/bə | N back=LOC/DAT | ‘After/following N...’ |
| Temporal | FINAL CLAUSE = lo | FINAL CLAUSE=LOC | ‘At/during the time of CLAUSE...’ |
| Temporal | FINAL CLAUSE ogò | FINAL CLAUSE TMP | ‘When/at the (already-realized) time of CLAUSE...’ |
| Temporal | PRED-máa-dáa = bə | PRED-NEG-ACHV=SBRD | ‘Before CLAUSE...’ |

Table 16.1 – Additional periphrastic clause-linking constructions

16.3.2. Coordination by predicate-bound operators

16.3.2.1. Conditional coordination

Although certain other non-final clause types are able to occur with conditional implications (§16.4.3.3), the only dedicated Galo *conditional coordination* is in *-boolo* – a form which seems to derive historically from a fusion of an earlier nominalizer **bVV* plus Locative enclitic *lo* (§14.3.5).³⁰³

Conditional coordinator *-boolo* occurs as a suffix to a supporting clause predicate root/stem (verbal or adjectival), which may or may not be inflected for aspect and polarity (1066)-(1067).

³⁰³ Jacquesson (2001) claims this construction to be one based on a synchronic nominalization. However, he neglects to provide evidence to support this claim, which, minimally, should consist of a verb or adjective in *-boo* which is capable of standing as a syntactic nominal. In fact, such formations are ungrammatical in all Galo dialects on which I have conducted research, suggesting that while the nominalization etymology is probably a good one, it is also probably inaccurate as a synchronic description.

(1066) *hɪɲɪ...əɾəkó dakkòm aləɾə əmbóolo...*

[hɪɲɪ əɾək = go dakkòm alə-rə əm-boolo]

this.year pig=IND CONC good-IRR say-COND

əɾək moopín rɪdù əí?

[əɾək moopín rɪ-dùu əí]

pig harvest festival do-IPFV ETAG

‘If (the shamans) say that this year even a pig will do (i.e., that it isn’t going to be necessary to sacrifice a mithun)...(then) we’ll have a Pig Moopin, eh?’ (LN, MF 024-026)

(1067) *“kəə, nó pàgdə boolò, ɲókə...hɪlə akcə him*

kəə [nó pàk-dó(o)-boolo] [ɲó-kə hɪlə akcə hì-m

CNCS 2.SG manage-STAT-COND 1.SG-GEN tree.variety branch SPRX-ACC

nuutɪr kaatò.”

nùu-tír-káa-tó]

bob.knees-BREAK.LONG.RESULT-TENT-IPTV.ODIR

“‘Fine, if you have the ability to do it, let’s see you break my *hiile* stick (by standing on it and bobbing up and down).’” (NyPB, LAT 166)

In addition to hypothetical conditionals concerning potentially real (current or pending) events or states as in (1066)-(1067), *-boolo* may mark an Irrealis clause to form a future conditional (1068), as well as a counterfactual speculation in construction with Perfective copula *ee* (1069). In (1068), note also that *-boolo* undergoes Initial gemination when following an initial light ((C)V) syllable within a phonological word (§4.1.5.1).

(1068) *“mægumə...gumbôk rəbbooló, ɲó nôkə lo aalə pə.”*

[mægum = əəgum-bók-rə-boolo] [ɲó nó-kə = lo áa-lapə]

flame=TOP lean-DOWN/SOUTH-IRR-COND 1.SG 2.SG-GEN=LOC come-INTN

“If the flames...should burn to the south, I will go to your (home, i.e., marry you).” (NyPB, LAT 197)

(1069) *ɲó innə geebooló, alɾə dɪ.*

[ɲó ín-nà go = ee = boolo] [alə-rə dɪ]

1.SG go-NZR:SUB IND=COP.PFV=COND good-IRR WOND

‘Should I have gone?’ (lit., ‘I wonder whether it would have been good if I had been a goer (instead of not going, as was the case)’; NB: speaker *must not* have in fact gone) (IR, OLB5:49)

-boolo has a particle allomorph *boolo* which occurs as an adclausal nominal subordinator, with a sense like English ‘if it were *N*’; ‘in the case of *N*’ (§13.2.1). Note in

this case that the marked noun phrase is *not* an constituent of the clause to which it relates, but is in fact an independent, coordinated entity (1070)-(1071).

(1070) *bɛ̃ booló, bocâa rəpə̀.*

[bɛ̃ **boolo**] [bó-càa-ré = pə̀]

3.SG **COND** invite-TO.GOAL-IRR=UCRT

‘If he (were to try), he may (be able to) bring (the sun) up.’ (TB, OAM 106)

(1071) *korûm booló, nó̃m cìn paré.*

[korûm **boolo**] [nó-m cìn pá-ré]

ancient.times **COND** 2.SG-ACC ADD chop-IRR

‘In the old days, we’d have killed you too.’ (lit., ‘If (it were) ancient times...’) (TB, OAM 160)

It is important to note that although *-boolo* is described here as a conditional marker, and the constructions it licenses as conditional coordinations, the semantic/functional range of *-boolo* is probably somewhat broader than these terms would suggest; in particular, clauses in *-boolo* are often introduced not as hypothetical conditions per se, in the sense of a provisional *a* which, if met, would lead to *b* (‘if *a* (then *b*)’), but rather to introduce *unreal or counterfactual contexts* (whether temporal or logical) in terms of which a speaker wishes to predicate some fact (as in (1071)).³⁰⁴

16.3.2.2. Concessive and bi-concessive coordinations

A supporting clause with the *concessive* sense ‘although; despite; even; notwithstanding’ is obtained via suffixation of one of two semi-compositional forms *-dakkòm* ‘CONC’ or *-la(a)cìn* ‘CONC’. *-dakkòm* ‘CONC’ seemingly derives from a fusion of the Change of state aspectual inflection *-dâk* ‘COS’ (§12.3.2.3) with the Minyong-loaned Additive particle *kòm* ‘ADD’ (§13.2.2.2). Similarly, *-la(a)cìn* ‘CONC’ is derived from a fusion of Non-final suffix *-lâ(a)* ‘NF’ (§16.4.2) with native Galo Additive particle *cìn* ‘ADD’ (§13.2.2.2) (1072)-(1073). Note in (1073) that *-la(a)cìn* ‘CONC’ is

³⁰⁴ Note that, if the final proto-formative of *-boolo* is indeed Locative postposition *lo*, such an etymology would argue in favour of viewing the general sense of the marker as basically “contextual” rather than strictly “conditional”.

subject to the irregular process of Type 2 Phrase-medial truncation (§4.1.5.2) when occurring on a disyllabic grammatical word stem.

(1072) *əmbə rɪdakkòm, nokkəm zərjâa rə.*

[əmbə rɪ-**dakkòm**] [nó-kə = əəm zér-jàa-rə]
 ANAP.PADV happen-**CONC** 2.SG-GEN=ACC spin-MORE-IRR
 ‘That (fact) **notwithstanding**, my (top) will spin longer than yours will.’ (MN, OLB4:4)

(1073) *berráp lacìn, akên gonna jubbêl doodù.*

[béK-ráp-**la(a)cìn**] [akèn go = na = əə jùp-bəə-là(a) dóo-dùu]
 spring-UPRIGHT-**CONC** one IND=SLCT=TOP sleep-CTIN-NF lie.down-IPFV
 ‘**Despite** (the rest) having leapt up, one of them was still lying there asleep.’ (IR, FA 080)

Vestiges of compositionality are retained in certain contexts. For example: the *Bi-concessive construction* consists of two concessive clauses presented in succession with the basic sense ‘in this case or not (which ever it may be)’. In this construction, the first concessive clause is in *-dakkòm* ‘CONC’, representing the positive polarity alternative, while in the second clause the Change of state suffix *-dàk* ‘COS’ is replaced with Negative suffix *-máa* ‘NEG’ – representing the negative polarity alternative (1074).

(1074) *ŋók jòo azəə kaamá, rɪdakkòm rimaakòm.*

[ŋó-kə jòo azəə káa-máa] [[rɪ-**dakkòm**] [rɪ-**maakòm**]]
 2.SG-GEN what penalty have/exist-NEG do-**BCNC1** do-**BCNC2**
 ‘**Whether** you do it **or** not, it isn’t going to have an adverse affect on me.’ (ZR, C1:136)

At least some speakers may replace the seemingly Minyong-derived Additive formative *kòm* in *-dakkòm* ‘CONC’ with native Galo counterpart *cìn* ‘ADD’, although such utterances are certainly infrequent.³⁰⁵ Evidence for the continuing compositionality of *-la(a)cìn* ‘CONC’ is less compelling, although it seems possible to identify the “bridge” construction from which *-la(a)cìn* ‘CONC’ derives, in a sentence like (1075); in (1075), the

³⁰⁵ In fact, the construction *rɪ-dàk = cìn* ‘do-COS=ADD’ ‘however’ has only been naturally-attested once by me, in the context of a speech given at a *daar#* village council meeting by the renowned orator *zikén rɪbáa* (who was later consulted and found to endorse its correctness). However, the same utterance is (albeit tentatively) rejected by at least some other speakers. Whatever its ultimate consensus grammaticality status, it is certainly an infrequent utterance type.

Additive particle can be omitted, leaving a clause chain with the sense ‘he’ll eat and (then) go’ (cf. §16.4.2.2).³⁰⁶

(1075) *acín dolâacín inrô.*

[acín dó-la(a)cìn] [ín-rô]
 cooked.rice eat-CONC go-IRR
 ‘He’ll go **even** after eating.’ (IR, B5:25)

Both *-dakkòm* ‘CONC’ and *-la(a)cìn* ‘CONC’ may also function as *adclausal nominal subordinators*, again with a concessive sense (§13.2.1). In this function, there is no question of continuing compositionality and both forms must be described as dedicated subordinating particles (1076)-(1077). As in the case of *-boolo* ‘COND’, although it is clear that the predicate-marking and nominal-marking forms of *-dakkòm* ‘CONC’ and *-la(a)cìn* ‘CONC’ are semantically relatable, and equally clear that the predicate form is basic (and/or diachronically prior), it is not necessarily clear whether the forms should be said to represent a synchronically unified category or not. For additional discussion, see §13.2.1.

(1076) *hìpè...ə̀rə̀kgó dakkòm alə̀rə̀ ə̀mbóolo...*

hìpè ə̀rə̀k = go **dakkòm** alə̀rə̀ ə̀m-boolo
 this.year pig=IND CONC good-IRR say-COND
 ‘If (the shamans) say that this year **even** a pig will do (then that’s what we’ll go ahead and sacrifice).’ (LN, MF 024)

(1077) *ə̀g lacìn...patú dèek*

ə̀gə̀ **la(a)cìn** pá-túu-dée-kò
 ANAP.IND CONC chop-SPLIT.ACROSS.WIDTH-PROS-NZR:LOC
kaarûubə maé.ji!
 káa-rûu = bó máa = ee jii
 have/exist-DEF=SBRD NEG=COP.PFV DEDC
 ‘But **anyhow**, certainly there’s no way to cut down the sky!’ (TB, OAM 088)

Although there seem to be anecdotal indications that *-dakkòm* ‘CONC’ and *-la(a)cìn* ‘CONC’ are not completely semantically identical (i.e., some of my

³⁰⁶ That sentence, *acín dolâ inrô*, was in fact the authentically-attested sentence on the model of which (1075) was elicited.

consultants “feel” a slight difference), a formal characterization has eluded me as of this writing. Further research into this question is required.

16.4. Interclausal continuity: non-final predication and temporal/episodic subordination

16.4.1. Overview

The basic forms of the constructions to be discussed in this section are concerned with *interclausal continuity*, in the sense of managing the temporal, episodic-sequential and thematic inter-relationships of clause-coded events. They may be divided into two broad types: *non-final* constructions and *temporal subordinations*, discussed in §16.4.2 and §16.4.3 respectively. Non-final constructions are marked in a predicate suffix *-lâ(a)* ‘NF’, and are further divided into *complex predicate* (§16.4.2.1) and *clause chain* (§16.4.2.2) subtypes. Temporal subordinations are divided into Basic (§16.4.3.1), Accusative (§16.4.3.2) and Co-temporal/hypothetical (§16.4.3.3) subtypes.

16.4.2. Non-final predication (-lâ(a))

Predicates suffixed in *-lâ(a)* ‘NF’ are described as *non-final*. The etymology of the Non-final suffix is uncertain, although it is found widely in Tani languages, and there is a good chance that a coordinating or non-final marking function of some kind will be reconstructible to the Proto-Tani stage.³⁰⁷ *-lâ(a)* ‘NF’ has a variety of phonetic realizations depending on phrasal context and the type of construction in which it appears. We will first review these possibilities. The terms *complex predicate* and *clause chain* will be mentioned in passing here, and treated in more detail below.

-lâ(a) ‘NF’ is normally subject to Phrase-medial truncation (§4.1.5.2), surfacing with a long rhyme [laa] when phrase-final (1078) or when in second syllable position within a grammatical word (1079). It surfaces with a short rhyme [la] when in third

³⁰⁷ Non-final *-lâ(a)* ‘NF’ seems likely to be cognate with some if not all of Nominal coordinator *laa* ‘NCNJ’ (§6.2.5), ‘Speaker-directed’ imperative *-lâ(a)* ‘IPTV.SDIR’ (§12.4.2.1) and Content interrogative marker *laa* ‘CQ’ (§13.3.3.5), as well as other particles and suffixes in which it, or a cognate form, stands as a formative (such as Concessive suffix *-la(a)cîn* ‘CONC’ (§16.3.2.2)).

syllable position within a grammatical word (1080). These three contexts generally occur in the context of *clause chaining*.

(1078) *ləkénne zeelàa...uugié...aréǵ làa...*

ləkèn = nè zèe-là(a) uugí = əə arék-là(a)
 once=TMP.IRR.PUNC grue-NF back=TOP sharp.blade-NF
 ‘Sometimes it’s green and...its spine...is sharp and...(so on)’ (MK, TT 227)

(1079) *nijômə...liitúp ciŋì molâaku.*

nijòm = əə liitúp ciŋì mò-là(a)-kú
 rule(<Asm)=TOP seed.grain planting.stick make-NF-CMPL
 ‘According to custom...they made a first-crop planting stick...’ (MK, TT 280)

(1080) *pərəǵǵ...aaróm mempôǵ lakù. (*laakù)*

pərəə = ǵə aaró = əəm mén-pək-là(a)-kú
 bird.variety.nightingale-sized=GEN back.paw=ACC weigh.on-SNAP.O-NF-CMPL
 ‘(As she was just about to get up), the pere’s legs were broken under the weight.’
 (MK, TT 126)

In *word-final*, *non-phrase-final* contexts, the phonetic realization of -là(a) ‘NF’ is [l^(ə)]; that is, there is usually a release of the consonant [l], but often no clearly audible, syllabic vowel. This is *not* a regular process of reduction for underlyingly heavy syllables in a language-general sense, and would normally suggest an alternative underlying form in -là or -lə. This type of realization is usually found marking a *complex predicate* (1081).

(1081) *zebbò pootûml alá.*

zebbò = əə pòo-túm-là(a) á-là(a)
 tunic=TOP cover-CLOSED-NF keep-NF
 ‘He wrapped it up in a tunic, and...’ (MK, TT 047)

Finally, in a yet-to-be-named construction in which identical predicates in -là(a) ‘NF’ are repeated in rapid succession to illustrate the passing of time, *both* [l^(ə)] *and* [la(a)] realizations may be heard; in this case, some consultants feel that realizations in [la(a)] indicate a relatively lengthier passage of time, although some others feel that the alternation may be better described in terms of the rhetorical style of the individual speaker (1082)-(1083).

(1082) *inlênla, ínP ínP innəmó...kanó kaakù.*

ín-lèn-là(a) ín-là(a) ín-là(a) ín-nam = əə kanó-káa-kú
 walk-OUT-NF walk-NF walk-NF walk-NZR:RLS=TOP dark-PF-CMPL
 ‘They went out, and they walked and walked and (thus) it got dark.’ (TR, FA 003)

(1083) *inlâa inlâa inlâa inlâa innəmó...ikî doolúulo*

ín-là(a) ín-là(a) ín-là(a) ín-là(a) ín-nam = əə ikî doolúu = lo
 walk-NF walk-NF walk-NF walk-NF walk-NZR:RLS=TOP dog village=LOC
caalên dù.
 càa-lèn-dùu
 ascend-OUT-IPFV
 ‘Walking and walking and walking and walking...he arrived at a village of dogs.’
 (NyPB, LAT 104)

It seems clear that the variation observed is iconically related both to the *tightness of the syntactic construction* in which the term in *-là(a)* appears, as well as to the *temporal proximity* of events coded in *-là(a)* (these being, in a sense, two sides of the same functional coin). What is *less* clear is whether there may ultimately be said to exist *one* construction, with *one* marker (a ‘Non-final’ marker *-là(a)* ‘NF’, with contextual rules for predicting its phonetic realization), or two (say, *-là(a)* ‘Non-final *clause* marker’ and *-là* or *-lâ* ‘Non-final *predicate* marker’). For the present, the more conservative first path of identifying a single, semi-predictably varying form *-là(a)* ‘NF’ will be followed; however, it must be acknowledged that a functional bifurcation seems incipient, if it is not already in fact grammaticalized to some degree at least.

16.4.2.1. Complex predicates

In a prototypical complex predicate, an *uninflected* predicate stem suffixed in *-là(a)* ‘NF’ is closely followed by a final, inflected predicate. Together, the two chained predicates interact to form a single, complex predication. In the canonical form of the construction, both predicates occur in *immediate sequence* under the *same intonation contour*, share the *same set of arguments* and other clause elements, and work together to code a *single macro-event*. The Non-final marker *-là(a)* ‘NF’ is usually *reduced* in this construction to [l ~ l̥]; despite rhyme reduction, however, the non-final marker continues to project an underlying low/tense tone (Figure 16.3).

[[(NP_{1...n}) [PRED1.STEM-*l*(*â* ~ *ə* ~ *ə*)] [PRED2]]]_{CLAUSE}

Figure 16.3 – Canonical form of a complex predicate

The event structure of a complex predicate is in a sense variable, and depends on the semantics of the two conjoined predicates and the ways in which they may be construed to interact. In many cases, the event represented by a complex predicate is clearly temporally unified, with the two components only analytically distinguishable; such configurations are often best translated into English either via a one-word predicate, or else by a predicate plus adverbial (1084).

(1084) *zəəP menjô ké!*

[[**zəə-là(a)**]_{PRED1} [**mèn-jô**]_{PRED2 = kée}]_{CLAUSE}

shout-NF speak-PROH=HORT.POL

‘Don’t **shout** at me (lit., ≡ ‘don’t **speak** to me **shoutingly**’)!’ (KN, OLB7:15)

In other cases, the “micro-events” denoted by the two predicates must, of necessity, be understood as at least partly temporally distinct; in (1085), it is quite clear that ‘baking’ precedes ‘eating’, and that a potential reversal of the two predicates (?*dôP baakaakú* ‘ate and (then) roasted it’) would render the statement semantically nonsensical. At the same time, however, both “micro-events” are construed to denote a single “macro-event” of ‘roasting-and-(then)-eating’.

(1085) *okká, adîgəm...âo gaddə...domó*

okkáə [adi = gə = əəm]_O [aə gadə = əə]_A [dó-mó
SCNJ TRIBE=GEN=ACC child group=TOP eat-NZR:ACCOMPANIMENT

kaamá lêek^wəmə bâalə dokáa kú.

káa-máa-lèe-kú = əəm = əə]_{SBRD} [**báa-là(a) dó-káa-kú**]_{PRED}

have/exist-NEG-SSEQ-CMPL=ACC.TSUB=TOP **bake-NF eat-PF-CMPL**

‘And, the Adi’s (writing), the children...because they didn’t have anything to eat (rice) with, **roasted and ate** it.’ (MK, LW 049)

Complex predicates can perform the important grammatical function of hosting non-adjectivalizing predicate derivations (§13.2.4.3) – often involving repetition of the predicate root – for the purpose of (usually manner or purpose-related) final predicate modification. In an example like (1086), although it would be possible in principle for the speaker to simply utter the derived verb *mèn-cék* ‘speak-SHORTEN’ as a final predicate –

with the same *basic* semantic value – she seems to choose the complex predicate construction as depicted for the purpose of further *enhancing* or *profiling the manner* with which the event is brought about.

(1086) *ŋó...izi, mencêklə mendú.*

[ŋó]_S [izi]_{ADV} [mèn-cék-là(a) mèn-dùu =_{']}_{PRED}
 1.SG now **speak-SHORTEN-NF** **speak-IPFV=NF1I**
 ‘I’m just **briefly laying** (the story) out now (lit., ≡ ‘I’m **short-sayingly saying** it).’
 (LN, TG 083)

It is important to note that, despite the frequent “adverb-like” semantics of the initial predicate of a complex predicate construction, it is *not* in fact a syntactic adverbial. While syntactic adverbials can usually occupy different positions in the clause syntax – often with different scope relations, but with no difference in their denotation (§16.5) – the non-final element of a complex predicate cannot be moved without changing the overall sense of the expression; namely, it would then be understood as a *clause chain* rather than as a complex predicate, and would then denote *two distinct events* rather than one (§16.4.2.2).

Finally, the *argument structure* of a complex predicate is seemingly projected by the *final* predicate only. No examples occur in my data in which the subject of a non-final predicate is different from the final predicate subject in a complex predicate construction; nor are there any examples in which the non-final predicate is transitive and licenses an O argument which is not simultaneously licensed by the final predicate (i.e., in which the final predicate is intransitive). Intriguingly, there are a few examples in my data in which a non-prototypical sense of the non-final predicate is licensed by a mismatch in the argument structures of two conjoined predicates. In (1087), the clause subject *namé* ‘house’ has a straightforward grammatical relation to the final intransitive predicate; however the non-final predicate head *hée-* ‘unmake’ is normally a *transitive* verb, subcategorized for an Agent A and Patient O. The complex predicate construction seems to license an S=O *sense* of *hée-* in which the subject is understood as the ‘unmade’ Patient. Note that **namé=əə hée-dùu* ‘house=TOP unmake-IPFV’ is generally rejected by my consultants (unless it is somehow possible to construe the *house* as ‘unmaking’ another entity).

(1087) *nammó hêeP doodù.*

[namó = əə]_S [hêe-là(a) dóo-dùu]_{PRED}

house=TOP **unmake-NF** LOC.EXIS.INAN-IPFV

‘(His) house is **lying there unmade** (i.e., it has been partially disassembled for the purpose of re-construction at a different location).’ (MN, OLB7:57)

In sum, a complex predicate is clearly syntactically compositional, and derives its overall properties from the interaction of the two conjoined predicates. However, it is also an asymmetrical construction, in which the *final* predicate governs most of the grammatical properties of the clause which a complex predicate heads. Syntactically, a complex predicate is composed of *two grammatical words*, but functions as a *single grammatical predicate*, and stands as head of a *single predicative clause*.

16.4.2.2. Clause chaining

Like many other languages of the Tibeto-Burman area (as well as elsewhere), Galo is strongly *clause chaining*. A Galo clause chain minimally consists of a sequence of two clauses, in which the first, non-final clause is headed by a predicate in *-là(a)* ‘NF’. Unlike the complex predicate construction discussed in §16.4.2.1, the non-final predicate of a clause chain may or may not be inflected, may or may not share a common set of arguments with the final clause predicate, and generally depicts an event which is both analytically and temporally distinct from that expressed by the final clause. In a clause chain, the non-final marker *-là(a)* is generally *not* phonetically reduced (unlike in a complex predicate). The number of non-final clauses in a clause chain is potentially without limit (Figure 16.4).

$[(NP_{1...n})_i \text{ PRED-là(a)}]_{1...n} [(NP_{1...n})_{i/j} \text{ PRED}]$

Figure 16.4 – Canonical form of a clause chain

16.4.2.2.1. Duration in discourse

In some types of discourse, clause chains may be greatly extended, sometimes spanning as many as fifteen or twenty clauses. The procedural description in (1088) contains a relatively long twenty-four-clause chain, which has been abbreviated in the interest of space.

(1088) [*âm rigʷrə lá*]...[*acabbó...moodii-rík*

əmbə rì-gərə-**là(a)**=_′ ací-abó = əə moodii-rikó
ANAP.PADV do-ACNC-NF=NF1 elder.brother-father=TOP mountain-field
‘[Having done that], [the men cut (forest to clear space for) jhum fields]...

palá]...[*hîin təəlā*]..[*okkə...mərāa là*]...[*hîin təəlā*], [*ogò*,

pá-**là(a)**=_′ hîinè təə-**là(a)**=_′ okkə mərāa-**là(a)** hîinè təə-**là(a)** ogò
chop-NF=NF1 plant chop-NF=NF1 SCNJ whatever-NF plant chop-NF TMP.SEQ
[chop down trees]...[and what else do they do]...[they chop down trees], [and then,

hîinəm təəlā kú]... [**Sixteen non-final clauses**]...[*ammòm cippə kulà*,]

hîinè = əəm təə-**là(a)**-kú amò = əəm cíK-pó-kú-**là(a)**
plant=ACC chop-NF-CMPL rice.paddy=ACC plant.with.stick-TO.END-CMPL-NF
after chopping down the trees]...[*Sixteen clauses*]...

[*acabbó kookhîlo... dərêe monnà*

ací-abó = əə kookhî = lo dərêe mò-nà = əə
elder.brother-father=TOP back=LOC seed.holes make-NZR:SUB=TOP
moîn rəîʔ?

mò-ín-**rə** = (ə)î

make-FWD-IRR=ETAG

[of the men, those tasked with covering up the seed holes will go along (behind the women) doing that].’ (LN, GMW 021-029)

In extended chains, a non-final clause may take on the *feel* of a final clause, in the sense that it may carry a downward intonation contour, may have a prosodic gap of any length between it and the next clause, and may not even necessarily be followed by another clause, in case the speaker is interrupted or decides for some other reason not to continue (for example, if he or she feels that the basic contents of the final clause can be anticipated from context). However, there is always an *implication* in such cases that another clause is forthcoming, and Galo speakers – if asked – usually report that isolated clauses in *-là(a)* ‘NF’ feel “incomplete”. (1089) presents the first two clauses of a personal/historical narrative; the first clause is marked as non-final, indicating that the speaker clearly has plans to continue his narrative. However, the second clause has no direct relationship to the first clause, but instead represents an “aside” request to a listener to fill in some details which the speaker can’t remember. Accordingly, with the exception of the implication that the discourse will continue, there is little syntactic or functional difference between the non-final clause in (1089) and a final clause in the same position.

(1089) *korûm...tolokè...daarî tokkè...jûn hôg iilâ.*

[korûm tolokè daarî tokè = əə ɲunù hogò iì-là(a)]
 ancients DST.LOC.ABL.UP PLACE DST.ABL.UP 1.PL SPRX.LOC **descend-NF**
jâd bosorè, nó mên-to ké.

[jadî bosor = əə nó mèn-tó = kée]
 how.many year(Asm)=COP.IPFV 2.SG speak-IPTV.ODIR=HORT.POL
 ‘In the old times...we came down to here from up in Daring. What year was it, you tell him.’ (NyR, MDS 002-003)

16.4.2.2.2. Inflection

In Galo, it is possible for non-final clauses to be fully inflected, enabling a fine degree of control over event-and-temporal continuity. In (1090), use of the Perfective in *-tó* ‘PFV’ ensures that ‘drinking’ is understood as temporally prior to ‘killing’; in absence of perfective marking, the two events could potentially be understood as temporally simultaneous.

(1090) *əm opôəm tîitô là, parép tokk^wá.*

[əəm opò = əəm tîi-tó-là(a)] [pá-rép-tó-kú = káa]
 ANAP.ACC liquor=ACC imbibe-PFV-NF chop-ICEP-IPTV.ODIR-CMPL=ADVS
 ‘**After** drinking the liquor, start your killing.’ (TB, OAM 296)

On the other hand, use of Imperfective *-dùu* ‘IPFV’ in a non-final clause ensures a sense of temporal simultaneity where a sequence might otherwise be understood (1091).

(1091) *jûptə duulà, bulù...jôo rîká?*

[jûp-tà-dùu-là(a)] [bulù jòo rî-káa = ʔ]
 sleep-INCP-IPFV-NF 3.PL what do-PF=NFI1
 ‘**As** they were going to sleep, what do you think happened?’ (IR, FA 032)

Non-final predicate marking in Stative *-dó(o)* ‘STAT’ is quite common in Galo, however its precise function is not yet fully understood. It is clear that Stative marking creates a sense of event-separation – in (1092), use of the Stative suffix gives a sense that ‘peering’ and ‘calling’ are separate activities, while without it the overall sense of the construction would be closer to a manner modification ‘called peeringly’ – it is not yet understood what sort of temporal relationship a non-final predicate in Stative *-dó(o)* ‘STAT’ establishes with a following predicate/clause. Instances of seeming temporal simultaneity and temporal subsequence alike have been attested.

(1092) *omeə əm aruəm combúu là dóot/...*

omèe = əə əəm arúu = əəm cóm-búu-là(a) dóo-tó
 kid=TOP ANAP.ACC hole=ACC peek-INTO-NF lie.down-PFV
combúu doolà goktó.
 cóm-búu-**dó(o)-là(a)** gók-tó
 peek-INTO-STAT-NF call-PFV
 ‘The boy lied peering/...peered and called into the hole.’ (TR, FS 034)

The position of *-là(a)* ‘NF’ with respect to certain (other) predicate inflections exhibits certain variations. In particular, *-là(a)* ‘NF’ *precedes* Completive *-kú* ‘CMPL’ when no other predicate inflections are present. However, when other predicate inflections are present, *-là(a)* ‘NF’ *follows* all of them. (1093) is an example in which both contexts occur in sequence; note that in the first bracketed clause, *-là(a)* ‘NF’ *precedes* Completive *-kú* ‘CMPL’, while in the second bracketed clause it follows. This is due to the occurrence of the Stative suffix in the second bracketed clause predicate.

(1093) *jibó aalâa kú...aadó kulâ...áo əkə...*

[jibó áa-**là(a)-kú**] [áa-**dó(o)-kú-là(a)**] [áo əkə
 person.non-kin come-NF-CMPL come-STAT-CMPL-NF child IND.PL
akké-kânə.gò bæətúu kù.
 akké-kanə = go báə-tùu-kú]
 six-seven=IND bear-CONT-CMPL
 ‘She got married, and...having married...she had these six or seven kids.’ (TR, FS 073)

For further discussion of the co-occurrence properties of predicate inflections, see §12.1.

16.4.2.2.3. Subject continuity

Clause chains in Galo tend strongly to be *same-subject*; however, there seems to be no grammaticalized subject-continuity constraint per se. In the sequence in (1094), note that the speaker is able to switch from one third person subject ‘the men’ to another ‘the women’, despite not having reached a final clause in the sequence of clauses about ‘the men’. The change in subject may be assisted in this case by the occurrence of a lengthy prosodic gap between the sequence in ‘the men’ and that in ‘the women’, as well

as the occurrence of the Sentence conjunction *okkəə* (which may be functioning here to mark an episodic boundary).

(1094) *ogò...acabbó_i (...) hñr^o tottəb inrə.*

[ogò ací-abó = əə hñrə tó-tà = bə ín-rə]
TMP.SEQ elder.brother-father=TOP ambush.platform wait-INCP=SBRD go-IRR

Ø_i pirík-taakú ablà...ogò Ø_i takə...ták-koocə

[pirík-taakú àp-là(a)] [ogò takə takə-koocəə
kaleej.pheasant-bird.variety shoot-NF TMP.SEQ squirrel squirrel-chipmunk

*ablà...okkə **ânənamə**, **ânə gaddə**, ihñ palà,*

àp-là(a)] [okkəə anə-ɲaməə = əə anə gadə = əə ihñ pá-là(a)]
shoot-NF SCNJ mother-daughter.in.law=TOP mother group=TOP wood chop-NF

Ø_j ihñ, oó, malà rîgə rəllà Ø_j arumóm aarəkú...

[ihñ oó má-là(a)] [rî-gərə-là(a)] [arúm = əəm áa-rə-kú]
woodvegetable search.for-NF do-ACNC-NF evening=ACC come-IRR-CMPL
'Then...**the men_i** (...) will go ambush-hunting...Ø_i shoot game birds...and Ø_i shoot squirrels...wild rodents...and **the women, the women_j** will cut firewood, and after Ø_j searching for firewood and vegetables (**they'll_j**) return in the evening...' (LN, GMW 034-037)

In “tighter” chains in which no prosodic gap intervenes between non-final clauses, it is usually not possible to interrupt subject-continuity unless the predicate is marked in the ‘Switch-subject’ function of Causative suffix *-mò* (see §12.2.5.3 for discussion and examples). Again, however, there does not seem to be a well-grammaticalized constraint; in context-free elicitation, speakers have accepted both same-subject (preferred) and switch-subject (possible) interpretations of most types of non-final construction. In order to *ensure* subject-continuity, it is possible to use one of a variety of *discourse continuity operators*, which are available to both non-final clauses and to certain subtypes of temporal subordination. Discourse continuity operators are discussed in §16.4.4.

16.4.3. Temporal/episodic subordination

Temporal/episodic subordination (“temporal subordination” for short) encompasses a variety of related constructions, most of which involve marked subordination of an *inflected predicative clause* to a higher main clause (of almost any

structural type). All of the attested temporal/episodic subordinating morphemes occur also occur as noun phrase postpositional or demonstrative postpositional relational markers in modern Galo, and are also attested in a wide variety of time noun-headed temporal phrase-marking functions (cf. §14.3 for an overview of noun phrase relational marking, §7.4 for an overview of the demonstrative postpositional subclass of relational markers, and §5.2.2.16.5 for an overview of their use in temporal phrase-marking). Some subtypes of temporal/episodic subordination are more frequent and versatile than others, and could perhaps be better-analysed as a distinct construction type.

In the present analysis, temporal/episodic subordinations are divided into three subtypes:

- 1) Type 1: Basic (§16.4.3.1)
- 2) Type 1a: Accusative (§16.4.3.2)
- 3) Type 2: Co-temporal/hypothetical (§16.4.3.3)

16.4.3.1. Type 1: Basic

Basic temporal/episodic subordinations are usually (though not obligatorily) preposed to a main clause, giving some type of *contextual information* which frames the main clause event, as “when/after *x* happens, [CLAUSE]” or “in such case as *x*, [CLAUSE]”. The form of a Basic temporal/episodic subordination is schematized in Figure 16.5, and exemplified in (1095).

[S/A.GEN_i (O) PRED=POS] [S/A_{i/j} (O) PRED]

Figure 16.5 – Structure of a Basic temporal/episodic subordination

(1095) *b̥h̥k iidəkəm, sâ molâana.*

| | |
|---|--|
| [b̥h̥k ìi-dàk = əəm] | [Ø_j Ø _i hàa _k mò-laana] |
| [3.SG-GEN descend-COS= ACC] | [tea make-IPTV.SOFT] |
| [S_i PRED= POS] | [A_j E _i O _k PRED] |

‘When he comes down, make (him) some tea.’ (lit., ‘On his coming down, make some tea.’) (ZR, OLC2:10)

As illustrated in (1095), the *subject* of a Basic temporal/episodic subordination is obligatorily in the *Genitive*; **b̥h̥k ìi-dàk = əəm* ‘3.SG descend-COS=ACC’ is rejected by my consultants. There are *no coreferentiality requirements* between main and subordinated

clauses, which may be either same-subject or different-subject, as in (1095). In practice, however, temporal subordinate clause subjects which are coreferential with the higher clause subject are almost always ellipsed, with overt subordinate clause subjects usually indicative of subject discontinuity (again, as in (1095)). The *predicate* of a basic temporal/episodic subordination is always inflected for a *non-perfective* aspect, as *-dùu* ‘IPFV’ *-dó(o)* ‘STAT’ or, more often, *-dàk* ‘COS’ or *-rɛ* ‘IRR’. The temporally-subordinated clause is obligatorily marked by one of a large number of the available Galo postpositions, with semantic values which are close to if not always identical to their values in the context of temporal phrase-marking, as discussed in §5.2.2.16.5. As of this writing, not all available Galo postpositions have been attested with each possible type of inflected predicate in a temporal subordinate clause; although it is clear that some co-occurrence restrictions exist, the general picture is one of a wide range of co-occurrence possibilities, within which fine-grained semantic distinctions can be made.

The most commonly-attested types of *realis* subordination are in *lo* ‘LOC’ and *ogò* ‘TMP.RLS’, which mark a temporally-subordinated supporting clause as a *range within which* or *point/span fully overlapping with which* the main, focal clause is construed to occur (1096)-(1097).

(1096) *ám kaabók daglól...íkiə...pətúp nè*

[əmbə káa-bók-dàk = **lo** = **’**]_{TSUB} [ikìi = əə pətúp = nè
ANAP.PADV look-DOWN/SOUTH-COS=**LOC**=NF1 dog=TOP container=NAGT

gəbəə tokú lă...

gə-bəə-tó-kú-là(a)=**’**]

carry/wear-CTIN-PFV-CMPL-NF=NF1

kírkí akkə olóo kaakù.

[kirkii akkə ò-lòo-káa-kú = **’**]

window(<Asm) DST.ABL.SOURCE.SLEV fall-AT/TO.DOWN.S/O-PF-CMPL=FI

‘**When** they looked down (i.e., ‘*at some point within the period of their looking down*’), the dog, wearing the container...fell down from the window.’ (TR, FS 018)

(1097) *mootûmbə doodêk ogò...maazîbə...*

[mootûm = b́ d́o-dàk ogò]_{TSUB} [maazîi = b́
jungle=DAT LOC.EXIS.ANIM.PERM-COS **TMP.RLS** very.much.EMPH=AVZR
pətáa-kobuə hottúm-horré maazib́ rətó.
pətáa-kobùu = əə hottúm-horé = əə maazí = b́ ŕé-tó = ́]
bird-rodent=TOP bear-boar=TOP very.much=AVZR live/exist-PFV=NFI1
‘Back **when** we used to live in the jungle (i.e., ‘*throughout the time during which we used to live in the jungle*), lots and lots of wild animals of every kind were there.’ (LN, GMW 061)

The most frequent *irrealis* temporal subordinator is *əəm* ‘ACC.TSUB’, a form which is homophonous with the Accusative NP case enclitic. Although it is possible to form Basic temporal subordinations in *əəm*, as in (1095), other types of temporal subordination in *əəm* have unique properties which merit their description in terms of a distinct subtype of temporal subordination:

16.4.3.2. Type 1a: Accusative

Accusative temporal subordinations in *əəm* ‘ACC.TSUB’ exhibit at least three properties which distinguish them from Basic temporal subordinations. The first is that they (like clause chains) include the possibility of *perfective* subordinations in *-tó* ‘PFV’ (1098); note that the sense of subordination in *əəm* is in this case *not* *irrealis*.

(1098) *bî saám tî́tóm, iŋkaakú.*

[bî [háa = əəm tî́-tó = **əəm**]_{TSUB} ín-káa-kú]
3.SG tea=ACC imbibe-PFV=**TSUB.ACC** go-PF-CMPL
‘After drinking tea, he left.’ (ZR, C2:11)

The second distinguishing feature is that Accusative temporal subordinations are able to subordinate predicates which *lack* aspectual marking, but which are suffixed by Discourse continuity operators (again, resembling clause chains, as discussed in the following section §16.4.4). Finally, and perhaps most notably, Accusative temporal subordinations are often followed by Topic marker *əə*, usually with a “backgrounding” or “framing” function (in this respect more closely resembling clausal nominalizations; see §15.3.2).

Examples (1099)-(1101) each illustrate topic-marked uses of an Accusative temporal subordination. In the first sentence (1099), note the use of Additive concessive discourse continuity operator *-gərə* ‘ACNC’, which accounts for the sense of temporal subsequence (*after*) which is felt. Overall, the Accusative temporal subordination functions to *frame* the event presented in the main clause.

(1099) “*nôk jès hīgə rəmá...ŋoí laanəmə̀m*

[nó-kə jəsì hí-gə́rə = ə́m = ə́]TSUB [ŋoí làa-nam = ə́m
2.SG-GEN urine urinate-ACNC=ACC.TSUB=TOP fish take-NZR:NSUB=ACC
jə̀ə rəm dodéena?”
jə̀ə rem dó-dée-nà = ə́]
who QASM eat-PROS-NZR:SUB=COP.IPFV
“[After your pissing in the river,] [who on earth would be able to eat any fish caught there?]” (NyPB, LAT 048)

In (1100)-(1101), the Accusative temporal subordination occurs *inside* a main clause, with a basically “backgrounding” function. Note especially the functional similarity between the Accusative temporal subordination and the backgrounding clausal nominalization in (1100). (1100) also illustrates subordination of a stem marked in Discourse continuity operator Subsequential *-lèe* ‘SSEQ’, while in (1101) the subordinate clause predicate is inflected in Stative *-dó(o)* ‘STAT’.

(1100) *bulù...attírə...munáa jò gə̀llèe má...*

[[bulù]A [attír = ə́]RQE [munáa = jòo gə́-lèe = ə́m = ə́ = ́]TSUB
3.PL group=TOP bag=and/or.such carry/wear-SSEQ=ACC.TSUB=TOP=NF1
immèn tabə̀ innəmə́...bə́daə́m
[ín-mèn-tà = bə́ ín-nam = ə́]BNZN [bə́daa = ə́m]O
walk-AS/PLAY-INCP=SBRD go-NZR:RLS=TOP road=ACC
mə̀əpāa kumá kaakú.
mə́ə-pàa-kú-máa-káa-kú]PRED]
think-ATTN-CMPL-NEG-PF-CMPL
‘Going for a walk all together, wearing packs and so on, they forgot the way.’ (IR, FA 009)

(1101) *akên gonnà ɛrapló indóo mǎ...ɛráp lokə*

[akên go = na = əə]_S [ɛráp = lo ín-dó(o) = əəm = əə]_{TSUB} [ɛráp lokə]_{OBL}
 one IND=SLCT=TOP door=LOC go-STAT=ACC.TSUB=TOP door ABL
kâarə kaadù.

[káa-rò-káa-dùu]_{PRED}

look-THROUGH.HOLE-TENT-IPFV]

‘One of them, going to the door, peeped through.’ (IR, FA 052)

16.4.3.3. Type 2: Co-temporal/hypothetical

Temporal/episodic subordination of an *irrealis* clause in *-rǎ* ‘IRR’ results in a *co-temporal/hypothetical* construction which strongly resembles, and is often functionally interchangeable with, the Conditional in *-boolo* (§16.3.2.1); roughly, something like ‘should *x* be the case’ or ‘in such a situation as where *x*-IRR the case’. Unlike the conditional in *-boolo*, a cotemporal hypothetical construction in *-rǎ = əəm* ‘-IRR=ACC.TSUB’ *cannot* be used to make counterfactual assertions (i.e., ‘had *x* not happened’). (1102)-(1103) illustrate use of the Co-temporal hypothetical construction; in (1103), note in particular the parallel use of the Accusative as a temporal phrase-marker, with essentially the same *irrealis* functional value.

(1102) *caarûu lapə mǎɛrəm...caalâa rǎ.*

[càa-rûu-lapə mǎɛ-rǎ = əəm]_{TSUB} càa-là(a)-rǎ
 ascend-CERT-CTZR:PURP/INTN think-IRR=ACC.TSUB ascend-ABIL-IRR
 ‘**Should** they definitely want to move in, they’ll be able to.’ (IkR, HC 019)

(1103) *hozûə kabréəm, ajjòm*

[hozûu = əə káp-rǎ = əəm]_{TSUB} ajð = əəm
 bird.variety=TOP cry-IRR=ACC.TSUB night=ACC
jublâa maí, bossó!

jùp-là(a)-máa = (ə)î bohó = əə

sleep-ABIL-NEG=EMPH afraid=COP.IPFV

‘**When** *hozuu* birds cry at night, yikes! You can’t sleep!’ (RmR, CC 167)

Although the sequence *-rǎ = əəm* ‘-IRR=ACC.TSUB’ generally forms a tight phonological unit and may appear to pattern as a single suffix, the possible intervention of a completive suffix *-kú* confirms continuing compositionality (1104).

(1104) *okkə hîm nîrəkʷəm, óf rəkú î?*

okkəə [hí-m nî-rə-kú=əəm] off-rə-kú (ə)î
 SCNJ SPRX-ACC nudge-IRR-CMPL=ACC.TSUB off(<Eng)-IRR-CMPL ETAG
 ‘And if you then press this, it will go back off, right?’ (Pkm, OLB4:27)

Unlike an Accusative temporal subordination as described in §16.4.3.2, it is *not* possible for a Topic marker to follow the supporting clause (as **hozûə kabramə*, on the model of (1103)). Finally, unlike all other types of Temporal subordination discussed above, the subject of a Co-temporal hypothetical construction is *not* in the genitive, but rather occurs in the unmarked (Nominative) case (1103). This last fact in particular suggests that the co-temporal hypothetical construction may be developing or has developed into a fully distinct construction type.

The prototypical form of a Co-temporal hypothetical construction is given in Figure 16.6.

[(S/A_i) (O) PRED-*rə=əəm*][(S/A_{i/j}) (O) PRED]

Figure 16.6 – Prototypical form of a Co-temporal hypothetical construction

16.4.4. Interclausal continuity operators

16.4.4.1. Subsequential *-lèe*

A Subsequential clause is headed by a predicate marked in *-lèe* ‘SSEQ’, and entails a sense that *something follows* from the marked clause/event. Although structurally resembling a predicate inflection,³⁰⁸ Subsequential suffix *-lèe* ‘SSEQ’ is unable to independently license a predicate word, instead most often occurring on a non-final predicate suffixed in *-là(a)* ‘NF’ or temporally subordinated in *əəm* ‘ACC.TSUB’. Often, the overall sense is one of *reason/cause*, as when the marked (supporting) clause is understood as something “out-of-which” the event reported in the final (focal) clause is brought about. In (1105), failure to mark the initial non-final predicate in *-lèe* ‘SSEQ’ would simply indicate either that the subject referent was ashamed, and then fled

³⁰⁸ *-lèe* ‘SSEQ’ is able to suffix directly to verb roots, is followed by Completive suffix *-kú* ‘CMPL’ and may be subsequently followed by non-final suffix *-là(a)* ‘NF’ or Accusative temporal subordinator *əəm* ‘ACC.TSUB’; it is in complementary distribution with all other predicate inflections.

(temporally sequential clause chain reading, cf. §16.4.2.2), or was feeling ashamed *as* she fled, and/or fled in an ashamed manner (temporally simultaneous complex predicate reading, cf. §16.4.2.1), but *not* that the subject referent's being ashamed *led directly* to her decision to flee. In (1105), note that in the ensuing sentence – which is *not* marked in Subsequential *-lèe* – the subject referent's thinking “whoops” does *not lead* to her fleeing, but rather simply occurs in more or less close event-proximity *to* the fleeing.

(1105) *əɲĩ leelà, kekkáa kú! “éət!” məəlà, kekká kú*

[əɲĩ-**lèe**-là(a)] [kéK-káa-kú] [éət məəl-là(a)] [kéK-káa-kú]
 shy-SSEQ-NF flee-PF-CMPL whoops think-NF flee-NF-CMPL
manè.

mane

that's.to.say(<Asm)

‘**Out of** shame she ran away! “Whoops (I’ve been caught)!” she thought, and ran away.’ (NyPB, LAT 050)

When occurring in non-final constructions, Subsequential supporting clauses in *-lèe* ‘SSEQ’ appear to obligatorily share the *TAM specification* as well as the *subject* of the final, focal clause. The Subsequential construction in *-lèe* is schematized in Figure 16.7

[S/A_i (O) PRED.STEM-*-lèe*-NF/TSUB], [S/A_i (O) PRED]

Figure 16.7 – Schematization of the Subsequential construction in *-lèe* ‘SSEQ’

The sense of Subsequential marking in *-lèe* ‘SSEQ’ is not always causal; in (1106), there is no indication that “taking” constitutes a *reason* for “going” per se. However, there remains a strong sense of event-continuity, in that the second event is viewed as following from the first.

(1106) *guɲĩ mola, porók rogzírəm*

guɲĩ mola-là(a) porók rogzír = əəm
 penaltyclaim-NF chicken chicken.adolescent=ACC
laalêe kuəmó, indûuku arú.

làa-**lèe**-kú = əəm = əə ín-dùu-kú aru
 take-SSEQ-CMPL=ACC.TSUB=TOP go-IPFV-CMPL CEXP(<Asm)

‘So he claimed a penalty, and taking a young hen he in the end went on his way.’ (NyPB, LAT 102)

Rarely, a Subsequential clause in *-lèe* ‘SSEQ’ may occur in a *final clause* predicate; seemingly, if and only if the marked predicate is inflected in ‘Direct’ perfective *-bá(a)* ‘PFV.DRCT’ (§12.3.3.2). The reason for this seemingly irregular patterning is not yet clear (1107). Note also in (1107) that *-lèe* ‘SSEQ’ is subject to the irregular but pervasive process of *Initial gemination* (§4.1.5.1), which obtains when it is suffixed directly to a weak ((C)V) syllable stem.

(1107) “*apí mumsìà, ân-abó tðə-kə akìn = əm*”

[[apí mumsì = áa]_{TOP} [anə-abó tðə-kə akìn = əm]_O
 sister.elder NAME=VOC mother-father HDST.UP-GEN leaf.packet=ACC
gəllèe kubə ké, ” əmnəmə, apí mumsì... ” naahùu

[gə-lèe-kú-bá(a)]_{PRED.FINAL} kə]_E [ə́m-nam = əə]_{PRED} apí mumsì naahùu
 carry-SSEQ-CMPL-PFV.DRCT INFO say-NZR:RLS=TOP sister.elder NAME granary
tòl attāa ká ” əmpə nammə nà.

tolò á-tà(a) = káa ə́m-pà-nam = əə na
 DST.LOC.UP keep-IPTV.MOT=HORT.ADV say-PFV2-NZR:RLS=COP.IPFV DECL
 ‘(He) having said, “O Elder Sister Mumsi, I have brought the meal packet from
 your parents up there,” Elder Sister Mumsi said, “go put it up in the granary.”’
 (NyPB, LAT 297)

No plausible etymology for *-lèe* ‘SSEQ’ has yet been discovered.

16.4.4.2. Perfective sequential *-rée*

Non-final clauses in *-tó* ‘PFV’ are often secondarily marked in *-rée* ‘PSEQ’, a dedicated ‘Perfective sequential’ suffix which occurs in no other function. Like Subsequential suffix *-lèe* ‘SSEQ’, it indicates that an ensuing focal clause “follows on” from the marked, supporting clause (obligatorily sharing the same subject). Perfective non-final clause-marking in *-rée* ‘PSEQ’ tends to occur when it may otherwise be unclear that the subject referent, having fully brought about the completion of a given event, then went on to bring about another event as part of thematically-connected sequence. In (1108), use of the Perfective sequential in *-rée* ‘PSEQ’ makes it clear that the same actor who is responsible for putting the frog in a jar is the same actor who then went to sleep. In (1109), which was elicited on the model of (1108), it is possible that someone other than the sleeper was responsible for putting the frog in a jar.

(1108) *ôgo lîglə ató reelà...mîi...jûpto kú.*

[Ø_{i/*j} ogò lîk-là(a) á-tó-rée-là(a)] [bîi jùp-tó-kú]
 ANAP.LOC insert-NF keep-PFV-PSEQ-NF 3.SG sleep-PFV-CMPL
 ‘(He_i/*someone_j) having kept (the frog) in there, he_i...went to sleep.’ (TR, FS 008)

(1109) *bîi tatíkóm lîglə ató là, jûpto kú.*

[bîi tatík = əəm lîk-là(a) á-tó-là(a)] [Ø_{i/j} jùp-tó-kú]
 3.SG frog=ACC insert-NF keep-PFV -NF sleep-PFV-CMPL
 ‘He_i having kept the frog in there, (he_i/someone_j) went to sleep.’ (IR, 19:90)

Like Subsequential suffix *-lèe* ‘SSEQ’, Perfective sequential *-rée* ‘PSEQ’ occurs in both clause chains in *-là(a)* ‘NF’ (1108) and temporal subordinations in *əəm = əə* ‘ACC.TSUB=TOP’ (1110), as well as in ‘Direct’ perfective *-bá(a)* ‘PFV.DRCT’ (1110); again, the reason for the seemingly idiosyncratic appearance of the Perfective sequential in only one final clause type is unclear.

(1110) *môtə reekumə, caakûr dookùl “apí*

mò-tó-rée-kú = əəm = əə càa-kùr-dó(o)-kú-là(a) apí
 make-PFV-PSEQ-CMPL=ACC.TSUB=TOP ascend-RETURN-STAT-CMPL-NF sister.elder
mumsà, appîi ɲó... ɲiéék
 mumsì = aa appîi ɲó ɲîi-jék
 NAME=VOC all 1.SG prepare.materials-LEAVE.NO.REMAINDER.1
ɲîimék...torée kubá.”
 ɲîi-mék-tó-rée-kú-bá(a)
 prepare.materials-LEAVE.NO.REMAINDER.2-PFV-PSEQ-CMPL-PFV.DRCT
 ‘After making it, he went back up and (said), “Elder Sister Mumsi, I’ve prepared everything down to the last detail.”’ (NyPB, LAT 232)

While Perfective sequential clauses in *-rée* ‘PSEQ’ exhibit similar discourse-continuity properties to those of Subsequential clauses in *-lèe* ‘SSEQ’, it is important to note that Subsequential clauses have no perfectivity value; thus, while *bîi opòo = əəm tîi-lée-là(a) ín-tó-kú* ‘3.SG liquor=ACC imbibe-SSEQ-NF go-PFV-CMPL’ ‘Having drunk (from) the liquor, he left’ does not specify whether the drinking was completed or not, the same configuration in *-tó-rée* ‘PFV-PSEQ’ would make it clear that the event ‘drinking’ was completed prior to the event ‘going’.

16.4.4.3. Additive concessive -gərə

Additive concessive suffix -gərə ‘ACNC’ appears to reflect a historical fusion of Irrealis predicate inflection -rə ‘IRR’ (§12.4.1) with a predicate derivation of some kind, possibly Comitative applicative -gə ‘COMT’ (§11.2.5.4) (or a common historical precursor, probably the verb root gə- ‘carry/wear’); however, since there is very little evidence of a clause-continuity function of -gə ‘COMT’ used independently of -rə ‘IRR’, this cannot be asserted with any certainty.³⁰⁹

In absence of any additional predicate marking, the core sense of -gərə ‘ACNC’ is one of *Additive concession*, as *x and indeed, also y*. In this capacity, -gərə ‘ACNC’ may function as a *predicate stem-coordinator*. When coordinating two verbs or adjectives denoting like properties, conditions or events, or those which can be construed as naturally co-occurring, the sense of -gərə is basically *additive*, as *ahòo-gərə adhi* ‘long/tall-ACNC strong’ ‘tall **and (indeed) also** strong’. When coordinating two verbs or adjectives denoting dissimilar or unnaturally co-occurring properties, conditions or events, the sense is *contrastive*; in (1111), coordination via -gərə implies an underlying belief that fat, egglike things are not generally also long or tall, but that in this case, the stone being referred-to is just that.

(1111) *əm mogə rə, aəm...əpnigó..pɦtə gərə*

| | | | | |
|----------|-----------|---------------|-----------|------------------|
| [əəm | mò-gərə] | [aə-m | əpní = go | [pɦ-tə-gərə |
| ANAP.ACC | make-ACNC | HDST.SLEV-ACC | bit=IND | CLF:EGG-big-ACNC |

ahòonàm laakâató, ilíəm.

| | | |
|-----------------------|---------------------|------------|
| ahòo] = nà = əəm | làa-káa-tó | ilí = əəm] |
| long/tall-NZR:SUB=ACC | take-TENT-IPTV.ODIR | stone=ACC |

‘[After doing that], [get the thing which is a bit [long **and (yet)** fat], the stone].’
(IR, MPO 054)

Albeit rarely, -gərə ‘ACNC’ may also occur as a *clause coordinating* suffix, again with Additive concessive semantics. When clauses coordinated in -gərə are clearly

³⁰⁹ In Pugo Galo, the corresponding form is -gée, which would suggest pre-Pugo *-gə-jé ‘COMT-IRR’ (< PG *-gə-tjé), following the regular Post-Proto-Galo Pugo processes of Circumsonorantal harmonization and Intervocalic glide deletion (cf. also Conjectural particle *bəree* (Pugo *bee*) (§13.3.3.4), in which the same set of changes are observed).

opposed in their information content (as when they are mismatched in polarity) the sense is basically contrastive (1112). In the absence of such a mismatch, the sense is closer to a simple sequential function; in the initial clause of (1111) headed by *mò-* ‘make’, the sense of *-gərə* ‘ACNC’ may be translated as ‘then’, ‘next’, ‘following’ or ‘after’.

(1112) *zoon gə agomám tagərə́, ñòk agomám tamà.*

[zoon³¹⁰ = gə agóm = əəm tà-**gərə** = ʔ] [ɲó-kə agóm = əəm tà-máa]
 NAME=GEN speech=ACC obey-**ACNC**=**NFI1** 1.SG-GEN speech=ACC obey-NEG
 ‘So you’ll do what John tells you to do, **but** you won’t listen to me (is that how it is?).’ (BK, 15:50)

The statistically most frequent use of Additive concessive *-gərə* by far is in a *clause chain* or *accusative temporal subordination*, again with the above-described set of functions. In many such uses, it closely resembles Subsequential suffix *-lèe* ‘SSEQ’ (§16.4.4.1), i.e. in giving a sense that ‘something follows’ from the marked clause (however, in a purely temporal/episodic rather than potentially causal sense). Also like Subsequential *-lèe* ‘SSEQ’, Additive concessive *-gərə* ‘ACNC’ has the basic structural status of a predicate inflection, thus licensing a temporal subordination in *əəm* (= *əə*) ‘ACC.TSUB(=TOP)’ (1113).

(1113) *panúu gərəmá zilâake.*

[pá-núu-**gərə** = əəm = əə] [zí-là(a) = kée]
 strike-AFLAME-**ACNC**=ACC.TSUB=TOP give-IPTV.SDIR=HORT.POL
 ‘Give me (the cigarette) **after** you’ve lit it.’ (KN, B2:34)

An interesting emergent function of *-gərə* ‘ACNC’ seems to derive from omission of contrastive (declarative) focal clauses such as the final clause of (1112). In this case, the *implication* associated with the conjoined clause is retained, i.e. that something follows from the marked clause “on top of” what has already been stated.³¹¹ Often buttressed in usage by Non-final intonation type 2 (§16.2.2.2), this can amount to a rhetorically effective means of scolding oneself or another person, as though to imply that ‘you do this *and yet/still*...(you should be doing something else *or* you might well do any

³¹⁰ I.e., “John,” the Christian name of a particular (Christian) Galo person.

³¹¹ It is of course also possible that a usage such as in (1114) might represent the historically *prior* use, from which a coordinating function later evolved. This seems to me improbable, however, inasmuch as the likely candidate source formatives of *-gərə* contain no hint of such semantics.

number of other things to boot)’ (1114). Even more commonly, two such clauses are presented in apposition, together giving the sense ‘this is the case, as well as that, and...(who knows what else might just as well be the case!)’ (1115).

(1114) *əhə?! ɲó “diin” əŋgərə!*

əhə? ɲó diin óm-gərə

(oh).no 1.SG day(<Ind) say-ACNC

‘Aya! I said “diin” (rather than the native Galo word for “day”, knowing well that this foreigner has come to learn Galo; what **other** foolishness might I be capable of!?)’ (DW, 02-07)

(1115) *no əəm meŋgərə, márk əəm əŋgərə, agomé*

[no əəm mèn-gərə] [mark əəm óm-gərə] [agóm = əə

2.SG ANAP.ACC speak-ACNC NAME ANAP.ACC say-ACNC speech=TOP

jôombə meŋkên doobə?

joombə mèn-kèn-dó(o) = bə]

how speak-GOOD/EASY-STAT=SJNC

‘You say one thing, Mark says another – how do you expect to arrive at a decision?’ (MN, B2:32)

16.5. Adverbial subordination

16.5.1. Overview

There are three basic types of adverbial subordination:

(A) **adjectival subordination** (§16.5.2)

(B) **verbal subordination** (§16.5.3)

(C) **clausal subordination** (§16.5.4)

All of types (A)-(C) are marked by an enclitic *bə*, which is homophonous with and almost certainly relatable to the Dative enclitic *bə* (§14.3.3).³¹² The ultimate historical source of *bə* is uncertain; from the present standpoint, the most likely seeming ancestor is PTP nominal root **bə(ə)* ‘way’ (cf. Lare Galo *bədáa* ‘road; way’, Pagro Mising *lambə*

³¹² Although I have distinguished adverbializing, clause-subordinating and dative noun phrase forming functions in this grammar for ease of presentation (at least), it is important to note that the clause-level syntactic statuses of adverbials and dative noun phrases are not all that different, and semantic similarities are likewise clear. Ultimately, it may be preferable to assert the existence of a single “oblique phrase-marking” enclitic, which might in principle be able to encompass all the identified functions of forms in *bə*.

‘road; way’). The semantic logic of the change would be something like *happy way* → *happi-ly*, and/or *I gave it his way* → *I gave it to him*; of course, additional historical-comparative work must be undertaken before this candidate etymology can be advanced with any confidence.

16.5.1.1. Complex predicates in *-lâ(a)* ‘NF’ compared with adverbial subordination in *bš*

Complex predicates in *-lâ(a)* ‘NF’ (§16.4.2.1) and adverbials in *bš* ‘AVZR’ exhibit some clear fundamental differences; for example, unlike non-final suffix *-lâ(a)* ‘NF’, adverbial subordinator *bš* cannot (ever) be suffixed directly to a verbal root. Additionally, while adjectives cannot generally stand as a complex predicate constituent in *-lâ(a)* ‘NF’, all lexical adjectives and derived adjectivals may be adverbially subordinated to a predicate in *bš* ‘AVZR’.

However, a number of terms have been found capable of participating in *both* a complex predicate *and* an adverbial subordination. In such a case, there is usually a clear semantic difference: while the complex predicate initial in *-lâ(a)* ‘NF’ denotes a *prior case or condition* ‘being’ which, and/or (possibly by implication) ‘out of’ which the head predicate is true, an adverbial modification denotes a *manner* ‘in’ which, *purpose* ‘for’ which, or *standard or quality* ‘as though’ to be which (or ‘in imitation of’ which) the predicate head is true. The following minimal pairs illustrate the basic nature of the contrast (1116)-(1119).

(1116) *bñ aləlà aadù.*

bñ alə-**lâ(a)** áa-dùu

3.SG good-NF come-IPFV

‘He (having been ill), **being** (now) well, (therefore) came.’ (IR, B5:7)

(complex predicate)

(1117) *bñ aləbš aadù.*

bñ alə=**bš** áa-dùu

3.SG good=AVZR come-IPFV

‘He came well/safely (without danger or incident).’ (IR, B5:7)

(adverbial subordination)

(1118) *bhî tîkúm là meŋkà.*

bhî tî-kúm-là(a) mèn-káa

3.SG imbibe-SENSELESS-NF speak-PF

‘He spoke **being** drunk/**out of** drunkenness (so don’t worry about it too much).’

(IR, B5:6) (**complex predicate**)

(1119) *bhî tîkúm bɔ meŋkà.*

bhî tî-kúm=bɔ mèn-káa

3.SG imbibe-SENSELESS=AVZR speak-PF

‘He spoke drunkenly/**in** a drunken **manner/as though** he were drunk (which he may well not have been).’ (IR, B5:6) (**adverbial subordination**)

It may be possible in such cases to analyse the stems in *-là(a)* ‘NF’ as syntactic verbals, with the forms derived in *bɔ* ‘AVZR’ analysed (prior to derivation) as syntactic adjectivals.³¹³

16.5.2. Adjectival subordination

Adjectival marking in *bɔ* derives an adverbial which is used to modify predicate semantics in more or less the same way an adjectival modifies a nominal. Usually, the sense derived is one of a *manner in which*, *purpose for which*, *state resulting from which* or *extent to which* the denoted event/state is brought about. The resulting phrase often has the appearance and feel of a one-word adverb (1120), however adjectival dependents such as adverbial particles may also precede the adverbializer (1121).

³¹³ There is no doubt that *alɔ* ‘good’ and *tîkúm* ‘drunk’ in (1116)-(1119) are *capable* of functioning as adjectivals, as their common ability to stand as Copula Complement clearly shows (§5.1.2). There is also no doubt that *alɔ* ‘good’ is also *capable* of functioning as a verbal, since it also has a *transitive* use ‘feel good about/toward someone’ (which is not available when it occurs as Copula Complement, i.e. as an adjectival). And, although it has no transitive use, there is no particular reason for doubting that *tîkúm* ‘drunk’ might be able to function as an intransitive verbal (as opposed to its use as an adjectival, if only in a syntactic sense and without particularly robust evidence for a semantic contrast between adjectival and intransitive verbal uses). The only question is whether participation in a complex predicate or derived manner adverbial construction should in fact be construed as a purely *syntactic* condition, available to terms with the underlying potential to stand as syntactic verbals and adjectivals respectively (and, in turn, providing evidence for such underlying potential), or rather as a *semantic* condition which somehow cuts across both classes of term. Although the first solution would certainly be the simplest, I am unable to rule out the latter possibility on the basis of data collected to date. For additional discussion in the context of predicate stem-derivation, see §11.2.4.2.

(1120) *bulù...maazí bós ká.*

[bulù]_S [maazí=bó]_{ADV} [bohó-káa]_{PRED}
 3.PL very.much=AVZR afraid-PF
 ‘They...were very afraid.’ (TR, FA 027)

(1121) “*nó appiigó...acì rûubə níktó ká!*”

[nó]_A [appíi=go]_{ADV} [acì=rûu=bó]_{ADV} [ník-tó]_{PRED}=káa
 2.SG bit=IND harsh=CERT=AVZR punch-IPTV.ODIR=HORT.ADVS
 ‘You should...poke her really roughly!’ (MK, TT 076)

Adverbial modifiers may be recursively embedded; in (1122), the adverbial in *alé* ‘good’ modifies the head of the adverbial in *oodòo* ‘distant’. Phrase-internal adjectival head-coordinations may also occur under the scope of the adverbializer (1123).

(1122) *aləbə oodôobə innəmə...*

[[[[[alé]_{ADJ}=bó]_{ADV} oodòo]_{ADJ}=bó]_{ADV} ín-nam]_{PRED.NZD}=əə
 good=AVZR distant=AVZR go-NZR:RLS=TOP
 ‘Having gone quite far... (lit., ≡ ‘Having quite distant-ly gone...’) (LN, TG 021)

(1123) *ahôola addîbə rîdù.*

[[[ahòo-là(a) addî]_{ADJP}=bó]_{ADV} [rî-dùu]_{PRED}
 long/tall-NF strong.EMPH=AVZR do-IPFV
 ‘(he’s) tall and strong (lit., ≡ ‘he registers as tall and strong’) (ILR, EM 19-05-07)

An adjectival subordination may be based on a lexical adjective as in (1120)-(1123), or else on an adjectivalized verb, as in the second two adverbializations of (1124); in (1124), note also that occurrence of the main clause O constituent between *maazí=bó* ‘very.much=AVZR’ ‘very’ and *káa-kèn=bó* ‘look-GOOD/EASY=AVZR’ ‘beautifully’ blocks a potential constituency relation between the two derived adverbials and causes *maazí=bó* ‘very.much=AVZR’ to be understood instead as a modifier of the main clause predicate in *mò-* ‘make’.

(1124) *maazí bɔ...gɪnci-cuucəkəm*

[maazí = bɔ]_{ADV} [gɪnci-cuucək = əəm]_O

very.much=AVZR basket.conical.small.dense-basket.tiny.dense.planting=ACC

kaakên bɔ...rimîgbɔ...môzi tó.

[káa-kèn = bɔ]_{ADV} [rì-màk = bɔ]_{ADV} [mò-zí-tó]_{PRED}

look-GOOD/EASY=AVZR do-MINUTE=AVZR make-BEN-PFV

‘He really...made her such **lovely, minutely woven** baskets (lit., ≡ ‘He really made her baskets **beautifully, minutely-wovenly**.’)’ (LN, TG 079)

Generally speaking, adjectival subordinations do not make direct reference to any arguments of the modified predicate; for example, in (1120) it is ‘fear’ which is understood as ‘very much’ true of the S argument – the quality of being ‘very much’ does not obtain of the S argument itself – similarly, in (1122) ‘good’ gives an extent of ‘distant’ just as ‘distant’ gives an extent of ‘go’; neither makes reference to the actor of ‘going’. At the same time, it is worth noting that there is often an *implication* to an adjectival subordination of relatively closer association to the *S* or to the *O* argument of a modified predicate (when that predicate is intransitive or transitive, respectively). For example, *káa-kèn* ‘look-GOOD/EASY’ ‘beautiful’ in (1124) relates conceptually to the *O* argument ‘baskets’, even as the adverbial phrase is not a syntactic modifier of the *O* argument constituent.

Finally, we can note that while it is possible for a local *verbal* subordination to host its own arguments, it is *not* possible for an adjectival subordination to host any argument of its own (see §16.5.3). For example, while *oodòo* ‘distant’ takes an undergoer/attributant argument *S* when occurring as a final predicate, it can host no such noun phrase in (1124). Similarly, while *aci* ‘pain(ful); harsh’ may occur as a final predicate with undergoer/attributant *S* with the sense ‘be in pain’, and while there is perhaps reason for supposing that the intended sense derives from a concept of the main clause notional *O* (the “poke-ee”) being ‘in pain’ as a result of the ‘poking’, in fact no noun phrase may occur within the adjectival phrase headed by *aci* ‘be in pain’; **bî(-kə)* *aci = rûu = bɔ nîk-tó = káa* ‘3.SG(-GEN) be.in.pain=CERT=AVZR punch-IPTV.ODIR=HORT.ADVS’ is rejected by my consultants.

Figure 16.8 schematizes the form of an adjectival subordination. Note that there are no “outer” brackets (to correspond to an overall predicate complex, e.g.); although the adverbial is *logically* predicate-dependent, and *usually* occurs adjacent to the predicate it modifies, it may in fact occur in any position in the clause syntax.

[[ADJ]=bó]_{ADV}[PRED]

Figure 16.8 – Structure of an adjectival subordination

16.5.3. Verbal subordination

While no verb root may be directly subordinated in *bó*, certain types³¹⁴ of *uninflected predicate stem* – seemingly with the morphosyntactic statuses of verbals³¹⁵ – may be adverbially subordinated in *bó*. Usually, such *verbal subordinations* give information related to the *purpose* or *manner* of an event. The most frequently-attested type of verbal subordination is in Incipient *-tâ* ‘INCP’ (1125).

(1125) *ók kookhí bó bulù...aumó...jùptə bó*

[okə kookhí = bó]_{OBL} [bulù]_S [aúm = əə]_{RQE} [jùp-tà = bó]_{ADV}
 ANAP.ABL back=DAT 3.PL three=TOP [sleep-INCP=SBRD]

aapôm tokú.

[áa-póm-tó-kú]_{PRED}

come-AS.CLUSTER-PFV-CMPL

‘After that the three of them came together **to sleep**.’ (TR, FA 023)

Verbal subordinations, unlike adjectival subordinations, exhibit a certain amount of clause-like structure which, however, is not identical to the structure of a main clause. Most importantly, the subject of a verbal subordination – while usually ellipsed, as in (1125) – is, if overt, obligatorily in the Genitive (1126). Ellipsed subjects of a verbal subordination are generally coreferential with the main clause subject (1125); if the subject is different, it should be overtly given (also in Genitive case) (1127).

(1126) *añgə dosibə bií acín moto*

[añ = gə; dó-hí = bó]_{ADV} [bií]_A [acín]_O [mò-tó]_{PRED}

self=GEN eat-REFL=SBRD 3.SG cooked.rice make-PFV

‘He_i made rice for **his own**_i eating.’ (IR, 19:106)

³¹⁴ Due to the combined factors of relative infrequency in the corpus and the extremely large number of predicate stem-expanding derivations which exist in Galo, it has not been possible as yet to determine the factors that license or constrain the adverbial subordination of a predicate stem in *bó*; this is an important topic for further research.

³¹⁵ Such stems may project transitive argument structures, or, if intransitive, may not be able to occur as Copula Complement – thus marking them as certain verbals rather than adjectivals.

(1127) *ɲok domenbə, bɛi dopak moto.*

[ɲó,-kə dó-mèn = bə́]_{ADV} [bɛi]_A [dopák]_O [mò-tó]_{PRED}
 1.SG-GEN eat-AS.PLAY=SBRD 3.SG snack make-PFV
 ‘He_i made snacks for my_i play-eating.’ (IR, B8:53)

The O argument of a transitive verbal subordination is typically unmarked, but this is not a structural requirement. If the O argument is contrastively referential, it may take accusative case-marking (1128).

(1128) *ɲun nám-ohoém mottə bə́ intə reelà, ɲun tolò*

ɲunù [námə-ohóo = əəm mò-tà = bə́] ín-tó-rée-là(a) ɲunù tolò
 1.PL house-rope=ACC make-INCP=SBRD go-PFV-SSEQ-NF 1.PL LOC.UP
caalîg là.
 càa-lîk-là(a)
 ascend-INTO-NF
 ‘Having set out **to make house ropes**, we went up there (to look for cane).’ (RmR, CC 018)

Rarely, a verbal subordination in *bə́* may stand as the complement of a copula negator *máa* or *móo*. The sense is generally of a speculation or judgment on the speaker’s part that some hypothetical case or situation does not or would not obtain (perhaps given some real or otherwise relatively ordinary set of circumstances) (1129)-(1130).

(1129) *dotə bəmmó!*

[dó-tà = bə́]_{CC} [= móo]_{COP}
 eat-INCP=SBRD=COP.NEG
 ‘It wouldn’t do for me to eat any more!’ (MN, T7:16)

(1130) *əg lacìn...patúu déek*

əgè la(a)cìn [pá-túu-dée-kò]_{CS}
 ANAP.IND CONC chop-DIVIDE.ON.WIDTH.S/O-PROS-NZR:LOC
kaarûubə maé ɲi!
 [káa-rúu = bə́]_{CC} [máa = ee]_{COP} ɲi
 have/exist-CERT=SBRD COP.NEG=COP.PFV DISC
 ‘But anyhow, certainly there’d have been no way (for them) to cut down the sky!?’ (TB, OAM 088)

Despite the relatively nominalization-like structure and behaviour of verbal subordinations – such as occurrence with an obligatorily genitive subject and the ability to occur as CC of a negative copula – it is important to underline the fact that verbal

subordinations are *not*, strictly speaking, syntactic nominals. Although certain “subordinable” verb stems such as *dó-mèn* ‘eat-AS.PLAY’ in (1127) are in fact capable of standing as a possessed nominal, as *ŋó-kə dó-mèn = əə dó-kèn-dùu* ‘1.SG-GEN eat-AS.PLAY=TOP eat-GOOD/EASY-IPFV’ ‘my **snack** is delicious’, they then have a *different sense* (namely, ‘snack (as a foodstuff)’ rather than ‘(activity of) play-eating’). On the other hand, other subordinable stems such as *dó-hí* ‘eat-REFL’ in (1126) or *dó-tà* ‘eat-INCP’ in (1129) cannot be used as a nominal at all. Therefore, it is not possible to analyse a verbal subordination as, for example, Dative marking of a zero-nominalized verb stem in any synchronic sense. Nor does it seem possible to treat the enclitic *bə* ‘SBRD’ as itself a nominalizer in the sense established in this grammar, since subordinations in *bə* are in most cases unable to stand as head of an argument noun phrase (whereas all nominalizations discussed in §15 are, at least in their basic uses). Thus, while verbal subordinations certainly have a relatively less finite clause structure, and could certainly be historically derived from a type of nominalization, their synchronic status would not appear to be that of a nominal in the stricter sense employed in §15.

Figure 16.9 schematizes the structure of a verbal subordination. Note that the relative linear position of constituents here is insignificant; although morphosyntactically “lighter” verbal subordinations tend to be predicate-adjacent and/or to follow the higher clause subject, and relatively “heavier” phrases tend to be set syntactically apart from the main clause, this seems to be a purely processing-oriented condition which does not reflect any underlying structural ordering constraints.

[[[S_i=GEN] [V-PDER=*bə*]]_{ADV} [S_{i/j}] [PRED]]_{CLAUSE}

Figure 16.9 – Structure of a verbal subordination

16.5.4. Clausal subordination

A clausal subordination in *bə* ‘SBRD’ closely resembles canonical main clause syntax. Unlike verbal subordinations, the *subject* of a clausal subordination (if overt) is in the unmarked *nominative* case. Contrast (1126) above – a verbal subordination exhibiting

a Genitive subject – with (1131) below, a clausal subordination in which the subject is in the zero-marked nominative.³¹⁶

(1131) *aiiuyé dodəbə bi acín motò.*

[aii = Ø = əə dó-dó(o) = bə]_{ADV} [bi]_A[acín]_O [mò-tó]_{PRED}
 self=NOM=TOP eat-STAT=SBRD 3.SG cooked.rice make-PFV
 ‘He made rice so that he himself could eat.’

In a clausal subordination, the predicate is obligatorily inflected in one of the three *non-perfective* aspects -*dùu* ‘IPFV’, -*dó(o)* ‘STAT’ (as in (1131) above), or -*dàk* ‘COS’, or else in negative polarity -*máa* ‘NEG’. Clausal subordinations *cannot* occur in perfect(ive) aspects or in Irrealis -*rə* ‘IRR’.

Although clausal subordinations tend strongly toward same-subject readings, there are no grammaticalized lower clause-higher clause coreferentiality constraints in a clausal subordination unless additional predicate-marking is applied. For example, marked coreference-constraining “disjunct” subordinations may be found, as discussed in §16.5.4.3.

16.5.4.1. Co-temporal (-*dùu* ‘IPFV’, *dàk* ‘COS’ -*máa* ‘NEG’)

Clausal subordination in Imperfective -*dùu* ‘IPFV’ or Negative -*máa* ‘NEG’ derives a basically *co-temporal* clause linkage (1132)-(1133). Often, the subordinated clause can take on the feel of a manner or extent subordination, probably as a matter of pragmatic/semantic implication (1132).

(1132) *bhi nìgláa nendûubə nirdù!*

[bi]_S [nìgláa nèn-dùu = bə]_{ADV} [nìr-dùu]_{PRED}
 3.SG **tear** **exit-IPFV=SBRD** laugh-IPFV

‘He’s laughing (to the point that) tears are coming out!’ (lit., ≡ ‘He’s laughing tears-coming-are-coming-out-ly.’) (GS, OL16:115)

³¹⁶ **aii = gə dó-dó(o) = bə* ‘self=GEN eat-STAT=SBRD’ and **aii = Ø = əə dó-hí = bə* ‘self=NOM=TOP eat-REFL=SBRD’, in which the inflected subordination has a genitive subject, and the uninflected subordination has a nominative subject, respectively, are both ungrammatical compositions.

(1133) *əə, izzà, higim...məpâa maabə*

əə [izzàa]_{OBL} [higim]_O [móə-pàa-máa=bə]_{ADV}
 AFF now SPRX.INC-ACC **think-ATTN-NEG=SBRD**
mendâa mendâa dâk.
 [mèn-dáa mèn-dáa-dâk]_{PRED}
 speak-WITHOUT.STOPPING speak-WITHOUT.STOPPING-COS
 ‘Yeah, see I’m just talking **without really thinking.**’ (MK, LW 023)

The combination of subordinate clause predicate negation and achievement marking derives an implication of *episodic prioricity* (i.e., ‘*x* not yet-achieved-ly, *y*’ → ‘before *x*, *y*’) (1134). Although it does not constitute a direct lexicalization of the concept ‘before’, this type of adverbial subordination would seem to be most direct means of encoding the concept of temporal event-precedence in Galo.

(1134) *boolə aamáa dabə jopcô.*

[bóol=əə áa-máa-dá(a)=bə]_{ADV} [jòp-cóo]_{PRED}
 [ball(<Eng)=TOP come-NEG-ACHV=SBRD] jump-FIRST
 ‘He jumped (to head it) before the ball was there (lit., ≅ ‘(During/at) **the ball not-yet-arriving**, he jumped early.’).’ (IR, OLC1:63)

16.5.4.2. Irrealis/prospective (-*dó(o)* ‘STAT’)

The most frequently-attested type of clausal subordination is in Stative -*dó(o)* ‘STAT’. The basic sense of a subordination in -*dó(o)* ‘STAT’ is *irrealis/prospective*: the subordinate clause contains information which is viewed as non-co-temporal with the information contained in the main clause, and which may be non-real, hypothetical, or prospective from the standpoint of the main clause setting. Very often, the sense derived (possibly by implication) is one of *purpose*; for example, in (1135), ‘sleeping’ is viewed as a prospective activity at the time of ‘divvying-up labour’, and, indeed, is understood as the *purpose* for which ‘divvying-up’ is undertaken.

(1135) *ogòéí jubdàbà bulù...attírǎ...*

[ogò=éí jùp-dó(o)=bǎ]_{ADV} [bulù]_S [attír=ǎǎ]_{RQE}
 ANAP.LOC=HEMP sleep-STAT=SBRD 3.PL group=TOP
parlǎk hiká.

[pár-lǎk-hí-káa]_{PRED}

divide.up.labour-INTO-REFL-PF

‘(In order to make preparations) to sleep *right* there, they all divided themselves into various functions.’ (IR, FA 031)

Otherwise, the sense of a subordinate clause in *-dó(o)* ‘STAT’ may be one of *extent* or *resulting state* (generally, as would pertain most directly to S or O). In (1136), the stick’s ‘being broken’ is viewed as a prospective result to ‘making (i.e., affecting)’ it.

(1136) “*ǎôk higìm, kà, dǎrdóob*

[ǎô-kà higì-m]_O [kǎǎ]_{IJEC} [dǎr-dó(o)=bǎ]_{ADV}
 1.SG-GEN SPRX.IND-ACC o.k. break(VI).long-STAT=SBRD
mokâa tó.”

[mò-káa-tó]_{PRED}

make-TENT-IPTV.ODIR

“This one (stick) of mine, come on, try to break it if you can (lit., ≡ ‘try to make it (such that it’s) broken’).” (NyPB, LAT 142)

Very commonly, an irrealis/prospective clausal subordination is marked in *ǎm-làa*

‘say-NF’, in a weakly grammaticalized linking function of non-final *ǎm-* ‘say’ which supports discrete establishment of a subordination relationship. For further discussion and examples, see §16.7.

16.5.4.3. “Disjunct” subordination (-ée ‘IPFV.DISJ’)

Subordinate clauses in *-dùu* ‘IPFV’, *-dó(o)* ‘STAT’, or, most often, *-dàk* ‘COS’, which are subsequently marked in “Imperfective disjunct” suffix *-ée* ‘IPFV.DISJ’ (described more generally in §12.5.2) exhibit a “different subject” subordinate/main clause coreferentiality constraint. (1137) first demonstrates a clausal subordination in *-dó(o)*, in which the lower clause subject is overt and the higher clause subject is

ellipsed; although it is not a grammatical requirement, the interpretation is overwhelmingly likely to be conjunct (same-subject).³¹⁷

(1137) *márk la cotú tamík nè p̄əðə b́ əmlà*

[[**márk**=**laa cotú**]_i]_A [tamík = nè]_O [p̄əð-dó(o)]_{PRED} = b́ əm-là(a)]_{SBRD} [**Ø**]_i]_S
 NAME=NCNJ NAME NAME=NAGT hammer-STAT=SBRD say-NF
pindù.
 [pìn-dùu]_{PRED}
 scheme-ISOL-IPFV
 ‘**Mark and Chotu**_i are planning **Ø**_i to beat Tamik.’ (IR, B8:79)

(1138) and (1139) show that when the higher clause subject is overt, it may be same (1138) or different (1139).

(1138) *márk la cotú tamík nè p̄əðə b́ əmlà*

[[**márk**=**laa cotú**]_i]_A [tamík = nè]_O [p̄əð-dó(o)]_{PRED} = b́ əm-là(a)]_{SBRD}
 NAME=NCNJ NAME NAME=NAGT hammer-STAT=SBRD say-NF
buj̄n̄ə pindù.
 [buj̄n̄ = əə]_j]_S [pìn-dùu]_{PRED}
 2.DL=TOP scheme-IPFV
 ‘**Mark and Chotu**_i are planning that **they**’_{ll}_i beat Tamik.’ (IR, B8:79)

(1139) *márk la cotú tamík nè p̄əðə b́ əmlà ŋ́*

[[**márk**=**laa cotú**]_i]_A [tamík = nè]_O [p̄əð-dó(o)]_{PRED} = b́ əm-là(a)]_{SBRD} [**ŋ́**]_j]_S
 NAME=NCNJ NAME NAME=NAGT hammer-STAT=SBRD say-NF 1.SG
pinrâa dù.
 [pìn-râa³¹⁸-dùu]_{PRED}
 scheme-ISOL-IPFV
 ‘**I**’_m_j planning for **Mark and Chotu**_i to beat Tamik.’ (IR, B8:79)

(1140)-(1141) now demonstrate suffixation of -ée ‘IPFV.DISJ’ to the subordinate clause predicate. Note now that the subordinate and main clause subjects can no longer be coreferential, whether they are overt (1140) or ellipsed (1141).

³¹⁷ Note the use of non-final form of direct speech verb *əm* ‘say’ inside the subordinate clause throughout these examples; this represents an instance of a purpose-complementizer-like function (described in §16.7), which does not in this case affect higher argument-coreference constraints.

³¹⁸ The Isolative suffix -*râa* ‘ISOL’ has the basic sense ‘as odd one out; not doing what others are doing’ and in this clause contributes a sense of ‘do on someone’s behalf (what they are not doing themselves)’. It is added to render the expression more semantically felicitous, but does not affect the argument structure.

(1140) *márk la cotú tamík nè pãdã keebá*

[[**márk**=**laa cotú**]_i]_A [tamík = nè]_O [pãdã-dãk-**ée**]_{PRED} = bá
 NAME=NCNJ NAME NAME=NAGT hammer-COS-IPFV.DISJ=SBRD
əmlà ŋó pinrãa dù.
 əm-là(a)]_{SBRD} [ŋó]_S [pìn-rãa-dùu]_{PRED}
 say-NF 1.SG scheme-ISOL-IPFV
 ‘I’_m planning for **Mark and Chotu**_i to beat Tamik.’ (IR, B8:79)

(1141) *ŋó tamík nè pãdã keebá əmlà*

[ŋó]_S [[**ŋ**]_{j/*i}]_A [tamík = nè]_O [pãdã-dãk-**ée**]_{PRED} = bá əm-là(a)]_{SBRD}
 1.SG NAME=NAGT hammer-COS-IPFV.DISJ=SBRD say-NF
pindù.
 [pìn-dùu]_{PRED}
 scheme-IPFV
 ‘I’_m planning (for you/someone_j/*myself_i) to beat Tamik.’ (IR, B8:79)

16.5.4.4. Quasi-S complement of *rĩ* ‘do’

In a use seemingly limited to occurrence with two particular senses of S=A ambitransitive verb *rĩ* ‘do’ – but with very high overall text-frequency and functional value – a clausal subordination in *bã* occurs as a “quasi-complement” of *rĩ* ‘do’ in S or E function. The relevant senses of *rĩ* ‘do’ in this case are ‘happen; be the case’ (as in *əmbã rĩ-káa* ‘ANAP.PADV do-PF’ ‘it happened like that’) and ‘do (in the British sense); be all right/passable; be required’ (as in *agóm = əd rĩ-dùu* ‘speech=TOP do-IPFV’ ‘the sentence is (grammatically) correct/passable’). Clausal subordination in *bã* to *rĩ* ‘do’ is a “quasi-complement” in the sense that it is difficult to show that the subordinated clause is filling a verb-subcategorized complement slot per se, and is not simply occurring as a non-subcategorized adjunct. For example, in (1142), it is conceivable that ‘deer’ is in fact the syntactic subject of ‘do’, with the clausal subordination occurring as an adjunct. Similarly, in (1143) it is conceivable that the S of ‘do’ is something like a second person pronoun, or else a noun ‘person’.

(1142) *əgə hocəɹ...hikú maabə...guli*

[əgə hocəɹ = əə hí-kú-máa = **bə**]_{QCMP} [guli
ANAP.IND deer=TOP die-CMPL-NEG=**SBRD** bullet(<Ind)
âaci maabə rinəmə...
áa-cì-máa = **bə**]_{QCMP} **rì**-nam = əə]
enter-REACH.GOAL-NEG=**SBRD** **do**-NZR:RLS=TOP
'That deer...not having died...the bullet not having entered far enough...(I had to chase it all over the place).' (NyR, MDS 094)

(1143) *tahúm kudûubə rîdə rə?*

[tahúm kú-dûu = **bə**]_{QCMP} **rì**-dó(o) = rée
shellfish fish.using.basket.trap-IPFV=**SBRD** **do**-STAT=PQ
'Can you fish for crawdads (up there) (lit., ≡ 'Would fishing for crawdads do')?'
(AO, CC 102)

The abovementioned syntactic possibilities notwithstanding, it is certainly the case that speakers view sentences like (1143) as being “about” the subordinated proposition – rather than “about” any particular nominal referent as such. This would seem to make it clear that, at a minimum, we are dealing in a semantic sense with a complementation strategy, if not with syntactic complementation per se.

16.5.4.4.1. Quasi-modal of necessity

A seeming semantic extension of the ‘be passable’ sense of *rî*-‘do’ gives the closest fully native Galo equivalent to the Assamese loaned/calqued modal of necessity in *lagí-/lage* (§16.6.2.1). As an “Indic-avoidance strategy”, it has high emblematic value as a construction, but certainly suffers from relatively much lower frequency of usage than the Assamese loan/calque, particularly in the foothills (1144).

(1144) *ŋó bəəm nè meŋkâm dûubə rikà.*

[ŋó bəi-əəm = nè mèn-kâm-dûu = **bə**]_{QCMP} [**rì**-kâa]_{PRED}
1.SG 3.SG-ACC=NAGT speak-FORCEFULLY-IPFV=**SBRD** **do**-PF
'I had to push him (to do it).' (MN, OL23:125)

Sentences such as (1144) are understood as having a strong ‘necessity’ overtone, but possibly have, or are at least potentially ambiguous with, a weaker core sense alike to ‘it *did* to *x*/was considered reasonable/passable to *x*’. Note also that negation of the matrix predicate does not indicate *lack* of necessity, but rather indicates that the subordinated proposition simply ‘won’t do’ (1145); although necessity to *not* do something can be

expressed through negation of the subordinated clause predicate (not shown), it is *not* possible to directly negate the semantic ‘necessity’ operator in this construction (i.e., to state that it is *not necessary* to do something). This fact suggests that while useful as an alternative in some cases, this construction has not in fact grammaticalized a true modal usage, and probably does not represent a true (or realistic) native alternative to the Assamese-derived modal in *lagí-/lage*.

(1145) *aadûu bô rimà!*

áa-dûu = bô rî-máa

enter-IPFV=SBRD do-NEG

‘It wouldn’t be a good idea to go (into the outhouse, since there’s a beehive hanging there)!’ (MN, OL11:80)

16.5.4.4.2. Emergence of subjunctive

In a certainly recent and frequently-exploited case of desubordination, a *subjunctive-like* construction has developed through deletion of matrix verb *rî-* ‘do’ in the sense ‘do (British sense); be passable’. Clearly capitalizing on the hypothetical semantics of other types of clausal subordination, a “stand-alone” clausal subordination in this condition has the basic sense ‘that [CLAUSE] should be the case’.

In a few cases, the matrix verb can be replaced with little change in meaning, as in (1146); a sentence originally uttered with no matrix verb. When asked, the speaker responded that he was “saying it short” by leaving the matrix verb off and felt it was “more correct” to include it; note also the seeming transference of the ‘be necessary’ sense of *rî-* ‘do’ discussed in §16.5.4.4.1.

(1146) *ηυηηə padûubə (rîdû).*

ηυηη = əə pá-dûu = bô (rî-dûu)

1.DL=TOP chop-IPFV=SBRD (do-IPFV)

‘(It would do) for we two to cut it.’ (IR, OL17:55)

In other cases, the “subordinate” clause seems clearly to be exhibiting main clause-like status. In (1147), note the occurrence of clause-final hortative particle *káa* ‘HORT.ADVS’, which ordinarily occurs as a predicate enclitic. A consultant later informed me that although it would be possible to include an imperative matrix verb in *rî-* ‘do’ (preceding the hortative particle), the sentence was probably “better” as attested.

Accordingly, in such cases it would seem preferable to view the “subordinated” clause in *bé* as, in fact, a main clause in subjunctive mood.

(1147) *məəpɛ́ məəcɔ́ kumaabé kâ!*

məə-pɛ́ məə-cɔ́-kú-máa = **bé** káa = ^
 think-OBJECTINGLY.1 think-OBJECTINGLY.2-CMPL-NEG=**SJNC** HORT.ADV=EMPH
 ‘Don’t y’all go mindin’ now!’ (MN, OLB4:122)

Finally the subjunctive in *bé* is very frequently used to ask *rhetorical questions*, a use which would not appear to admit re-introduction of an erstwhile matrix verb into the syntax (1148)-(1149).

(1148) *acínəm jêə “má” əmdəbɛ́!*

acín = əm jêə máa əm-dó(o) = **bé**
 cooked.rice=ACC who no say-STAT=**SJNC**
 ‘Who would say no to rice?’ (IR, OLB4:101)

(1149) *“hó doopí poolò mook hokkə; nôkə bolò jôomb*

hó doopí poolò mookó hokkə = əə nó-kə bolò jôombə
 1.SG sun moon place SPRX.ABL=TOP 2.SG-GENDST.LOC.DOWN how
aadəbɛ́?”

áa-dó(o) = **bé**
 come-STAT=**SJNC**
 ‘I’m from the Spirit World here; how could I/how might I be expected to go down (to the world of Man) with you?’ (NyPB, LAT 173)

16.6. Complementation

16.6.1. Overview

The present section discusses complementation types and strategies, in the structurally/typologically-oriented senses developed by Dixon (2006).³¹⁹

Complementation is not particularly rich in Galo, seemingly due to two principal factors:

First, while in some languages many *secondary concepts* (concepts which stand in relation to other concepts or propositions) such as ‘want (to do/obtain something)’ and

³¹⁹ To summarize only briefly, a clause is a “complement clause” *if and only if* it stands as an argument of a verb, and (in doing so) satisfies the subcategorization requirements of that verb (i.e., it is a core argument, in the sense developed in §14.1). A “complementation strategy” describes a looser periphrastic (but possibly in some way marked) construction which resembles complementation in some more functional sense, but which does not satisfy the conditions stated above.

‘try (to do something)’ are expressed as lexical verbs or auxiliaries, in Galo they usually occur as *predicate derivations* (§11.2). However, see below for at least one Indic-derived exception to this general state of affairs in Galo.

Second, while in some languages information related to the *epistemic status* of propositions is handled lexically, often via complement clause-taking verbs such as ‘suppose (that something is the case)’ or ‘believe (that something is the case)’, in Galo it is most often handled via *clause-final particles* with propositional semantic scope (§13.3).

16.6.2. Complement clauses

16.6.2.1. Modal complement of necessity/obligation in *-pə lagí-/lage*

Together with a number of other Tani languages, Galo exhibits a modal construction of necessity/obligation in *-pə lagí-/lage* which represents one of the few very robust examples of well-assimilated loaned and, potentially also, calqued material from an Indic language. Given the semantics involved, it seems very likely that the construction initially developed in the Tani languages in the context of trade.³²⁰ In this construction, the most frequent modal operator *lagí-* is derived from the non-final form of the Assamese verb root *lag-* ‘want; need; attach/affix’, *lag-i*. In Galo, *lagí-* also occurs as a lexical verb meaning ‘want/need/desire (something)’; in this sense, it is capable of taking a common nominal O argument construed as a concrete wanted, needed or desired entity (1150).

(1150) *jòo agér go rîdâk kòm...rikó rîlâa cîn, ôpòəm*

jòo agér = go rî-dakkòm rikó rî-laacîn [opòo = əəm]o

what work=IND do-CONC field work-CONC liquor=ACC

lagidú...

[lagí-dùu = ́]PRED.TR

want/need-IPFV=NF1

‘Whatever work we do...should we cultivate, we need opo.’ (LN, OPO 010)

³²⁰ Given the relative overall lack of well-assimilated Indic lexicon and grammar in the Tani languages, this very robust exception represents a critical point of reference in any reconstruction of the (pre-)history of Tani-Indic contact. Although it seems clear that the construction occurs widely in Tani, the extant sources are not sufficiently detailed to enable us to determine whether the construction may be dated to a particular historical stage, or whether it may have been repeatedly, and independently, innovated in different Tani languages. Further research into this question would be of very high cross-disciplinary value.

When used as a modal verb with the sense ‘want/need (something to happen)’, the O argument slot is filled by a predicative *complement clause*. In this construction, the complement clause predicate is usually uninflected, and is obligatorily marked by a proprietary nominalizer *-pə* ‘CTZR:IRR’, which may be suffixed directly to a verb root (1151) or derived verb stem (1152), as well as to a predicative adjective (1153). Complement clause predicates inflected in irrealis *-rə* ‘IRR’ have only rarely been attested (1154); no other predicate inflections seem to be allowed. Unlike a common nominal O argument, the complement clause is not case-marked.³²¹

(1151) *ôm-ôrə gotú nênpə lagí dù.*

[ômə-orə = go tu nênpə]_{COMPL} [lagí-dùu]_{PRED}
 daughter-son=IND RFOC(<Asm) progenerate-CTZR:IRR **want/need**-IPFV
 ‘He **needed to** have children.’ (NyPB, LAT 006)

(1152) *“iikâapə lagí dù” əmlâa jù.*

[i-kâa-pə]_{COMPL} [lagí-dùu]_{PRED} óm-lâa juu
 descend-TENT-CTZR:IRR **want/need**-IPFV say-NF REP
 “‘We’ll just **have to go** (down and) find out,” he said.’ (TB, OAM 259)

(1153) *ləpâapə lagè.*

[ləpâa-pə]_{COMPL} [lage]_{PRED}
 middle-CTZR:IRR **want/need**-IPFV
 ‘One **should be** in the middle (not too much this way, not too much that).’ (lit., ‘people **need to be** in the middle’) (KN, OLB2:33)

(1154) *pakâa rəkú pəlagirə.*

[pá-kâa-rə-kú-pə]_{COMPL} [lagí-rə]_{PRED}
 chop-TENT-IRR-CMPL-CTZR:IRR **want/need**-IRR
 ‘We’ll **have to** try to chop it (open).’ (MN, OLB4:113)

The origin of the complementizing suffix *-pə* ‘CTZR:IRR’ may be in PTB nominalizer **pa* (LaPolla 2003), a form which, while it has widespread reflexes in other TB languages, is but sparsely attested in Galo. In complementizing function, it derives a clause with *irrealis semantics* which may be consonant with ‘Uncertainty epistemic

³²¹ Since only referential O arguments are case-marked in Galo (§14.3.2), and an irrealis complement of necessity/obligation is quite obviously non-referential, this fact should not be too surprising.

particle *pə* ‘UCRT’ (§13.3.2.1.3; also see §16.6.2.2).³²² There is a possibility that the entire construction represents a calque on the Assamese modal of necessity, whose form may be schematized as $[[V-bə]_{\text{COMPL}} [lag-]_{\text{VT}}]$ (in which *-bə* is the Assamese subordinating nominalizer). However, given a plausible Tani-internal etymology it seems unwise to suppose Galo *-pə* ‘CTZR:IRR’ to itself reflect Assamese *-bə* – a possibility which is, in any case, phonologically less than plausible.

In most attestations, the modal verb has been inflected like any other final predicate, as in (1151)-(1152). Sometimes, a speaker may choose to present a form which is inflected (more or less) according to an Assamese predicate inflectional paradigm; most often, such forms will be in the Assamese third person present *-e*, as in (1153) (for imperfective predications) or third person past imperfective *-is-il-e* (for perfective predications). Such formations are far more common in Assamese contact areas, and are considered poor form by many Galo speakers; certainly, Assamese-inflected forms represent a minority of mentions in my corpus, with the majority of attestations following native Galo inflectional paradigms (as in (1150)-(1152) and (1154)).

Complement clauses in *-pə* ‘CTZR:IRR’ obligatorily share the *same subject* as the higher clause. The complement clause subject is also obligatorily *ellipsed*. Thus, while it is not possible in Galo to express a sentence with the sense ‘I need him to go’ using the modal of necessity in *lagí-*, it is possible to, for example, causativize the complement clause predicate to form an expression like ‘I want to send him away’, etc.

The prototypical form of the Galo modal of necessity/obligation construction is schematized in Figure 16.10.

$[[A_i][\emptyset_i \text{ PRED-}pə]_{\text{COMPL}} [lagí\text{-PINFL}]_{\text{PRED}}]$

Figure 16.10 – Prototypical structure of the modal of necessity construction

16.6.2.2. Complement of purpose and intention in *-lapə*

A complement clause of purpose or, more often, intention whose predicate is marked in a dedicated complementizing suffix *-lapə* ‘CTZR:PURP/INTN’ occurs in one sense

³²² Note, however, that epistemic particle *pə* ‘UCRT’ cannot follow an uninflected predicate, meaning that these two forms are not synchronically relatable (whatever the diachronic facts).

of the polysemous verb *məə*- ‘think’. As a nominal object-taking verb, *məə*- has the senses ‘think (actively, about an idea); think/reckon/have an opinion (regarding something); like/love (someone); want (something)’. Sense 1 ‘think (about an idea)’ also licenses an appositional complementation strategy, discussed in §16.6.2.3 (cf. also §9.2.2.4.2). The complement of purpose and intention in *-lapə* ‘CTZR:PURP/INTN’ seems to be an extension of Sense 2 ‘reckon’, and entails a proposition regarding the subject’s own directly-experienced opinions or mental state. A complement clause in *-lapə* ‘CTZR:PURP/INTN’ exhibits obligatory complement clause-main clause *subject-coreferentiality*; seemingly, this would relate to the fact that it is not possible for an individual to directly experience the thoughts or intentions of another individual (1155)-(1156).

(1155) *nóm ŋó iza gôgmo lapə məənəmé.*

[nó-m ŋó_i izzàa gók-mò-**lapə**]_{COMPL} [Ø_i]_A [məə-nam]_{PRED.NZD} = ee
 2.SG-ACC 1.SG now call-CAUS-CTZR:PURP/INTN think-
 NZR:RLS=COP.PFV
 ‘I_i was just thinking of Ø_i having you called (for a meeting, but here you are).’
 (MN, OLB3:80)

(1156) *caarûu lapə məəré...caalâa rə.*

[Ø_i càa-rûu-lapə]_{COMPL} [Ø_i]_A [məə-rə]_{PRED} = əəm càa-là(a)-rə
 ascend-DEF-CTZR:PURP/INTN think-IRR=ACC.TSUB ascend-ABIL-IRR
 ‘Should **they**_i definitely want Ø_i to move in, they’ll be able to.’ (IkR, HC 019)

Although it seems clear that the second formative of *-lapə* ‘CTZR:PURP/INTN’ is relatable to complementizing suffix of necessity and obligation *-pə* ‘CTZR:IRR’ and/or a cognate form (§16.6.2.1), the provenance of the initial formative [la] is uncertain. While it may be ultimately derived from Non-final suffix *-là(a)* ‘NF’, in its present form it follows different principles for its phonetic realization, suggesting non-continuation of any synchronic relationship. Namely, although exhibiting the expected phonetic reflex of *-là(a)* ‘NF’ in third syllable position [la], in second syllable position the expected phonetic reflex [laa] does not occur; instead, we find [l^ə] (1157); for discussion of position-based alternations of the Non-final suffix, see §16.4.2.

(1157) *ηό êz alígo râpə məənəmá.*

[ηό]_A [ezə-alí = go râ-**lapə**]_{COMPL} [máə-nam]_{PRED.NZD} = əə
 1.SG clothing-new=IND buy-CTZR:PURP/INTN think-NZR:RLS=COP.IPFV
 ‘I was thinking I’d buy some new clothes (when we go into town).’ (MN, OL19:3)

As in a modal complement of necessity/obligation in *-pə* ‘CTZR:IRR’, the complementizer of purpose and intention *-lapə* ‘CTZR:PURP/INTN’ almost always suffixes directly to an uninflected predicate stem, although complement clause predicate inflection in Irrealis *-rə* ‘IRR’ is also occasionally attested.

Although usually occurring without any additional marking, it is evidently possible for a complement of purpose/intention in *-lapə* ‘CTZR:PURP/INTN’ to be marked in Locative *lo* ‘LOC’. Consultants suggest that the event presented in a Locative-marked complement clause is viewed as relatively *less likely* to come about. The difference an unmarked and locative-marked complement clause of purpose/intention may be roughly (certainly not perfectly) conveyed via English *thinking of/about going* – in which a real possibility of going is considered – versus *thinking on going* – in which going is considered in the abstract rather than as a real possibility (1158)-(1159).

(1158) *áam paapəkəm ηό*

[áa-m paapək = əəm ηό
 DST.SLEV-ACC banana.flower=ACC 1.SG
bəərûu kuləpə məəbé.
 bəə=rûu=kú-**lapə** máə-bée
 carry/hold=CERT=CMPL-CTZR:PURP/INTN think-EPF
 ‘I was thinking **of** taking the banana flower (but then changed my mind, or for some other reason it didn’t happen, although it was a possibility).’ (MN, T16:20)

(1159) *áam paapəkəm ηό*

[áa-m paapək = əəm ηό
 DST.SLEV-ACC banana.flower=ACC 1.SG
bəərûu kulə pəlò məəbé.
 bəə=rûu=kú-**lapə = lo**] máə-bée
 carry/hold=CERT=CMPL-CTZR:PURP/INTN=LOC think-EPF
 ‘I was thinking **on** taking the banana flower (knowing well that it was impossible, since it was completely out of reach).’ (MN, T16:20)

The prototypical form of the complement of purpose and intention in *-lapə* is given in Figure 16.11.

[(A)_i][Ø_i PRED.STEM-*pə*]_oPRED][*məə*-PINFL]]

Figure 16.11 – Prototypical form of the complement of purpose and intention in *-lapə*

16.6.2.2.1. Emergence of conjunct/disjunct intentional inflection

Through what seems to be a fairly well-advanced process of desubordination in which the main clause predicate in *məə*- ‘think’ is systematically ellipsed, *-lapə* ‘CTZR:INTN’ seems to have further developed functionality as a modal inflection of intention (also discussed in the more general context of predicate inflections in §12.4.2.8). In some uses, the matrix predicate may or may not be mentioned, with little difference in meaning. (1160) is one such example, in which a matrix predicate *məə-dùu* ‘think-IPFV’ could occur clause-finally as in (1161), with the translation remaining the same. In such examples, my consultants often claim that the matrix verb is *underlyingly* present, but has been ellipsed due to “speaking shortly”.

(1160) “*áo gaddə, ɲó...agə eekubá, ihigò*

aò gadə = əə ɲó agə = ee = kú = bá(a) isì = go
 child group=TOP 1.SG hot-COP.PFV=CMPL=PFV.DRCT water=IND
huttâa lapə.”

hú-tà(a)-lapə

wash.body-MOT-INTN

“Hey boys,” (he said to the Paadam) “I’ve gone and gotten all hot, I **reckon on** going to take a bath.” (TB, OAM 293)

(1161) “*áo gaddə, ɲó...agə eekubá, ihigò*

aò gadə = əə ɲó agə = ee = kú = bá(a) isì = go
 child group=TOP 1.SG hot-COP.PFV=CMPL=PFV.DRCT water=IND
huttâa lapə məədù.

hú-tà(a)-lapə

məə-dùu

wash.body-MOT-CTZR:INTN **think-IPFV**

“Hey boys,” (he said to the Paadam) “I’ve gone and gotten all hot, I **reckon on** going to take a bath.” (elicitation based on TB, OAM 293)

In other cases, it may be awkward or even impossible to “re-insert” the matrix verb without a change in meaning. In (1162), note the occurrence of Assurance particle *laa* ‘ASSR’ following a clause in *-lapə* ‘CTZR:INTN’. As discussed in §13.3.2.3.1, Assurance particle *laa* ‘ASSR’ is a *copula clause* operator, and should ordinarily never occur

following a final clause. The development in this case seems to be made possible via deletion of a nominalized predicate under copula scope *məə-dùu-nà = əə*

‘think-IPFV-NZR:SUB=COP.IPFV’. However, re-insertion of the nominalized predicate in this case *does* cause a semantic difference: namely, the sentence is now be understood as assuring the addressee of the reality of the speaker’s *thinking* (about his intention), *not* about the *contents* of his intention per se (1163).

(1162) *ŋó inləpə là.*

ŋó ín-lapə laa
1.SG go-INTN ASSR
‘You’ll see, I **will** go.’ ZR, C2:39

(1163) *ŋó inləpə məədùu naalà.*

ŋó ín-lapə məə-dùu-nà = əə = laa
1.SG go-INTN **think-IPFV-NZR:SUB=COP.IPFV=ASSR**
‘You’ll see **that I believe that I will** go.’

Intriguingly, matrix predicate ellipsis in *-lapə* ‘CTZR:INTN’ appears to have given rise to a novel *conjunct/disjunct* marking pattern, using morphology which is completely unrelated to the seemingly older conjunct/disjunct patterns discussed in §12.5. In this pattern, marking in *-lapə* is possible in *declarative* clauses with a *first person subject* and *polar interrogative* clauses with a *second person subject* only (1164)-(1169).

(1164) *ŋó inləpə.*

ŋó ín-lapə
1.SG go-INTN
‘I will go.’

First person declarative

(1165) **nó inləpə.*

nó ín-lapə
2.SG go-INTN

***Second person declarative**

(1166) **bɛ̃ inləpə.*

bɛ̃ ín-lapə
3.SG go-INTN

***Third person declarative**

(1167) **ŋó ín-lapə pərə?*

ŋó ín-lapə ree

1.SG go-INTN PQ

*First person interrogative

(1168) *nó ín-lapə pərə?*

nó ín-lapə ree

2.SG go-INTN PQ

‘Will you go?’

Second person interrogative

(1169) **bɛ́ ín-lapə pərə?*

bɛ́ ín-lapə ree

3.SG go-INTN PQ

*Third person interrogative

The logic behind this development seems quite clear: inasmuch as the source construction, a complement clause of intention in *-lapə*, observes a strict *same-subject constraint* with matrix verb *mə́ə* ‘think’ (§16.6.2.2), and inasmuch as it is not possible in Galo to make a direct statement regarding the thoughts of another person (no more than it is possible to ask another person about one’s own thoughts),³²³ the pattern which was offered up *by* the source construction for reanalysis was precisely the one which is now exhibited by the target.³²⁴

Conjunct/disjunct patterning in the intentional in *-lapə* may be overridden, in effect, with the help of the speech-reporting/anaphoric linking verb *ə́m* ‘say’. In (1170), the notional subject of *zùr-lapə* ‘perform.ceremony-CTZR:INTN’ ‘will perform a ceremony’ is coreferential with the (non-first person-coreferential) noun phrase *abó-taníí* ‘the father of mankind’. This is possible inasmuch as *abó-taníí* is the syntactic subject of *ə́m* ‘say’, while *toguəm zurlapə* ‘will perform the mithun-sacrificing ceremony’ has the syntactic status of a *speech report* argument of *ə́m* with an *internal first person subject*. At the same time, my consultants are quite clear that no independent event of ‘saying’ is

³²³ Thus, for example, while (1156) in §16.6.2.2 is possible because it represents a *speculation* regarding the thoughts of another person, a simple declarative form of that same sentence would not be possible.

³²⁴ If it is accurate, this analysis would appear to have implications for our understanding of the “functional motivation” of conjunct/disjunct marking patterns. That is, while the intentional inflection in *-lapə* might appear superficially to be *motivated* by a synchronic function of marking “firsthand” or “direct” knowledge (i.e., in agreeing only with first and second persons in statements and questions respectively), this would turn out *in fact* to be a complex property of the source construction, which is simply inherited *as a pattern* by the target construction via desubordination.

presented here, and generally disagree with the sense of the putatively “literal” translation given in (1170).

(1170) *áb-taní...əgə...toguəm,*

[**abó-taní**]_is əgə [Ø]_i togùu = əəm
father-mankind HEST mithun.sacrifice = ACC
zûrləpə əmnəmə, bîi...

zûr-**lapə**]_E [**əm**-nam = əə]_{PRED.NZD} bîi
perform.ceremony-CTZR:INTN say-NZR:RLS=TOP 3.SG

‘**Abo Tani**_i...so...being that **he**_i was to perform the mithun-sacrificing ceremony, he (started chanting).’ (lit., ≅ ‘**Abo Tani**_i, **saying** “**I**_i will perform the mithun-sacrificing ceremony”, he...’) (MK, TT 038)

For additional discussion of speech reporting and the linking functions of *əm*-based terms, see §16.6.2.3 and §16.7 respectively.

16.6.2.2.2. Emergence of predictive particle

When following a final predicative or appositive clause, *lapə* has a *predictive* sense, and is seemingly not subject to any person-based constraints. It is not yet known whether this usage has arisen as a functional extension of the stem-based inflections discussed in §16.6.2.2-§16.6.2.2.1 (perhaps through reanalysis of the suffix as an independent particle), or whether *lapə* ‘PRD’ perhaps has an independent etymology. The sense of *lapə* ‘PRD’ is one of *predictive assertion* that the marked event will come about; note that neither the S argument of (1171) ‘my mother’ nor the (ellipsed) CS argument of (1172) ‘those who will come’ are first person-coreferential.

(1171) “*nigbó lo, ŋók anə...ogò...mərə “jóogo bərə” əmlà*

ník-boolo ŋó-kə anə ogò mərəáa jòo = go bəree əm-là(a)
punch-COND 1.SG-GEN mother TMP HEST what=IND CJEC say-NF

lomrə, gərəp rəlapə là.” əgəm menkà.

lòm-rə gə-rəp-rə = **lapə** laa əgə-m mèn-káa
be.shocked-IRR be.disposed-UPRIGHT-IRR=**PRD** ASSR ANAP.IND speak-PF

“‘When you poke her, my mother...then...you know, she’ll be shocked, thinking “what on earth is this,” and so she’ll get up.’ That’s what he said.’ (MK, TT 077)

(1172) *əmbə rɪnəm əŋəkə...aŋgə...hobɪn-hoə*

əmbə rɪ-nam = əə ŋəkə-kə aŋ = gə hobɪn-hoə
ANAP.PADV happen-NZR:RLS=TOP 1.REFL-GEN self=GEN goat-cattle
ɲum kulə pəŋŋə.

ɲum kú = lapə = ɲo = əə

DLMT CMPL=PRD=CEXP=COP.IPFV

‘So, (if anything may come to destroy our fields) it will only be our own livestock.’ (LN, GMW 079)

16.6.2.3. “Direct” contents of speech and thought

“Direct” contents of speech and thought are expressed via an unmarked clause which may be analysed either as apposed to or as embedded within a higher, main clause (in the latter case, as an argument in some sense; additional discussion will be found below). When occurring in relation to the S=A ambitransitive verbs *məə* ‘think’ and *mèn*- ‘speak’, the “contents clause” may be *postposed*, as in (1173)-(1174).

(1173) *ɲun məədù tē...dɪp abúugo doodù, əi.*

[ɲunù **məə**-dùu] [tə dɪpə abúu = go dóo-dùu] əi
1.PL **think**-IPFV DST.UP PLACE river=IND LOC.EXIS.INAN-IPFV ETAG
‘[We **think** (that the reason for naming this village “Dipa” is that)] [up there...there’s a Dipa River], right?’ (LN, MF 128)

(1174) *əmbə rɪnəmə, kohúkəm mēntə kú... “nôk*

əmbə rɪ-nam = əə [kohúk = əəm **mèn**-tó-kú] [nó-kə
ANAP.PADV happen-NZR:RLS=TOP dried.oko.leaf=ACC **speak**-PFV-CMPL2.SG-GEN
áo gaddə káanekə” i.

əd gadə = əə káa-nək = əə] əi

child group=TOP look-BAD=COP.IPFV ETAG

‘[So then, he **said** to the dried-up leaf,] [“your children are ugly,”] eh.’ (NyPB, LAT 012)

When occurring in relation to the verb *əm*- ‘say; tell’, the “contents clause” is *internal* to the main clause, and precedes the verb (1175).

(1175) *ɲó “má” əmdée koé kaamá!*

[ɲó]_A [máa]_E [**əm**-dée-kò]_{PRED.NZD} = ei káa-máa
1.SG no **say**-POSB-NZR:LOC=EMPH have/exist-NEG
‘I’ve got no way [I can say] [“no”]!’ (IR, OLC1:94)

Unmarked clause-internal occurrence is also possible for the direct contents of *məə-* ‘think’ (1176).

(1176) *má, ɲóm takâa duubʳè məəɾʳmó nà.*

máa [ɲó-m takâa-dùu = bəree]_E [**məə**-nam]_{PRED.NZD} = əə na
 no 1.SG ask-IPFV=CJEC **think**-NZR:RLS=COP.IPFV DECL
 ‘Nothing; I had thought [perhaps you were asking me] (that’s why I replied to
 your question to someone else).’ (DR, OLC2:47)

However, unmarked clause-internal occurrence is *not* possible for the direct contents of *mèn-* ‘speak’ *unless* it is conjoined periphrastically by a non-final form of *ém-* ‘say; tell’; for discussion, see §16.7.

The argument status of “direct” contents of speech and thought is somewhat difficult to determine. Certainly, post-predicate occurrence as in (1173)-(1174) is highly unusual for predicate arguments, and yet this is the statistically most common position for direct content reports. And, while at least some types of direct content reports appear to occur clause-internally, such forms are not generally replaceable by pronouns in the same syntactic functions. Finally, however, note in (1177) that the speaker changes speech verbs between the first and second clauses despite the lexical semantics of the speech event remaining quite clearly unchanged. This turns out to be necessary precisely because of the *change in complement type*: while *ém-* ‘say; tell’ is subcategorized for an unmarked clausal speech report complement (in addition to a common nominal S), *mèn-* ‘speak’ (in its transitive sense of speaking to an addressee) is subcategorized for a common nominal A and O.

(1177) *nó “gaddə” əmrəm, kəbbəm menmāa rə.*

[[nó]_A [gadə = əə]_E [əm-rə]_{PRED = əəm}]_{TSUB} [kəbə = əəm]_O [mən-māa-rə]_{PRED}
 2.SG group=COP.IPFV say-IRR=ACC.TSUB other=ACC speak-NEG-IRR
 ‘If you say [“gaddə”] (in that sentence position), you won’t say [anything else]
 (following it).’ (KN, OLB2:21)

In sum, direct contents of speech and thought appear to qualify as arguments (hence as “complement clauses”), with the caveat that they observe non-canonical marking and behavioural patterns in most cases. It is perhaps most useful to consider their behaviour in terms of the overall construction in which they appear (Figure 16.12-Figure 16.13).

[CLAUSE HEADED BY TYPE 1 SPEECH/COGNITION VERB],[REPORT]

Figure 16.12 – Prototypical form of a Type 1 “direct contents” report construction

[S][REPORT][TYPE 2 SPEECH/COGNITION VERB]

Figure 16.13 – Prototypical form of a Type 2 “direct contents” report construction

16.6.3. Complementations strategies

16.6.3.1. Framing event nominalizations

“Framing” event nominalizations in *-nam* (§15.3.2.4) are sometimes used to frame information which has been *seen* or *thought about* by an actor. In a Framing event nominalization, while the focal clause is not in any way marked as a syntactic dependent of the supporting clause, in an example such as (1178) it is clear that the information contained in the main clause represents the contents of ‘seeing’, as expressed in the supporting clause. Functionally speaking, the backgrounding construction may be viewed as a complementation strategy, and was often employed by my consultants when directly translating English or Assamese complement clause structures.

(1178) *kaanəmə...nam^olô jêəcìn duumà.*

[káa-nam = əə]_{FNZN} [nam^o = lo jêə = cìn dùu-māa]_{FINAL.CLAUSE}
 look-NZR:RLS=TOP house=LOC who=ADD stay-NEG
 ‘[(Upon) looking...][(they saw that) there was nobody in the house.]’ (TR, FA 012)

16.6.3.2. Adverbial subordination

Clauses adverbially subordinated in *bó* (§16.5.4), while not usually analysed as a core argument of a complement-taking predicate, may have a complement clause-like *feel* with respect to particular senses of some verbs. In (1179), both the main clause predicate in *rî-* ‘do’ and the immediate lower clause predicate in *káa-* ‘look’ can be analysed as having special senses ‘be *as though*’ and ‘look at *as though*’, in which the ‘resembled’ condition (i.e., the way that something is or appears) is given by an adverbially subordinated clause. Potentially, such senses of *rî-* ‘do’ and *káa-* ‘look’ could be analysed as “extended (in)transitive” senses in which E occurs as an adverbially subordinated clause complement. However, inasmuch as the morphosyntax involved is no different from any other case of adverbial subordination, a decision has been made to analyse examples like (1179) as complementation strategies rather than as complement clauses in the strict sense.

(1179) *mané níi duubâð kò garîî bó*

mane [[[[[*níi*] dùu-bâð-kò]_E garîî]_{PRED = bó}]_{ADV}
 that’s.to.say(<Asm) person stay-HAB-NZR:LOC resemble=SBRD
kaadûu bó rîdù.

káa-dùu]_{CLAUSE = bó}]_{ADV} *rî-dùu*
 look-IPFV=SBRD do-IPFV

‘I mean, it looked as though people were really living there (lit., ≡ ‘[It was as though [they looked at it as though [it resembled a place where people habitually stayed]]].’)’ (IR, FA 028)

16.7. Linking functions of *ém*-based terms

As in other Tibeto-Burman languages, as well as other more-or-less clause-chaining languages elsewhere in the world (Saxena 1988; Heine and Kuteva 2002; Noonan 2006), Galo has developed several weakly grammaticalized *linking functions* of terms headed by the speech verb *ém-* ‘say; tell’. As a preliminary to the discussion and examples, it will be useful to review the attested senses of *ém-*, and the types of argument structures with which they are associated (Table 16.2).

(1181) *izì jêə dî aadée kunnà əmlâa mæədù.*

[izì jêə dî áa-dée-kú-nà = əə] **ə́m-là(a)** [máo-dùu]
 now who WOND come-PROS-CMPL-NZR:SUB=COP.IPFV **say-NF** **think-IPFV**
 ‘[“Now who could it be,”] (thus)] they **thought.**’ (IR, FA 036)

(1182) *ə́m bîi hocérə əmlà cenmâ*

[əəm bîi hocér = əə] **ə́m-là(a)** [cèn-máa = ̀]
 ANAP.ACC 3.SG deer=COP.IPFV **say-NF** **know-NEG=FI**
 ‘He didn’t **know that** [it was a stag].’ (MN, 16:117)

(1183) *probləmɡò əmlà kaapêk dù.*

[probləm = go] **ə́m-là(a)** [káa-pêk-dùu]
 problem(<Eng)=IND **say-NF** **look-PERFECTLY-IPFV**
 ‘They clearly **see that** [it’s a problem].’ (MN, OLC2:45)

In some such uses, *ə́m-là(a)* ‘say-NF’ is heavily reduced; at the very least, it tends to lack a glottal stop onset, and may be reduced segmentally to the extent that it may be realized only as [m]. This would tend to suggest that development as a pure complementizer may be incipient.³²⁵ In contemporary Galo, however, my consultants usually insist on reconstructing the full form in clear speech (1184).

(1184) *kəbə almáa nə ní gaddə ɲóm*

kəbə alə-máa-nà níi gadə = əə ɲó-m
 other good-NEG-NZR:SUB person group=TOP 1.SG-ACC
dəmlé pə́ə́m rítò.
 də́m-lapə = **ə́m-là(a)** rì-tó
 beat-CTZR:INTN=**say-NF** do-PFV
 ‘Some other bad folks were making as though to beat me.’ (lit., ‘**saying** they would beat me, did that’) (KN, B2:21)

The nascent complementizing function of non-final *ə́m-là(a)* ‘say-NF’ has already developed some additional functions. For example, in (1184) we see that a complement of purpose or intention in *-lapə* ‘CTZR:PURP/INTN’ appears to occur in relation to matrix verb *rì-* ‘do’ – ordinarily an impossibility, inasmuch as a complement of purpose/intention

³²⁵ Note also the potentially very confusing near-homophony with Accusative enclitic *əəm* which is taken on by reduced *ə́m-làa* in a clause-linking function. Recalling that Accusative *əəm* has clause-linking functionality of its own (§16.4.3.2), it would be an extraordinary thing indeed if, over time, the two forms might be seen to have thereby merged, probably quite inadvertently!

in *-lapə* is a proprietary argument of *mə-* ‘think’ (§16.6.2.2). This is made possible by means of syntactic licensing of the complement of intention in *-lapə* as a *speech report* under scope of *əm-là(a)* ‘say-NF’ – however, no literal ‘saying’ event is in evidence here.

Additionally, capitalizing on both its capacity for anaphoric reference to clause contents and the implication of *causal linkage* inherent in the non-final construction in general (§16.5.1.1), non-final *əm-* has developed functionality as a marker of *reason*. Such a use can occur in a clause-linking function, as in (1185), or may occur in absence of any following focal clause, in a *postposition*-like use; in (1186), note that *əmlâa* stands *within* the marked focus of a cleft construction, and, accordingly, cannot be analysed as bearing independently on the main clause predicate.³²⁶

(1185) *dorrí...togûu zûrtə rənnà*

[[dór-rí togûu zûr-tà-rə-nà = əə]
 CLF:ANIM-ten mithun.sacrifice perform.ceremony-INCP-IRR-NZR:SUB=COP.IPFV
əmlà...áb-taní...əgə...toguəm,
əm-là(a)]abó-taní əgə togûu = əəm
say-NF father-mankind HEST mithun.sacrifice =ACC
zûrləpə əmnəmó, bî...
 zûr-lapə əm-nam = əə bî
 perform.ceremony-CTZR:INTN say-NZR:RLS=TOP 3.SG
 ‘(In order) to follow all the rules of the ten mithun ritual sacrifice [lit., ‘saying
 “I’ll perform the ten-mithun ritual sacrifice], Abo Tani...so...being that he was to
 follow all the priestly ritual ceremonies, he (started chanting).’ (MK, TT 038)

(1186) *âm-tamí rîmâa dookú əmlâa bərə...*

[amò-tamí rî-mâa-dó(o)-kú **əm-là(a)** bəree]_{FOC}
 paddy-millet do-NEG-STAT-CMPL **tell-NF** CJEC
aamâa doonà.
 [âa-mâa-dó(o)-nà = əə]_{TOP}
 come-NEG-STAT-NZR:SUB=TOP
 ‘Is it **because** the crops will fail [lit., ‘is it **being said** that the crops will
 fail’]...that (people observing a taboo period) don’t go (to the harvest festival)?’
 (MN, WGD 066)

Finally, note in (1185) that functional use of *əm*-based terms is not limited to the non-final form. *əm-nam = əə* ‘say-NZR:RLS=TOP’ (lit., ‘that having been said’) is also very commonly used as an interclausal linking word in discourse-backgrounding function, with

³²⁶ For further discussion of the grammar of cleft constructions, see §9.4.

anaphoric reference and a similarly causal implication, as ‘that being the case/therefore...’.

17. Postscript: The future of the Galo language

The preceding chapters have attempted to sketch some details regarding the present state and historical development of the Galo language. What of its future?

The first and most important thing that must be said is that Galo has every potential to be retained as a healthy, living language, spoken as a first language by a population large enough to sustain it in all its vibrancy, for a very long time into the future. But there is no guarantee that this will happen automatically.

Galo people have thus far proved themselves to be unusually adaptable and forward-thinking, both as individuals and as a deeply coherent society. Prior to embarking on my research, when I met with the eminent anthropologist Prof. A. C. Bhagavati at Gauhati University, Assam (ex-Vice Chancellor of Arunachal University, now retired), I remember him telling me that the Galo people were the most remarkable he had ever encountered in this regard; “only there, among the Galo,” he said, “does one find a *mathematical physicist* whose own *grandfather* had never seen a *wheel*!”³²⁷ Indeed, Galo people have proved exceptionally versatile in state and national politics and education, and now count among their numbers doctors, lawyers, civil servants at the highest local, state and national levels, MAs, PhDs, travel agents, business men and women, writers, democracy activists, and more – *none* of which vocations were found in the Galo area mere decades ago – co-existing with, and very often living under the same roof as, traditional slash-and-burn agriculturists and occasional hunter-gatherers. It is a dynamic mix, and one that – it seems to me, although I am no expert – could serve as a model for how cultural, social and economic change can and should occur in the world: in a resolutely local and community-oriented fashion; connected to the “outside” by roads and wires, and yet relatively free from centrally-imposed planning and “help” from the chattering, unschooled multitudes of modern “developed world” NGOs.

But the very successes in adapting to modern societies and new ways of thinking which so distinguish Galo society also constitute the greatest potential threat to the health and continuity of their language. With government schools still so desperately under-resourced, under-staffed, and thin on the ground, most Galo who are able to do so now send their children to be educated in boarding schools far from their native villages. In boarding schools, they (often under threat of punishment) speak Hindi and English in preference to Galo, and the more successful they are at their studies, the worse many of

³²⁷ The said physicist, Dr. Tado Karlo, is also a masterful speaker of the Galo language and tireless scholar of Galo traditional culture. He has most recently, I am happy to say, also begun to turn his keen scholarly insights to linguistic concerns.

them turn out to be as speakers of Galo. It is difficult to know what to do about this, and Galo parents and their children alike have repeatedly voiced their concerns to me that by seeking socio-economic success in broader India, they may find *themselves* eventually to blame for the degradation and, heaven forbid, gradual extinction of their own language and culture.

Under the circumstances, it seems to me that there is no time in the history of Galo culture which is more pivotal than the present, and no time to be lost in developing means of preserving the Galo language – not as a museum piece or invariant link to the past – but rather as a vibrant spoken and written language, a tool not only for identity-preservation and community-cohesion but also for creative expression, innovation and enrichment of everyday life. Galo people have already begun producing song albums (both traditional and modern), music videos, movies, and documentaries – to this must be added dictionaries, textbooks, cartoon books, novels, local histories, compendia of traditional knowledge, and even bilingual government documents, shopfronts and road signs – all in Galo.

With this vision in mind, the Galo Welfare Society – the principal local representative body of the Galo people – has founded a Language Development Committee, with whom I was fortunate enough to begin working toward the end of my PhD research. Together, we made several changes to a practical Galo orthography which I had been developing together with several of my consultants, and the result was formalized as the official “Galo Script” and published in pamphlet form (not yet seen by me) for free distribution throughout the Galo area. This script is presented below.

Vowels

| Galo | A | I | U | E | O | V | W |
|------------|---|---|---|---|---|----|----|
| | a | i | u | e | o | v | w |
| Paadam | A | I | U | E | O | E | I |
| Devanagari | अ | इ | उ | ए | ओ | -- | -- |
| Phonetic | a | i | u | e | o | ə | ɪ |

Consonants

| Galo | K | G | Q | C | J | X | T | D | N | P | B | M | Y | R | L | S | H |
|------------|---|---|----|----|----|----|---|---|---|---|---|---|---|---|---|-----|---|
| | k | g | q | c | j | x | t | d | n | p | b | m | y | r | l | s | h |
| Paadam | K | G | NG | CH | J | NY | T | D | N | P | B | M | Y | R | L | S | H |
| Devanagari | क | ग | ङ | च | ज | ञ | त | द | न | प | ब | म | य | र | ल | स | ह |
| Phonetic | k | g | ŋ | tʃ | dʒ | ɲ | t | d | n | p | b | m | j | r | l | s/ʃ | h |

Tones³²⁸

| | |
|------------|----|
| Galo | ` |
| Paadam | -- |
| Devanagari | -- |
| Phonetic | ˊ |

Thanks to the earnest patronage of Chief Secretary Tabom Bam, the energetic networking prowess of Superintendent Engineer Bora Ete, the uncompromisingly rigorous scholarship of Dr. Tado Karlo, and the hard (but hopefully also joyful!) labour of Ili Riba, I am happy to say that since formal adoption of the Galo script – and, quite literally, in a matter of only months since my last field trip and the present time of writing – the Galo Welfare Society has already succeeded in developing and publishing not one but three 20-chapter (circa 75 page) Galo language textbooks for classes 1 through 3, which are also now independently funded for introduction in local schools during the Fall 2007 semester. Should these textbooks prove successful, it is certain that other, more advanced volumes will shortly be in the works.

As a supplement to this landmark effort by the Galo Welfare Society, I and several of my consultants have been working for two years now on a Galo-English dictionary, cited in this work as Nyodu, Post et al. (in preparation). This dictionary currently stands at around 4,000 entries, and is slated for an initial local release during 2008. It is hoped that, with community participation, the dictionary will be able to be enlarged and further developed over the coming several years, to better meet the needs of ordinary Galo people as well as Galo and non-Galo research scholars.

In short, there are great challenges ahead, but there is also great potential. Minority cultures and their languages throughout the world are increasingly facing degradation and extinction, and the descriptive linguist often has little option but to regard the future with apprehension and dismay. One cannot help feeling a similar apprehension when one encounters young Galo whose native language is Hindi, who speak English every bit as well as I do, and yet when it comes to speaking Galo, at times struggle to keep up with even me. But the time, it would seem, is right, and if there were ever a people who were equal to the challenge, it is the Galo. With tenacity, and with a little bit of luck, it seems to me that the future of their language could be a very, very bright one indeed.

³²⁸ Low/Tense tones only are marked in Galo Script, with High/Plain words left unmarked. The tone marker is placed either over or preceding a syllable (according to the capabilities of the writing medium), marking the position of a phonological word “pitch peak”. Thus, while in practice resembling a system for marking stress in writing at the sentence level (since High/Plain words are treated as an unmarked “default”), it also has the capacity to consistently represent two-way contrastive lexical tones, as in a dictionary.

Appendix A: Glossary of Roots

The following is a glossary of approximately 1,300 roots, together with a small number of lexemes or other morphemes exemplifying their distribution, and a PT or PG reconstruction (where available). _H designates a High/Plain root, _L designates a Low/Tense root. Roots beginning with an initial fricative are arbitrarily grouped under *h*; they are realized *s* in some word-medial environments (see §3.2.4).

Sort order:

a i u e o ə i k g ŋ c z ɲ t d n p b m l r j h ^H ^L

a

- aa^H** enter/come. **áa-** enter; come; set (of the sun) **-áa** ‘To Here’ **aa-bóo** front side **aa-góo** west **aa-lám** entering point **aa-ró** hind legs *PTs* *vaŋ ‘come’.
- aa^H** tea. **háa** ~ **sáa** tea **aa-líi** red tea **aa-púu** milk tea
- aa^H** some type or property of natural objects. **aa-tár** chanterelle mushroom **aa-pám** fog
- a(a)^H** Distal demonstrative (same level). **áa** Distal demonstrative **a-kə** Ablative demonstrative, ‘same level’ **a-ló** Allative/locative demonstrative postposition, ‘same level’ *PTs* *aa (?) ‘that (demonstrative)’.
- aa^L** loop? **ho-aa** noose **pog-aa** noose
- aa^L** off; away. **-aa** Off; Away
- aa^L** wail. **aa-** wail
- aa^(L?)** heart/chest? **aa-púk** heart **aa-rò** lung **aa-kəə** chest **aa-tə** knot (on a tree) *PTs* *haŋ(-puk) ‘heart’.
- ak^H** branch; trunk. **ak-cəə** branch **ag-nə** stem; trunk **ag-bə** branch **ag-ràa** variety of tree **ko-ak** sheath mouth binding (?) *PTs* *fak ‘branch’.
- ak^H** hook; handle. **ák-** hook something; hang something from a hook **-ák...-púk** Stub/Get Caught *PTs* *fiak ‘hang (against wall)’.
- ak^H** layer. **ák-** layer sheets, especially leaves when stopping up a storage container
- ak^L** angry. **ák-** furious *PTs* *fak ‘angry’.
- ak^L** crow; raven. **pa-ak** raven **ak-ti** flock of ravens **ag-bèe** crow *PTs* *ak ‘crow’.
- ak^L** soybean. **pee-ak** soybean **ag-jàa** fermented soybean
- ak^L** itch. **a-ak** itch(y) *PTs* *fak ‘itch’.
- ak^L** scoop liquid. **ák-** scoop liquid
- an^L** cold. **an-cəi** freezing cold *PTs* *han ‘cold (water)’.
- ap^L** shoot. **ap-** shoot *PTs* *ap ‘shoot’.
- am^H** grain. **am-ée** ripe paddy **am-ò** rice paddy **am-kòo** seed grains **am-cì** flattened rice **am-pèe** sticky rice **am-pə** rice husk **am-bín** uncooked, husked rice **am-búk** popcorn **am-ròo** rice stalks post-harvest **amò-tamfi** crops (lit. paddy-millet)
- ar(ə)^H** render (an animal). **ar(ə)-** render; disembowel
- ar^H** thigh. **ar-báa** thigh **ar-pó** leg haunch *PTs* *far ‘thigh’.
- ar^H** drill. **ár-** drill, as through wood with a knife
- ar^H** glance. **ár-** glance
- a^H** dry-fry. **á-** dry-fry *PTs* *vaa ‘roast in pan without oil/parch’.
- a^H** keep. **á-** keep; put; stow *PTs* *vaŋ ‘set’.

i

- ii^H** bamboo¹. **iikúu** fermented, diced bamboo shoot **iipèe** fermented, sliced bamboo shoot **ii-jùp** fermented, powdered bamboo shoot **iipáa** immature bamboo
- ii^H** tooth. **a-fi** tooth **ii-búu** beak (of a bird) **ii-gám** molar **ii-kúm** numb teeth **ii-tór** bucktooth **ii-túu**

toothless **ii-zúu** front teeth **ii-jáf** gums *PTs* *fii ‘tooth’.
ii^H extend hand. **fi-** extend the hand **ii-túp** barrier to extending the hand
ii^H bask. **fi-** bask **əmà-iikò** hearth *PTs* *fiii ‘warm oneself near fire’.
ii^H last; youngest. **o-ii** last child **ki-fi** younger maternal uncle **jam-fi** last daughter in law **nə-ii** youngest brother’s wife (younger’s perspective) **mo-fi** younger maternal aunt
ii^L last; youngest (alt.). **ta-ii** youngest son **cə-ii** pinky finger **ja-ii** youngest daughter
ii^L blood. **ii** blood *PTs* *vii ‘blood’.
ii^L descend. **ii-** descend
ii^L heavy. **a-ii** heavy *PTs* *fiit ‘heavy’.
ii^L spirit. **u-ii** ghost **uui-agóm** gibberish **uui-oròm** spirits **uui-moorám** blackhead **uui-jaapér-poomìr** kind of moth **uui-ərók** demons **uui-kobúu** long-snouted rat **uui-taín** poison mushroom **uui-aò** magician *PTs* *ju ‘demon’.
ik^H leprosy. **ta-ík** (**hi-mék**) leprosy *PTs* *jit ‘leprosy’.
in^H mushroom; fungus. **ta-ín** mushroom **taín-tarèe** dragonfly **uì-taín** poisonous mushroom **eepik-taín** cow dung mushroom **hìtùu-taín** chanterelle *PTs* *jin ‘mushroom’.
in^H go; walk. **ín-** go **-ín** Forward directional **ze-ín** rag **taín-indáo** late-blooming edible mushroom variety *PTs* *in ‘go’.
in^H civet. **ho-ín** civet (*Viverra zibetha*)
in^L treasure (gold?). **a-ín** treasure **ain-murkòo** money *PTs* *in ‘gold’.
in^L cut on fixed blade. **ín-** cut along a fixed blade
i^H bee; wasp. **i-dùm** variety of wasp **i-ló** bee **i-tə** variety of bee **itúm-gaalùm** giant black bumblebee
i^H big. **ka-í** big **í-** be big (v.c.arg) **i-róm** male boar **o-í** neutral spirits
iK^H penis (reduced form). **iz-zùp** sheathed/uncircumsized penis **il-ló** circumcized penis

u

uu^H awake; shine; be a hole. **úu-** be awake; awaken; be a hole **úu-** shine **-úu** Awake **lo-úu** light **uu-rèi** deep **uu-jáa** shallow **uu-kòo** hole **uu-càa** rising sun **uu-gèe** floor cracks **uucfi-uulif** dim (red glowing) light *PTs* *fiut² ‘awake’.
uu^H back. **uu-gfi** back of the human body **uu-gfr** hunched back
uk^L shout; grunt. **ùk-** shout; grunt **gom-ùk** intonation; phrasing
un^H wound. **u-ún** wound **un-ə** wound (alt. pronunciation) *PTs* *un ‘wound’.
up^H rib(cage). **a-úp** ribs
up^H grope. **úp-** grope *PTs* *hup ‘grobe’.
up^L shatter. **-ùp** Shatter result **ii-jùp** fermented bamboo powder
um^H three. **a-úm** three **úm-** three *PTs* *fum ‘three’.
um^H humid. **úm-** be humid
um^L cook by boiling. **ùm-** cook by boiling
um^L grunt. **ùm-** grunt
um^L mouthful. **ùm-** hold something (liquid) in the mouth **ùm-** Clf: Mouthful **a-ùm** mouthful
ur^H carry/move lengthwise; beam. **úr-** carry/move lengthwise **ur-póo** breadthwise crossbeam **ur-jàr** lengthwise crossbeam
ur^L collect. **ùr-** collect
u^H boil (vi.). **ú** boil (vi.) **ùm** boil (vt.) *PTs* *fu ‘boil (vi.)’.
u^H fat/grease. **a-ú** fat/grease *PTs* *fu ‘fat/grease’.
u^L spicy; chili taste. **a-ù** spicy hot; chili taste

e

ee^H bind. **ée-** bind
ee^H ripe paddy. **ée-** strip-harvest ripe paddy **am-ée** ripe paddy
ee^L excrement. **eè** excrement **èe-** excrete **ee-kò** latrine **ee-gòm** defecate improperly **ee-pik** dung **eepik-taín** cow dung mushroom **ee-jùu** anus *PTs* *ee ‘excrement’.
ee^L bronze/brass. **nam-èe** musty odor **bor-èe** brass platter
ek^H stomach. **a-ék** stomach
ek^L millet (pearl, foxtail) **ta-èk** millet (pearl, foxtail) *PTs* *jak ‘millet (fox-tail)’.
en^H raise; lift; heft. **-én** Raise **a-én** sheath strap **gə-én** loom backstrap **o-én** be high

en^L feel. **èn-** feel **em-mì** like; feel kindly disposed toward (Pugo) *PTs* *fian ‘feel’.
eK^H write. **ék-** write *PTs* *fat¹ ‘write’.
eK^H twist. **ék-** twist; wring *PTs* *vet ‘twist; turn’.
eK^H scoop. **ék-** scoop

O

oo^H tend. **óo-** tend; raise (pet, animal); cultivate
oo^H distant; far **oo-dòo** distant/distance **o-én** high **o-ì** low **oo-dóm** high, as of a mountain *PTs* *fiot² ‘tall/high’.
ok^H scrape; shovel with hand; heaping handful. **ók-** scrape; bind; tie up **ók-** Clfq: Heaping Handful **a-ók** heaping handful **ok-sìr** hang (a person) *PTs* *fiok ‘scratch (an itch)’.
om^H sew. **óm-** sew *PTs* *fom ‘sew/patch’.
or^H distribute. **ór-** distribute *PTs* *hor ‘distribute’.
or^H dried-out. **ór-** be dried out
or^L stake. **ə-òr** bamboo firewood/embers **o-òr** small impaling stick **mə-òr** torch (alt.) **jig-òr** spectacles *PTs* *fior ‘panji (pointed spike)’.
o^H vegetable; pluck; tend. **o-ó** vegetable **ó-** pluck **o-hìk** variety of wild vegetable **o-làp** variety of sticky wild vegetable **o-ìk** variety of semi-sticky, spinachlike wild vegetable **o-kúu** variety of sour vegetable **o-ríi** coriander (*Coriandrum sativum*; prob. neo.) *PTs* *fioo ‘vegetable’.
o^H liquor (alt.). **o-dáa** prime rice beer **o-í** neutral spirits **o-pòo** liquor **o-ríi** second batch rice beer
o^H thorn. **ta-ó** thorn
o^H small bee. **ta-ó** small variety of bee
o^L child; small; low. **a-ò** child **am-ò** rice paddy **ka-ò** lower rapko shelf **ji-ò** maternal aunt’s daughter’s child **tə-ò** elephant calf **bu-ò** baby rodent **ro-ò** baby chicken **hi-ò** eighth month (low water point) **o-mèe** kid **o-rè** son **o-mə** daughter **o-kùr** grandchild **o-ì** last child **o-tə** adult **o-pèn** orphan **aò-kaí** eldest child *PTs* *fio ‘child (offspring)’.
o^L fall. **ò-** fall; be on an incline *PTs* *ho ‘fall; rain’.

ə

ə- Weakened prefix. **ə-kòo** butt **ə-dìi** incredible **ə-pàk** reject; discard **ə-ráp** door **ə-rák** steep cliff **ə-hàp** net **ə-màk** penis **ə-múm** useless; casual **ə-gìi** axe head
ə(ə) Anaphoric/addressee-proximate. **əə** Anaphoric/addressee-proximate demonstrative **əə** Topic marker
əə Copula (imperfective) **əəm** Accusative **ə-gə** Anaphoric/addressee-proximate individuating demonstrative **ə-kə** Anaphoric/addressee-proximate semblative demonstrative
əə^H decant. **əə-** decant
əə^L scoot. **əə-** scoot; move the butt
ək^H fan palm. **ta-ək** fan palm **əg-màk** fan palm powder
ək^H shake; move side to side. **ək-** shake; move side to side **ək-ér** fishing pole
ək^H (fore)warn. **-ək** forewarn; foretell
ək^L disregard. **-ək** With Disregard
əm^H say; tell. **əm-** say; tell
ər^H toss. **ər-** toss **ək-ér** fishing pole *PTs* *vor? ‘throw/cast’.
ər^L bamboo product. **ər-tàk** bamboo fragment **ər-tùp** bamboo cup **lub-ər** brimmed hat
ə^H cattle. **ho-ə** cattle **ə-nə** cattle cow **ə-tfi** herd of cattle **ə-bó** cattle bull **ə-bùk** adolescent male calf
-ə^H Mystery Suffix. **rik-ə** field **nam-ə** house **ji-ə** year two from now **un-ə** wound (alt.)
ə^L bamboo.1. **ə-** be bamboo **ə-ə** bamboo **ə-bùm** giant bamboo (*Dendrocalamus giganteus*?) **ə-nìi** edible bamboo (*Dendrocalamus hamiltonii*) **ə-lùu** bamboo grove **ə-òr** bamboo firewood **ə-pàa** middle-aged bamboo **ə-pò** bamboo variety **ə-sò** bamboo variety (thin) **ə-tòr** mature bamboo **ə-ríi** bamboo grove **ə-zò** bamboo variety (*Bambusa tulda*) **əə-akúik** bamboo chaff *PTs* *fiəə ‘bamboo (large species)’.

ì

ìì^H narrate. **ìì-** narrate a story
ìì^H saw; slither. **ìì-** saw; slither (vi.) **ìì-túu** saw (n.)

ii^H body; self. **a-ii** body; self **ii-póo** torso **afi-afi** selves *PTs* *i ‘body’.
ii^H weed. **ii** weed **ii-namjää** stinkweed sp.
ii^L low(er). **o-ii** low **hag-ii** sigh
ik^H under. **-ik** Go Under
ik^L louse (head). **ta-ik** head louse (*Pediculus humanus capitis*) **ig-nè** mature louse **ik-ci** baby louse **ik-pò** louse egg *PTs* *fik ‘louse (of head)’.
ik^L weed (vt.). **i-ik** de-weeder **ik-** de-weed
ir^H spread with hand. **ir-** spread with the hand *PTs* *hir ‘wash’ (?).
ir^H potent; strong. **ir-** be potent
ir^H sweat; bathe. **a-ir** sweat **ir-bùk** prickly heat **nè-ir** first baby-washing *PTs* *fir ‘bathe’.
ir^L glow. **ir-** glow **ba-ir** red hot steel
ir^L sprout. **ir-** sprout **ir-** sweat
ir^L incite. **-ir** incite; provoke
i^H hail (ice rain); pound. **ta-i** hail **i-** pound
i^H shave (long). **i-** shave an object with length
iK^H vagina; genitals. **it-túm** scrotum **it-tó** vagina

k

kVV- Flavour Prefix. **kaa-càk** bitter **kuu-cùk** sour **kii-cik** salty **kee-bèk** starchy; pasty; unripe *PTs* *kaa ~ *ko ‘bitter’ (?).
ka- Unknown prefix **ka-nòo** hungry **ka-nó** dark **ka-nè** seven **ka-í** big **ka-jää** black **ka-jii** huge **ka-dik** important **ka-zùu** let’s go
kaa^H look. **káa-** look *PTs* *kaŋ ‘look’.
kaa^H have; exist. **káa-** have; exist **-káa** Perfect Aspect
kaa^H hearth. **kaa-tè** fireplace lower shelf **kaa-nè** fireplace upper shelf **kaa-mée** fireplace lower shelf **ka-ò** fireplace lower shelf **ka-ik** upper fireplace shelf
kaa^H fern? **óo-takáa** fiddlehead (edible) fern
kaa^H black (alt.). **ta-káa** black one **tuk-káa** blackie (nickname) **duu-káa** black sesame
kaa^H in plenty; in competition. **-káa-hí** aplenty; in competition **jaa-káa** many
kaa^L black. **kàa-** be black (v:c.arg) **ja-kàa** black **poo-kàa** black rice beer
kaa^L cool (down). **-kàa** Cool (down) Result
kaa^(L?) bitter? **kaa-càk** bitter *PTs* *kaa ~ *ko ‘bitter’.
kak^H clean surface. **kák-** wash a surface **-kák** Clean; Reveal **akák-alák** empty, of one’s feeling *PTs* *krak ‘result participle’.
kak^L phlegm. **ta-kàk** phlegm **gon-kàk** stutter *PTs* *kak ‘phlegm’.
kanoo^L hungry. **ka-nòo** hungry *PTs* *(kV-)noŋ ‘hungry’.
kanò^H dark. **ka-nó** dark **kanò naben zaadu** too bloody dark *PG* *kana ‘dark’.
kanò^L seven. **kanò** seven *PTs* *(kV-)nit ‘seven’.
kap^H weep. **káp-** weep *PTs* *krap ‘weep’.
kap^H shingle (v.). **káp-** shingle; arrange large leaves on a roof **kab-zèn** horizontal roofing beam (lit. shingle friend)
kap^L winnow. **kàp-** winnow *PTs* *krap ‘winnow’.
kap^L wet. **-kàp** Wet Result
kap^L sunken. **nap-kàp** sunken-mouthed; pointy-chinned
kam^H mature; hardened; wizened; persevering; clay. **kám-** mature; well-fermented **kám-** be an old woman (v:c.arg) **-kám** still; perseveringly **ta-kám** clay **duu-kám** old section of bamboo **ko-kám** type of oko **ni-kám** old woman **pum-kàm** booger **kam-pák** type of oko leaf
kam^L crispy. **ciŋ-kàm** crispy rice **pum-kàm** booger
kam^{RF} everywhere. **ta-kám** everywhere
kar^H star; luminescence; emerge; reveal. **kár-** emerge (of moon/stars); button (shirt); peel (fruit) **ta-kár** star **kar-càa** moonlight **kar-tè** giant wedding celebration **kar-mik** ordinary wedding celebration *PTs* *kar ‘star’.
kar^H pile. **kár-** pile voluminous objects
ka^H dig by scraping. **ká-** dig by scraping; scrape with claws
ka^L send. **kà-** send
ka^L black (var.). **ka-jää** black **dum-kè** black hair **lii-kè** black bead stone **mir-kè** blackened **no-kè** black panther **ja-kè** black (alt.) **acáa-kajää** blackmouth (plant variety)
kii^H gut. **kii-** disembowel (v:c.arg) **a-kii** belly/stomach/guts **kii-cik** thin waist **kii-lii** water vessel **kii-rò**

large intestine **kii-zfi** small intestine **kii-rfi** small intestine (alt.) **kiinó** navel **kiinó-abúu** umbilical cord *PTs* *kri ‘guts’.

kii^H point(ed). **-kfi (-rfi)** Sharp; Expert(ly) **akfi arfi** expert **nak-kfi** point; sharp (point) **puŋ-kfi** pointy-nose(d) **lǝ-kii** talon?

kii^L dog. **i-kii** dog **kii-bò** male dog **kii-nà** female dog **kii-pìn** dogskin **kii-mèn** hunting dog **kii-cùu** puppy **kii-lèe** still living sacrificial dog **kii-rǝə** bad/evil dog *PTs* *kwii ‘dog’.

kik[?] sediment? **poo-kik** rice liquor sediment

kik^H overdo. **-kik** Overly; Like Crazy

kin^L impeded. **-kìn** Impeded **-kìn...-mìn** Muddled **-kìn...-rìn** Hopelessly Messed Up

kin^L child’s spouse’s parent. **kin-nà** child’s spouse’s mother **kim-bò** child’s spouse’s father

kiK^H deliver a blow. **kíK-** deliver a blow; punch in a non-traditional way

kuu^H bamboo shoot. **kuu-pè** unfermented bamboo shoot **ii-kúu** fermented, diced bamboo shoot

kuu^H sour. **kuu-cùk** sour **o-kúu** variety of sour vegetable **naŋ-kúu** sour-smelling **ii-kúu** fermented bamboo shoot *PTs* *kruŋ ‘sour’.

kuu^H weigh. **kúu-** weigh **-kúu** Tons of O

kuu^L thin (animate). **kúu-** be thin, of a person **-kúu** Brittle; Bend

kuu^L cucumber. **mǝ-kúu** cucumber *PTs* *kuŋ ‘cucumber’.

kuk^H outer covering. **a-kúk** bark **pi-kúk** eggshell **hii-kúk** tree bark **ǝə-akúk** bamboo husk **tamúl-mulkúk** betelnut husk *PTs* *kuk ‘outer covering’.

kuk^L variety of fruiting tree. **ta-kúk** variety of wild fruiting tree used for firewood

kup^H overturn (vi.). **kúp-** tip over; fall over (of oneself) **-kúp** Upside Down

kup^H trick; deceive. **kúp-** trick; deceive

kum^H numb; senseless. **-kúm** Drunk/Senseless **ii-kúm** numb teeth, as after eating chili *PTs* *krum ‘drunk’.

kum^L pray. **kùm-** pray

kum^L stack (long); gather close. **kùm-** stack objects with length **-kùm** Gather **-kùm...-júm** curled up **naa-kùm** rest house in fields

kum^L forceful. **a-kùm** forceful; hard

kur^L return. **-kùr** Return *PTs* *kur ‘back’.

ku^H Completive. **kú** Completive Aspect

ku^H fish using stone-and-basket trap method. **kú-** fish using stone-and-basket trap method

ku^L yell. **kù-** yell

kee^H ginger. **ta-kée** ginger **iŋín-takée** spreading (gingerlike) tapioca *PTs* *kree? ‘ginger’.

kee^H material. **do-kée** food; (animal) feed; fodder

kek^H flee. **kéK-** escape; flee *PTs* *kat¹ ‘flee’.

kek^L filth. **ta-kèk** filth **keK-** rub away filth; grind *PTs* *kot¹ ‘body dirt’.

kek^L kidney. **a-kèk** kidney *PTs* *krat¹(-pjil) ‘kidney’.

kek^L giant cane variety. **ta-kèk** variety of giant cane

keŋŋaa^L nine. **keŋ-ŋàa** nine *PTs* *kV(n)aŋ ‘nine’.

ken^H tublike basket, large, loosely-woven. **e-kén** tublike basket, large, loosely woven

ken^H spiteful. **-kén** Spitefully

ken^H Obligative. **-kén** Obligative

ken^L one; same; good; easy. **a-kèn** one; same **-kèn** Good/Easy **lǝ-kèn** once; of one **baa-kèn** unison *PTs* *kon ‘one’.

koo^H knit. **kóo-** enclothe (wear; knit) **koo-tàk** skirt stripe **zeci-koorée** festival clothing

koo^H handle; lever; wedge (v.). **kóo-** operate a lever; wedge; row with a pole **a-kóo** handle **puk-kòo** shaft of a headed/tipped arrow **pǝ-kóo** corn cob **koo-càk** twig **poo-kóo** skeleton **koo-tír** counting stick **koo-háp** tongs

koo^H roughly/imprecisely. **-kóo** Roughly **-kóo...-lóo** Imprecisely

koo^H peacock; bird variety. **ta-kóo** variety of bird **doo-kóo** hawk (generic) **po-kóo** peacock

koo^L cross on foot. **kòo** cross on foot, as a river **koo-bàa** ladder **koo-dàa** balcony **-kòo** Surpass/Protrude Manner/Result *PTs* *koŋ ‘cross (Eastern)’.

koo^L back; base; below. **kòo-** maneuver the butt **ǝ-kòo** butt; backside **ji-kòo** loom element **gǝ-kòo** loom baseframe **luk-kòo** chili stem **ci-kòo** lower area or section of a village **tuu-kòo** downside; south side **nam-kòo** downward neighbor’s house **nee-kòo** ground space around home **peŋ-kòo** valley **koo-kii** back side **koo-gàk** base of head **koo-tùu** tailless **nampǝ-rikòo** ground space under a house **koo-cǝ** chipmunk **koo-ták** stripe down skirt **bǝ-kóo** base of road **naanfi-kootǝr** base of spine *PTs* *(lam-)ku ‘back’ (?)

koo^L open; hole. **-kòo (...-lòo)** Open/Make Hole result **-kòo** Protrude **ko-àk** sheath mouth binding **am-kòo** seed grains tied in knots **uu-kòo** hole **i-kòo** skewer **gee-kòo** gorge **cǝ-kòo** cranny *PTs* *-ko ‘open (verbal particle)’.

koo^L fourth? **nam-kòo** fourth daughter-in-law **nə-kòo** third daughter-in-law
kok^H crow (vi.). **kók-** crow (v.) *PTs* *krok ‘crow (v.)’.
kok^H open. **-kók** Open Result **kók-** perform divination by examining the innards of a chick **kog-dír** peak
kok^L split(wise); straddling. **-kòk** Splitwise; Straddling
kok^L blackbrowed tree pie. **po-kòk** blackbrowed tree pie
kop^H stretch? **kob-dáa** loom framestick
kop^H hack; chop with force. **kóp-** hack; chop with force
kop^L dent(ed). **-kòp** Dented **a-kòp** dented
kom[?] store/storage? **-kom** As/For Storage?
kom[?] grasshopper. **ta-kom** grasshopper (fairly rare; tone unattested) **kom-ci** grasshopper variety
təəkòom-pətək popping beetle **mi-kóm** hawk **takom-dummáa** grasshopper variety *PTs* *kom
‘grasshopper’.
kom^H early morning. **kom-ci** early morning **arò-komci** early morning *PTs* *kom ‘early morning’.
kom^L also. **kòm** also **dak-kòm** although
kom^L fish trap (countercurrent). **ta-kòm** countercurrent fish trap
korom^L shoe. **ko-ròm** plank shoe *PTs* *kram ‘shoe’ (?).
kor^H step; pace. **kór-** take a step **akór** one pace **kór-** Clfq: Pace **-kór** Imitatingly *PTs* *kor ‘step’.
kor^H knife handle binding. **ta-kór** knife handle binding
ko^H place; ground; earth; stream. **moo-kó** place **tuk-kó** forehead **ko-àk** sheath mouth binding **ko-bùu**
rodent **ko-cəə** channel; stream **ko-cək** leaf fragment **ko-dée** soil **ko-hi** stream head **ko-pə** cassia
bark **ko-pək** eroded area **ko-màm** valley **ko-róo** ditch **ko-tùu** spoon **koróo-komàm** geological
depression
ko^H *Zingiberales/Musaceae*. **o-kó** *Zingiberales* (generic) **ko-pák** banana (*Musa acuminata*) **ko-lúu** seeded
wild plantain sp. **ko-ŋəe** edible heart of banana tree **ko-dùm** yellow-skinned jungle banana sp.
ko-kám *Zingiberales* sp(p). **ko-hùk** dried *okó* leaf *PTs* *ko(-pak) ‘banana’.
ko^H move mouth. **kó-** move, of the mouth **ko-ŋək** stutter **ko-ŋəa** **ko-rəa** speechless **bek-kó** bulbul
ko^L request; beg. **kò** request; beg *PTs* *ko ‘beg’.
ko^L dig by scooping with hand. **kò-** dig by scooping away **ko-tùu** spoon *PTs* *ko ~ kjo ‘dig (hole)’.
ko^L Nominalizer: Place. **-kò** Place/Situation Nominalizer **-kò** Content question predicate marker **-kò**
Cleft predicate perfective aspect marker
ko^L Reverse/Reciprocal. **-kò** Reverse A ↔ O **-kò** Reciprocally.1
ko^L pandanus. **ta-kò** pandanus (*Pandanus odoratissimus*)
ko^L ~ koo^L ~ ku^L old (usually inanimate). **kòo** old (adj:mono) **ko-rùm** ancient times; ancestors **a-kò** old
(inanimate) **ə-kò** old bamboo **ŋi-kò** wise old person **bə-kò** old bull **bə-kòo** old road **lə-kò** old times
rok-kò antique machete **goŋ-kù** classical language **ze-kù** old clothing *PTs* *ku ~ *kju? ‘old’.
kəə^H cook by boiling. **kəə** cook by boiling (vegetables or meat) *PTs* *krəŋ ‘boil (meat)’.
kəə^H tight. **-kəə** Tight, as a hug
kə(ə)^H start to. **-kə ~ -kəə** start to (but not follow through) **-tó...** **-kə ~ -kəə** for the first time
kə(ə)^H six. **ak-kəə** six **lək-kə** six times **kə-** six *PTs* *krə ‘six’.
kəə^L chest. **aa-kəə** chest *PTs* *(haŋ-)kiŋ ‘chest’.
kək^H emaciated. **akək-arək** emaciated
kər^H bend; twist; wavy. **kər-** twist; braid **a-kər** fishing pole **pa-kər** wavy; crooked **təkər-təmər** curling, as
a leaf **akər-doomər** swallow (the bird) *PTs* *kər ‘bend’.
kər^H hack at; chop vigorously. **kər-** hack at; chop with great vigor
kər^L thrust pelvis. **kər-** thrust pelvis
kə^H squirrel. **ta-kə** squirrel **kə-húu** rabbit *PTs* *krə ‘squirrel’.
kə^H twist. **kə-** twist **kə-bə** wool variety
kə^H support. **kə-dər** tailbone **kə-təə** beam supporting pillar
kə^H open? **goŋ-kə** open mouth(ed)
kə^L dead. **-kə** Dead Result **kə-lək** beating stick **pilfi-pikə** chicken louse *PTs* *-ka ~ *-ke ‘dead
(resultative verbal particle)’.
kə^L louse (body). **ta-kə** body louse (*Pediculus humanus humanus*)
kə^L basket? **pə-kə** egg-laying basket
kə^L Genitive/ablative/instrumental/perlative postposition.
kə^(L?) smoke. **mi-kə** smoke *PTs* *(mə-)ki ‘smoke’.
kii^H slice. **kii-** slice
kii^L repose; long time. **kii-** repose? **-kii** For Lengthy Duration **lə-kii** long time ago; way back when
koo-kii back; after **di-kii** each/every (time)
kik^H pound. **kik-** pound with a tool **-kik...-rik** Split *PTs* *kit ‘punch’.
kik^H everywhere. **-kik...-rik** Everywhere; With Full Coverage
kir[?] sweat (alt.); body odor. **naŋ-kir** body odor **bin-kir** goat odor

ki^H measure. **kí** measure; count out when measuring *PTs* *kri ‘count’.
ki^H uncle.maternal. **a-ká** uncle **ki-tà** elder maternal uncle **ki-róo** second maternal uncle **ki-dóo** third maternal uncle **ki-í** younger maternal uncle *PTs* *ki ‘uncle (maternal)’.
ki^H campaign. **kí-** campaign
ki^{L?} dove. **taa-kə** dove **ki-ár** variety of pigeon/dove, poss. speckled wood pigeon (*Columba hodgsonii*) **ki-kòo** variety of pigeon or dove **ki-zii** emerald dove (*Chalcophaps indica*) **ki-lùm** maroonbacked imperial pigeon (*Ducula badia*) **rihìn-taakə** variety of bird found in open clearings *PTs* *ki ‘dove/pigeon’.

g

gaa^H hornbill. **pə-gáa** great pied hornbill (*Buceros bicornis*) **gaa-rèe** wreathed hornbill (*Rhyticeros undulatus*) *PTs* *gaj ‘hornbill’.
gaa^H scratch with claws. **gáa-** scratch with claws **gaa-jáp** wave the hand *PTs* *gaj ‘scratch with claws’.
gaa^H misdirected. **-gáa** Misdirected; In Vain; Affecting everything
gaa^L hornet. **gaa-pùu** hornet **itúm gaalùm** giant black bumblebee *PTs* *gaj ‘hornet’.
gaa^L fill up. **gàa-** fill up **loo-gàa** noon; lunchtime
gak^H hold; seize; choose; occupy. **gák-** hold; seize; choose/select; occupy **gak-cəə** graspable protrusion **ta-gák** engaged to be married *PTs* *gak ‘hold; seize’.
gak^L engage (in marriage). **ta-gák** engagement; engage
gap^H fixed; stable. **-gáp** Fixed; Stable
gam^H mouth. **ii-gám** molar tooth *PTs* *gam ‘mouth’.
gam^H fix; fasten. **gám-** bind edges **ta-gám** hitchhiker seed **-gám** Incrementally
gam^H successful. **-gám** Successful **a-gám** fortune **ji-gám** successful hunter; expert hunter
gam^L ~ **ɲam^L** bite. **gám-** ~ **ɲám-** bite *PTs* *gjam (~*gjam?) ‘bite’.
gar^L bear (children); hatch (eggs). **gàr-** bear children; hatch eggs
ga^H pare; whittle; harvest. **gá-** pare; whittle **ga-rək** arrow notch **ga-rìi** resemble (lit. cut similarly) *PTs* *gja² ‘cut (as in reaping crops)’.
ga^H scale wall. **gá-** scale a wall; climb a vertical surface
gii^H collar (vt.). **gíi-** pull by grasping the whole thing
gii^L transport. **gíi-** transport
gik^H boring insect. **ta-gík** wood-boring insect
gin^L densely woven conical basket. **gìn-** Clf: Dense Conical Basket **i-gìn** large, densely woven conical basket **gin-cì** small, densely woven conical basket
gin^L winged ant? **taa-gìn** winged ant
giK^L wipe substance off of surface. **giK-** whittle; wipe
giK^L dirty. **giK-** (v:c.arg) make water dirty **hi-gik** dirty water
guugaa^H jew’s harp. **guugáa** jew’s harp *PTs* *gun² ‘jew’s harp’.
guu^H kettle handle? **a-gúu** kettle handle
guu^H debt. **guu-ɲí** penalty **guu-tə** large bridal price
guu^L curved; bent. **pa-gùu** bent **tə-gùu** curved **təgùu-təjəə** zig-zagged
gup^H incubate. **gúp-** incubate eggs *PTs* *gup ‘sit on eggs/hatch’.
gum^H storm; thunder. **gúm-** thunder **doo-gúm** storm; thunder *PTs* *gum ‘thunder’.
gum^L win. **-gùm** Win
gum^L lean; out(side). **a-gùm** out(side); exterior **gùm-** lean
gur^H churn. **gúr-** churn; whirl; rumble
gur^H assist. **-gúr** assist **gurnə-naanə** topmost element of a Galo loom, used for attaching to a balcony rail for support **gur-bə** back **bə-gúr** side road *PTs* *gul ‘help (vt.)’.
gu^L burn (vi.). **gù-** burn (vi.) *PTs* *gu ‘burn (vi.)’.
gee^H reciprocal labour. **gée-** labour reciprocally (v:c.arg) **ri-gée** reciprocal labour
gee^H seal (vi.). **gée-** seal; heal
gee^L gap. **-gèe** Maintain Gap **a-gèe** gap in space or time **goo-gèe** arc **uu-gèe** floor cracks **gee-kòo** gorge
gek^L dirty. **-gèk** Dirty Result
ger^H work; labour. **a-gér** work; labour (seemingly < Minyong)
geK^H quiver (for arrows). **geb-búu** quiver *PTs* *gat¹ ‘quiver’.
geK^H lie down. **gék-** lie down *PTs* *grət ~ *krət ‘lie down’.
goo^H circle; round. **-góo** Around O **góo-** make enclosure **goo-gèe** arc **jəg-góo** circling **lə-gòo** bowlegged **lii-gòo** neck **luu-góo** enclosure **pə-góo** circle; round **ciigóo-doogóo** the whole world
goo^H lead animal. **góo-** lead an animal

goo^H before; origin. **-góo** Nominalizer: Place From Which **-góo** Applicative: Before O **aa-góo** west (sunset direction) **caa-gòo** east (sunrise direction)
goo^L bulge; throat. **gòo-** swell; bulge **lii-gòo** throat *PTs* *gruŋ? ‘throat’.
goo^L forewarn. **gòo-** forewarn
goo^L pass time. **gòo-** pass time
gok^H call. **gók** call someone *PTs* *grok ‘call/shout’.
gok^H crack; breach. **gók-** crack **-gók** Crack Result **deg-gók** crack in the earth **lə-gòk** foot crack
gop^H handspan. **a-góp** one handspan **góp-** Clf: Handspan **góp-** measure in handspans *PTs* *gop ‘handspan’.
gom^H speech. **góm-** Clf: Mouth, Word **a-góm** speech; language; word; point (in an argument) **gom-zùp** closed mouth **gom-máa** mute; dumb **agóm-aíi** words; matter under discussion **ui-agóm** gibberish **ni-góm** officer; VIP *PTs* *gom ‘language’.
gom^L hug. **gòm-** hug
gom^L improper? away from proper target? **ee-gòm** defecate improperly **hii-gòm** urinate improperly
gor^H quickly. **-gór** Quickly
go^H slab; platform; trap using slab. **gó-** trap small animal using stone slab **go-zòo** raised resting platform **baa-gò** men’s sitting area **go-rè** raised observation platform **lə-gò** natural bridge
go^L warm/hot. **-gò** Warm/Hot Result **a-gò** warm/hot **di-gò** summer; hot season **hi-gò** hot water *PTs* *gu ~ *gju? ‘hot’.
gəə^L locate? **-gəə** Locative Applicative **a-gəə** storage area
gəə^L lean against. **-gəə** Touch O Result **duu-gəə** bench *PTs* *grəŋ ‘lean against’.
gəm^L collapse. **gəm-** collapse
gər^H wav(y); wind (vt.); crooked. **gór-** crank; wind (vt.) **pa-gór** wavy **gər-bə** effigy skirt *PTs* *gər ‘crooked’.
gə^H carry/wear. **gə** carry/wear **-gə** Carry Applicative **gə-én** loom backstrap **gə-mèn** ornament; piece of jewelry *PTs* *gəə ‘carry on body’.
gii^H structure; pillar; back; neck. **gii-** (vt.) stab into ground, as when erecting a pillar **gii-túu** house pillar **gii-túm** axe (whole) **gii-pə** goiter **uu-gii** back **dum-gii** main house pillar **tur-gii** roofpost **poo-gii** rice beer filtering framework **gii-dáa** management of household
gii^L bludgeon. **a-gii** blunt edge of blade **ə-gii** axe (head) **ro-gii** blade handle **pum-gii** nose bridge *PTs* *gii ‘bludgeon’.
gik^H impale. **-gik** Impale
gir^H hunched? **uu-gir** hunchback
gir^L grasp and tug. **gir-** grasp and tug
gi^L progress; plow; go (around). **gi-** plow **naməə-gi-** play around; sleep around (man)

ŋ

ŋaa^L waste. **ŋaa-** waste **-ŋaa** No Result/Pointlessly
ŋaa^L baby; fool. **uŋ-ŋaa** baby **ja-ŋaa** female idiot **ta-ŋaa** male idiot **daŋaa-daràa** misstep **jaŋaa-jaràa** clever but useless woman **taŋaa-taràa** clever but useless man *PTs* *ŋaa ‘baby’.
ŋak^L intense. **-ŋak** Intensely **liŋ-ŋak** overstretched penis
ŋak^L ~ **ŋaa^L** lost. **ŋak-** be lost; get lost **ŋaa-** be lost; get lost
ŋam^H ~ **gam^H** All/Every/Total. **-ŋám** ~ **gám** All/Every/Total
ŋar^H excess; outside target. **-ŋár** Part Outside Target **ŋar-sí** dew **ciŋ-ŋár** rice scraps
ŋa^L pant (vi.). **ŋə-** pant
ŋii^L join. **-ŋii** Join in Doing
ŋik^H extinguished. **ŋíK-** extinguish **ŋíK-** extinguish **-ŋík** Extinguished Result *PTs* *mit ‘extinguished’.
ŋin^H ripe. **ŋín-** be ripe **ba-ŋín** ripe **məəbə** cucumber **ŋínkə-taó** pimple *PTs* *min ‘ripe’.
ŋin^H pinch. **ŋín-** pinch *PTs* *in ‘pinch (with fingernail)’ (?).
ŋin^H tapioca. **i-ŋín** vine tapioca **ŋin-lùu** tapioca vine grove
ŋin^L naked. **a-ŋin** naked
ŋiK^H honey bee. **ta-ŋík** honey bee **ŋil-láa** honey *PTs* *ŋut² ‘honey bee’.
ŋum^L bird variety. **pə-ŋùm** bird variety
ŋur^H roll (vt.). **ŋúr-** roll a balllike or spherelike thing
ŋur^L reciprocate. **-ŋùr** Reciprocal suffix
ŋu- First person nonsingular formative. **ŋu-nù** 1.PL **ŋu-ŋù** 1.DL
ŋee^H be lost. **ŋée-** be lost
ŋee^L heart? **ko-ŋèe** banana heart

ŋeK^H surplus. **ŋék-** have surplus **-ŋék** Overdo; Over the Limit
ŋoo^H leftover; remainder. **-ŋóo** Remaining; Remainder; Habitually; Practice *PTs* *(do-)ŋoŋ? ‘leftover’.
ŋom^H creep. **ŋóm-** creep; crawl
ŋo^H peculiar. **a-ŋó** peculiar **ŋó-** be dazed; be confused
ŋo^H five. **aŋ-ŋó** five **ŋó-** five *PTs* *ŋo ‘five’.
ŋo^H fish. **ŋo-í** fish **ŋo-túp** variety of fish **ŋo-púí** variety of carp (*Cirrhina mrigala*) **ŋo-pè** minnow **ŋo-bé**
 variety of fish (Assamese *naŋdor*) **ŋo-mùk** pond fish **ŋo-lúm** boiled, liquified fish **ŋo-rík** predatory
 catfish (*Bagarius* spp.) **ŋo-rúu** fish variety (*Barbus* spp.) **ŋo-jáa** rotten fish **ŋojáa-ŋolúm** rotten,
 boiled, liquified fish *PTs* *ŋo ‘fish’.
ŋo^H First person singular pronoun. **ŋó** 1.SG *PTs* *ŋoo ‘First person pronoun’.
ŋəə^H crawl. **ŋəə-** crawl **ta-ŋəə** obese
ŋəə^L First person reflexive pronoun. **ŋəə** 1.REFL
ŋəm^H inch (vi.). **ŋém-** inch, as an inchworm or leech
ŋər^H too much. **-ŋér** Too Much
ŋə^L daughter in law’s sibling. **a-ŋə** daughter in law’s sibling
ŋír^H fish variety. **ti-ŋír** variety of fish **ŋír-pè** *tíŋír* minnow
ŋí^L lethargic. **ŋì-** feel lethargic

C

caa^H wild dog? **ho-cáa** wild dog? *PTs* *pjaŋ ‘wild dog’.
caa^H fool? **pec-cáa** fool
caa^L ascend; rise. **càa** ascend **-càa** Ascend **caa-gòo** east **caa-tùu** rising slope **caa-làm** entryway
caatò-dooŋí rising sun **ta-càa** variety of boring insect *PTs* *caŋ ‘ascend’.
cak[?] bitter. **kaa-càk** bitter
cak^H grow (arch.). **cuu-càk** small densely woven seed planting basket **aŋŋí-cagnà** teenie **aŋŋí-cakkóo**
 very little bit
cak^L fiber. **ta-càk** cotton **càk-** spin cotton *PTs* *pjak ‘wool’.
cak^L jerk upward. **càk-** jerk upward
cam^H tens; subset. **a-cám** tens place **a-cám** subset; section **cam-ŋì** twenty **cam-úm** thirty **cam-rí** one
 hundred *PTs* *cam ‘tens’.
cam^L thick? **zi-càm** thick (cloth)
ca^L work properly. **canàm** work properly
cí[?] spark. **məci-məree** spark **mə-ci** matchlike ember *PTs* *(mə-)ze(r)? ‘spark’ (?).
cik^H disperse. **-cik** Disperse
cik^L pangolin (*Manis* spp.). **ho-cik** pangolin *PTs* *pit ‘pangolin’.
cik^L Diminutive (full form). **kii-cik** small waist **pi-cik** spotted munia **rok-cik** knife **oc-cik** knife (alt.)
tum-cik variety of small bear **dookóo-koocik** sparrow hawk *PTs* *cik ‘Diminutive suffix?’.
cin^H cooked rice. **a-cín** cooked rice **ciŋ-kàm** crispy rice **ciŋ-ŋár** rice scraps **cim-pík** rice residue at base of
 pan **acin-oo** prepared food *PTs* *pim ‘cooked rice’.
cin^H pluck. **cín-** pluck with fingertips
cin^L also. **cìn** also
cin^L cane variety. **ta-cìn** variety of cane
cir^L fold (clothing). **cír-** fold (clothing) *PTs* *pil ‘fold’ (vt.).
ci^H half. **-cí** Whole In Two **tak-cí** half **kom-cí** early morning *PTs* *ke ‘half’.
ci^H elder brother. **a-cí** elder brother
ci^H tree fern. **ta-cí** tree fern
ci^H Diminutive (reduced, alt. form). **jap-cí** (**ci-líi**) little devil **pərcí-pəŋí** moth **mə-ci** flint; spark
ciK^H throw a spear. **cíK-** throw a spearlike object *PTs* *cut¹ ‘cast (spear)’.
ciK^H operate a door. **cíK-** operate a door or window
ci^L left. **-ci** Shift Place/To One Side **lak-ci** left hand/arm **lə-ci** left foot/leg **pum-ci** left nostril **ruu-ci** left
 ear **ŋik-ci** left eye *PTs* *(lak-)ke ‘left’.
ci^L crab. **ta-ci** crab **kom-ci** grasshopper variety *PTs* *ke ~ *kjo ‘crab’.
ci^L pain; disease. **cì-** be in pain; be ill (vi.). **a-ci** pain; disease **o-ci** birth pains **ŋi-ci** patient **ŋik-ci**
 conjunctivitis **ten-ci** afterbirth **dum-ci** headache **pum-ci** noseache *PTs* *ki ‘pain; disease’.
ci^L Diminutive (reduced form). **am-ci** flattened rice **ik-ci** baby louse **gin-ci** small, densely-woven
 conical basket **din-ci** care(ful) **dír-ci** small strips of bamboo **nam-cè** small house **bar-ci** cone-shaped
 basket **bì-ci** small snake **mə-ci** matchlike ember; spark **nə-ci** nearby; vicinity **zeci-koorèe** festival
 clothing

ci^L reach. **cì-** reach **cì-** divine; possess **-cì ~ -cì** Reach Goal
cuu^L baby/small animal. **kii-cùu** puppy dog **tə-cùu** small elephant **dum-cùu** sambar deer (*Cervus unicolor*) **bin-cùu** goat kid **ho-cùu** mithun calf **rək-cùu** piglet **mac-cùu** small penis, as of a little boy
cuu^L small basket. **cuu-kàa** small loosely woven fireplace basket **cuu-càk** small densely woven planting basket
cuk[?] sour. **kuu-cùk** sour
cuk^L ladle/gourd? **cug-rìi** bottle gourd *PTs* *cuk ~ *zuk 'scoop/ladle (v.)'
cup[?] mound? **tarùk-diicùp** anthill
cup^L poisonous fly variety. **ta-cùp** variety of poisonous fly
cup^L sparrow. **pu-cùp (pu-rùp)** sparrow
cum[?] butte/hill? **dii-cùm** butte
cum^H weave. **cúm-** (vt.) weave *PTs* *cum 'weave'.
cum^H stomp. **cúm-** stomp; jump in place
cum^L scoop with hand(s). **cùm-** scoop with hand(s) *PTs* *pjum 'hold on both palms'.
cui^H spittle. **ta-cúr** spittle **cúr-** spit (v:c.arg) *PTs* *kjul? 'spittle'.
cee^H split along length. **cée-** split along a length **cee-pór** gape, as a snake
cek^H immobile. **-cék** Render Immobile
cek^H shorten. **-cék** Shorten **ze-cèk** fragment of clothing
cen^H corner. **-cén** Into Corner
cen^L know. **cèn-** know **-cèn** Know result **a-cèn** believable **acèn-arèn** decide *PTs* *ken 'know'.
cem^H like/enjoy. **-cém** Like/Enjoy
ceK^H chew. **céK-** chew; masticate
coo^H steal. **cóo-** steal *PTs* *pjoŋ 'steal'.
coo^L first. **-còo** First *PTs* *pjoŋ 'first'.
coo^L quiet. **ac-còo** quiet
coo^L gallop(alt.). **còo-** gallop (alt.)
cok^(L?) jaw/chin. **cok-kò** chin **cog-bèe** jawbone *PTs* *cok(-praŋ) 'chin'.
com^H peek. **cóm-** peek; move head to side
co^H object (v.). **-có** Mind; Object
co^H ash. **ta-có** ash **mic-cò** ash
co^L breast. **a-cò** breast (male or female)
cəə^H finger; extension; protrusion. **cəə-** (v:c.arg.) finger; feel or touch with a finger; move, of a finger
cəə- Clf: Finger **-kùm...-cəə** Hung Up **a-cəə** offshoot; separate; contrarian **ak-cəə** tree branch **ko-cəə** channel; ditch **gak-cəə** graspable protrusion **no-cəə** lower spine **pam-cəə** baking parcel; bake in parcel **pu-cəə** (wrap in) meal packet **lak-cəə** finger **lə-cəə** toe **ce-ì** pinky finger **cəə-dáa** forefinger
cəə-jír ringfinger **cəə-nə** thumb *PTs* *(lak-)keŋ 'finger'.
cəə^H blind. **jík-cəə** blind *PTs* *ciŋ 'blind'.
cəə^H boast. **cəə-** boast
cəə^H exclude. **-cəə** Excludingly **acəə-parəə** independently; non-minglingly
cəə^L mat. **pee-cəə** bamboo mat
cək^H bind sarong. **cək-** bind a sarong to form a skirt **bə-cək** skirt
cək^H bold. **-cək** Boldly
cək^H splinter; shard. **cək-** break off a piece **a-cək** piece; fragment; broken-off section **acək-parək** splinter
pa-cək (pa-rək) chip **ko-cək** torn-off leaf fragment/shard **koo-cək** twig **bə-cək** skirt
cəp^L pinch. **cəp-** pinch; economize **pen-cəp** crux
cər^H deer. **ho-cər** deer **cər-nə** doe **cər-bó** buck **cər-lèe** wild deer **cər-tfi** herd of deer
cər^L bump. **cər-** bump up against something
cə^H knit; plait. **cə-** knit strips of flattened bamboo (to make a wall) **pee-cə** bamboo drying mat *PTs* *prat² 'plait'.
cə^H edge. **cə-rəə** corner **cə-kòo** cranny **cə-lám** side **cəlśə-gona** opposite side **cəlśə-cəhák** both sides
cə^L curse. **cə-** curse
cii^H pot. **pi-cfi** pot **cii-túu** broken pot **cii-pár** large-sized mortar (for pounding rice) *PTs* *(pV-)kiŋ 'pot'.
cii^H chill. **cfi-** feel severe cold **an-cfi** freezing
cii^H slap. **cfi-** clap; slap
cii^H bright/glowing red. **-cfi** Bright Red **lii-cfi** red **uucfi-uulfi** dim (red glowing) light **-cfi...-lfi** Ineffective
ukcfi-baalfi firefly
cii^H bacteria. **ta-cfi** bacteria
cii^L keep/care. **-cfi** Keep/Care **nam-cfi** permanent dwelling
cii^L settlement. **cii-kòo** lower village **cii-dùm** upper village **nam-cfi** permanent house; dwelling
cii-góo-doogóo the whole world
cik^H barricade. **-cik** Create Barrier **cik-cí** wall

cik^H scatter; splash. **-cik** Spread **-cik** Cause Splash **-cik...-jik** Scatter Everywhere
cik^L salty. **kii-cik** salty
cir^H boil water. **cir** boil water *PTs* *kil ‘boil (water)’.
cir^H full. **-cir** Full
cir^H thick bamboo wall. **i-cir** thick bamboo wall
cir^L drape. **cir-** drape
cir^L pellet. **cir-** Clf: Pellet **a-cir** pellet; seed **gom-cir** speech fragment (sentence, phrase or word) **pə-cir** corn kernel **cuu-cir** nipple **tii-cir** clitoris **hii-cir** wild fruit variety *PTs* *pjil ‘Clf: Small, Round’.

Z

zaa^L swim; float. **zàa-** swim *PTs* *bjarj ‘swim’.
zaa^L destroy. **-zàa** Destroy
zaa^{RF} real; true. **-zâa** Actually **az-zâa** real; true **zâa** much (particle) **iz-zâa** now; just now
zak^H be eroded. **zák-** be eroded
zap^H talk. **zâp-** talk
zap^L flat. **a-zâp** flat **-zâp** Flat **duu-zâp** flat (black) sesame **pum-zâp** flat nose *PTs* *zep ~ *rjap? ‘flat’.
zap^L duck. **pə-zâp** duck **zap-pò** male duck **zab-nè** female duck *PTs* *zap ‘duck’.
zam^H chew. **zâm-** chew
zar^H fly (flapping wings). **zâr-** fly (flapping wings) *PTs* *bjar ‘fly’.
zar^L flirt; tease; be frivolous. **-zâr** ‘Flirt by doing’ **-zâr...-jâr** ‘Frivolously’
za^L dance about. **zâ-** dance about; be stylish
zik^H be disturbed; be impeded. **-zík...(-mík)** Disturb or Impede Result
zik^H buffalo. **min-zík** buffalo **zig-bó** buffalo bull **zig-nè** buffalo cow
zik^L haphazard; without regard. **-zík** Haphazardly **-zík...-mík** Leisurely
zin^H swell. **-zín** Swell Result
zin^L stretch. **zìn-** stretch; be elastic **-zìn** Stretch (out) result **-zìn...-tàa** Flatten (out) result **-zìn** Carefully (perception verbs) **lə-zìn** (out)stretch(ed) legs **a(a)-zìn** stretch; yawn *PTs* *zon ‘stretch oneself’ (?).
zi^H give. **zí-** give **-zí** Benefactive **maa-zí** very *PTs* *bi ‘give’.
zi^H center. **nig-zí** pupil of the eye **maa-zí** very
ziK^H melt. **zík-** melt **-zík** Melt O *PTs* *zit ~ *zet ‘melt’.
zi^L now. **i-zì** now
zi^L yellow. **ja-zì** yellow **nam-zì** white (yellow) sesame **pə-zí** yellow maize
zuu^H front (teeth). **ii-zúu** front teeth
zuu^L wet. **zùu(-zâa)-** wet **ta-zùu** variety of water-dwelling frog *PTs* *zu(-zan) ‘wet’.
zúk^H run; ride. **zúk-** run; ride *PTs* *zuk ‘run’.
zúk^L war dance? **pa-zùk** war dance
zúk^L ladle (alt.). **u-zùk** gourd ladle *PTs* *çuk ~ *zuk ‘scoop/ladle (v.)’.
zup^L close (va.); settle. **zùp-** agree; settle; suit/fit (of clothing) **-zùp** Closed **liz-zùp** sheathed penis; closed umbrella **iz-zùp** sheathed penis (var.) **ko-zùp** sitting with legs outstretched and knees locked **da-zùp** standing with knees locked
zum^H release water. **-zúm** Release Water
zur^H time formative (6?). **ten-zùr** six years hence **ken-zúr** six years ago **kenzúr-alóo** six days ago
zur^L perform ceremony. **zùr-** perform a ceremony, of a priest
zee^H mess (up). **-zée** Make a Mess
zee^L glue. **ja-zèe** glue **zèe-** glue **dum-zèe** green hair
zek^H chunk; slice; shard; ripped-off section. **a-zék** slice; ripped off section **-zék** Leave Chunks **-zék** Nominalizer: Slices Resulting from V **zék-** Classifier for slices **tag-zék** shard, as of glass
zek^L expert; clear. **-zèk** Clearly **a-zèk** expert **azèk-apáa** valuable *PTs* *bjæk ‘hit (target)’.
zen^L friend. **a-zèn** friend **zèn-** be friends **-zèn** Nominalizer: Partner In **kab-zèn** horizontal roofing beam (lit. shingle friend) *PTs* *zon ~ zen ‘friend’.
zeK^H prune. **zéK-** prune; cut without using much force
ze^L clothing. **e-zè ~ e-zì** clothing **ze-ìn** rag **ze-kù** old clothing **ze-gàa** clothes-hanging pole **ze-cèk** clothing fragment **ze-pèe** thick (winter) clothing **ze-pè** tunic **ze-bò** apron-like tunic **zecì-korèe** festival clothing *PTs* *ge? ‘clothing’.
zeK^L rip. **zèK-** rip
zoo^H please. **-zoo** To Please
zoo^L lift. **zòo-** lift **go-zòo** resting platform **pa-zòo** supporting beam **rii-zòo** gentle slope to plain **ho-zòo** flying squirrel *PTs* *zoŋ ‘lift’.

zok^H flatter. **zók-** flatter
zok^L sloppy. **-zòk** Sloppily
zop^L ~ jop^L jump. **zòp-** jump **jòp-** jump
zom^L sloping. **nab-zòm** sloping-mouthed **pa-zòm** sloping; cut to an angle
zo^L bamboo variety: *Bambusa tulda*. **ə-zò** *Bambusa tulda* **zo-t̪i** grove of *Bambusa tulda*
zəə[?] penalty. **a-zəə** penalty
zəə^H blabber. **zəə-** blabber
zəə^H scatter. **-zəə** Scatter O
zək^H bird variety **pə-zək** bird variety; coward
zər^H jerk. **-zər...-mər** Jerkily **azər-amər** flitting about; restless
zər^H rotate; spin. **zər-** rotate; twist; spin
zii^H thick; chameleon. **zii-càm** thick (cloth, book, soup) **kii-z̪i** small intestine **hoo-z̪i** chameleon *PTs*
***br̪iŋ ~ *bj̪iŋ** 'thick'.
zii^H fat; plump. **z̪i-** be plump; be healthy **z̪i-** become an old man (v:c.arg) **-z̪i** Fat/Full Result (?) **ni-z̪i**
old man *PTs* *ziŋ 'fat'.
zii^H full; sink. **z̪i-** be full (Pugo) **z̪i-** sink (in water) **-z̪i** Fat/Full Result (?) **zii-tə-taətə** sun (poetic) *PTs*
***br̪iŋ** 'full (not empty)'.
zii^L true. **-z̪i** True
zik[?] buffalo. **min-zik** buffalo **zig-lèe** wild buffalo
zir[?] non-tipped? **pug-zir** shaft of a non-tipped arrow
zir^H adolescent? **rog-zir** adolescent chicken
zir^L piece(s). **-zir** Into Small Pieces **a-zir** cash; coins
zir^L girl. **ni-zir** girl **nə-zir** female calf **zir-tə** young woman
zir^L creeping bamboo. **ta-zir** variety of creeping, parasitic bamboo

ɲ

naa^L stab underhand. **naa-** stab underhand
naa^L as a group. **-naa** As Group
nak^L soft. **nak-** be fully cooked, of rice **rə-nak** tender; exhausted **naŋ-nək** overcook rice *PTs* *mjak 'soft'.
nap^H ~ jap^H continue. **-nap ~ -jap** Continue
nam^H daughter-in-law. **nam-** be a daughter-in-law; do the activities required of a daughter-in-law **nam-əə**
daughter-in-law **nam-tə** first daughter-in-law **nam-róo** second daughter-in-law **nam-dəə** third
daughter-in-law **nam-kòo** fourth daughter-in-law **nam-fi** last daughter-in-law
nam^H masticate. **nam-** masticate
nar^L push using tool. **nar-** push using a tool; dig using a snout
na^L wither; fall apart. **na-** wither; fall apart
ni^H ~ joo^H depart. **-ni ~ -jóo** Departingly
ni^H person. **ni-í** person **ni-kám** old woman **ni-kò** wise old person **ni-góm** officer **ni-cì** patient; person
with an illness **ni-zí** Nyizi clan **ni-z̪i** old man **ni-zir** girl **ni-nóo** Minyong tribe **ni-t̪i** throng **ni-tə** rich
(person) **ni-dáa** marriage **ni-dám** handicapped person **ni-bó** guest **ni-bò** priest; shaman **ni-bù** priest;
shaman (Zirdo) **ni-búu** grave **ni-màa** shadow **ni-máa** poor **ni-màk** enemy; war **ni-mə** wife **ni-lòo**
husband **ni-pàk** non-hill tribal **ni-ràa** Nyira clan **ni-h̪i** Aryan person **ni-z̪a** real person; non-slave
PTs *mi(i) 'human'.
ni^H sun. **ni-** be sunny (v:c.arg) **doo-ni** sun **ni-dóo** rain **ni-màa** shadow *PTs* *ni 'sun'.
ni^H elder sister. **a-ni** elder sister **ni-ni** maternal aunt's daughter **ni-kaí** eldest sister *PTs* *me 'elder
sister'.
ni(i)^H small. **ni-ni(i)** little (bit) **ni** small (adj:mono)
ni^Hbo^H guest. **ni-bó** guest; eligible party *PTs* *mji-bo 'guest; outsider'.
ni^L two. **a-ni** two **ni-** two *PTs* *ni 'two'.
ni^L loom element. **ta-ni** loom flower design tools **ni-kòo** loom element
ni^Huu^H stir. **niuu-** stir
ni^Lup^L gadfly. **ta-niup** variety of fly? **tacùp-tanùp** variety of poisonous fly **tacùp-reenùp** variety of
poisonous fly *PTs* *jup 'gadfly'.
ni^Hum^H squeeze. **niúm-** squeeze **-kùm...-niúm** curled up *PTs* *num 'squeeze with fingers'.
ni^Hum[?] only. **niúm ~ niúm** only
ni^Lum^L shade. **doo-niúm** shade; non-figured shadow
ni^Lek^L biting gnat. **ta-nèk** gnat *PTs* *mit 'gnat' (?).
ni^L face extension. **ni-pùm** nose **ni-rùu** ear *PTs* *na 'nose¹'.

ne^L tail. **ne-bùu** tail *PTs* *me ~ *mjo ‘tail’.
ne^L taro. **e-nè** edible taro (*Colocasia esculenta*) **ne-rìk** wild, inedible taro (*Xanthosoma* sp.)
noo[?] lose something. **noo-pèn** lose; forget; leave behind *PTs* *nok ‘lose something’ (?).
noo^H beckon. **nóo-** cause animal to come
noo^H briefly. **-nóo...-rñ** Briefly
noo^H surface? **noo-dáa** elders’ resting area **noo-pée** flattened bamboo **noo-hì** womens’ resting area **noohì-**
penkòo unmarrieds’ seating area
nok^L placate. **-nòk** Placatingly
nok^L spread, of disease. **nòk-** spread, of a disease
nop^L disc belt. **o-nòp** brass disc belt
nom^H ~ **jom^H** mix up. **-nóm** ~ **-jóm** Mixed Up
nom^L swallow. **-nòm** swallow
nor^H variety of tree. **o-nór** variety of tree
no^L megafaunal wildcat. **ho-nò** tiger **no-kà** black panther **no-rée** leopard **no-tà** tiger; lion (neo.) **no-càa**
lower spine *PTs* *mjo ‘tiger’.
no^L ~ **no^L** snail; pus; lime (powder). **ta-nò** pus **ta-nò** lime (powder) **tahìr-tapò** snail **tanò** snail; lime (Zirdo)
PTs *no ~ jo ‘snail’
nii^H bad. **-nñ** Bad (O)
nii^H maternal cousin. **nii-ní** maternal aunt’s daughter **nii-bñ** maternal aunt’s son **nii-ò** maternal aunt’s
daughter’s child
nii^L year. **a-nii** year **nii-è** two years from now **nii-tèn** three years from now **hi-nii** this year **mi-nii** last
year **luu-nii** next year **ken-nii** two years ago **ken-kə-nii** three years ago **ken-da-nii** four years ago
PTs *niñ ‘year’.
nii^L shy; shame. **a-nii** shy; shame *PTs* *niñ ‘shy; shame’.
nii^L prepare. **nii-** prepare materials, prior to performing a task
nik^H eye. **a-ník** eye **nig-òr** spectacles **nik-cá** blind **nik-ci** conjunctivitis **nik-ci** left eye **nig-zí** pupil of the
eye **nik-tóm** brow (not including hair) **nik-pàm** blind person **nik-pìn** eyelid **nik-pò** open eyes **nik-púu**
white of the eye **nig-bòk** right eye **nig-bùm** non-folded eyelids; Mongoloid eyes **nii-mè** eye hair
(including lashes and brows) **nig-mii** eyes slanted downwards **nig-jáp** blink **nig-rée** examination
dance **nig-rè** dust particles in the eye **nig-róm** lazy-eyed **nig-láa** tear **nig-lòr** coloured eyes
niksi-nigláa water from the eyes *PTs* *mik ‘eye’.
nir[?] mosquito variety? **num-nir** variety of small mosquito
nir^H laugh. **nír-** laugh **ii-nír** gums *PTs* *ñil ‘laugh’.
nir^L laughable. **-nir** Laughable Result

t

ta- Masculine Diminutive Prefix. *PT* *ta- ‘Masculine Diminutive Prefix’.
taa^H more; again. **-táa** More; Again
taa^H bird. **pə-táa** bird **taa-kə** dove **taa-gìn** winged ant **taa-kú** variety of bird **taa-jáp** swing fan **taa-jòo** top
taa-lì red bird **bər-táa** viper **pə-táa-kobúu** small animals **ziitə-taatə** sun (poetic) *PTs* *tañ ‘bird’.
taa^L undo. **tàa-** untie; unfold **-zin...-tàa** Flatten Out Result **ko-tàa** sitting with ankles together but legs
splayed open at the knees **da-tàa** standing with legs splayed at the knees
taa^L Motive imperative. **-tàa** Motive imperative
tak^H flat; wide; thin; fragment; crack. **ták-** crack; split; dig overhand **tak-** Clf: Fragment **-ták** Cracked
a-ták flat-sided fragment; half of pipe (*not* pole) **a-ták** breadth (as of river) **tak-cí** half **tag-zék**
shard **tak-tir** wild fruit variety **tak-tà** broad **takci-borée** cockroach **ər-ták** fragment of bamboo
koo-ták stripe along the back of a skirt **pə-ták** container with built-in handle; mug **ba-ták** flooring
made from bamboo strips **buk-ták** hardcover dao sheath **lii-ták** massive boulder **hii-ták** wooden pole
orri-riiták flat-leafed coriander (*Eryngium foetidum*) *PTs* *tak Clf: Flat, Thin; *PTs* *tak ‘wide’.
tap^H overturn. **táp-** overturn **-táp** Overturn Result
tam^H slope. **ət-tám** sloping cliff
tam^L hang. **tàm-** hang something
tam^L flat side. **tàm-** Clf: Flat **a-tàm** flat side of an object **i-tàm** loom framestick **ho-tàm** armor
tar^H chanterelle mushroom. **aa-tár** chanterelle mushroom
tar^L split down middle. **-tār** Split Down Middle
ta^H listen/hear. **tá-** listen/hear **ta-kàa** ask (?) *PTs* *tat² ‘listen’.
ta^L obey. **tà-** obey
ta^L Incipient. **-tà** Incipient

tii^H sweet; well-seasoned. **tíi-** (vi.) be well-seasoned **a-tíi** nectar **a-tíi** sweet! (interjection) **tii-hír** sweet
taó-atíi honey from the *taó* bee *PTs* *tii 'sweet'.
tii^H sharp/point. **tíi-** bite, of a pricking insect **hoo-tíi** metal skewer for roasting meat **po-tíi** tip of a blade or pen
tík^H bushel. **a-tík** bushel of leaves, 40 by standard
tík^H flail. **-tík...-rík** Flailingly
tin^H trust. **-tín** Trust; Have Faith In
tin^H small owl spp. **pi-tín** small owl spp., incl. forest eagle-owl (*Bubo nipalensis*) and collared scops owl (*Otus bakkamoena*)
tík^H roll up; bushel. **a-tík** bushel of 40 leaves **tík-** Clfq: Bushels **tík-** roll up
tík^L dab. **tík-** (vt.) dab; daub *PTs* *tit 'wipe'.
tuu^H part; stump; stick section. **a-túu** some **-túu** Stick In Pieces **-túu** Nzr: Part **tuu-kòo** lower side **tuu-dúm** upper side **tuu-ráo** end **ii-túu** toothless **ii-túu** saw (n.) **koo-túu** tailless **gii-túu** house pillar **cii-túu** broken pot **tii-túu** half-smoked cigarette **nap-túu** short-nosed **mə-túu** partially burnt firewood **puu-túu** summit; tup of a heap **lə-túu** stub-legged **hii-túu** tree stump
tuu^H survey an area. **túu-** survey an area, as with a video camera
tuu^H all night. **-túu** All Night Long
tuu^H steep. **-túu** Steep **caa-túu** rising slope
tuu^H stop; set down. **-túu** Stop/Down Result
tuu^H shine (on). **túu-** shine (on)
tuu^L bring into contact. **túu-** prop something against something else; push something suddenly, and with force
tuu^L secure. **túu-** secure
tuu^L dive. **túu-** dive
tuk^H head? **tuk-kó** forehead **tuk-káa** blackie
tup^H tip. **pum-túp** tip of the nose **lii-túp** top of the rice stalk
tup^H shovel (vt.). **túp-** shovel; ladle
tup^H comb (vt.). **túp-** comb hair *PTs* *tuk ~ *tup 'comb (v.)'.
tup^H head-butt; block. **túp-** head-butt **-túp** Blocked **ii-túp** barrier to extending the hand **tup-kò** bump on the head *PTs* *tup 'strike'.
tup^L cup. **ər-túp** bamboo cup **duu-túp** rice measuring/transferring cup **pə-túp** container
tum[?] land? **tum-pə** dry land
tum^H bear. **tum-pin** bearskin **tum-cik** variety of small bear **hot-túm** bear **bee-túm** bachelor monkey **bet-túm** nightingale variety **itúm** **gaalúm** giant black bumblebee *PTs* *tum 'bear'.
tum^H close; lock. **túm-** lock **-túm** closed **it-túm** scrotum **lə-túm** legs folded
tum^L clump; fold. **túm-** fold **túm-** Classifier for clumps **a-túm** clump
tur^H alive. **túr-** be alive *PTs* *tur 'alive'.
tur^H support from below. **túr-** support from below **tur-gí** roofpost
tú^H kick. **tú-** kick
tú^L knit a garment. **tù-** knit a whole garment (from start to finish)
tú^L garland. **tù-** garland someone
tee^H injure? **-téé** Extreme Feeling Result
tek^H partially disclose. **-ték** Partially Disclose Result
ten^H be above; be on top of; suspend; cover. **tén-** suspend something by fixing to surface, without hook **-tén** On Top **lə-tèn** cover with the foot
ten^H far away. **-tén** From Far Away **ten-ée** five days/years hence **ten-kùr** five days/years hence **jii-tèn** three years hence **ro-tèn** four days hence
ten^L repair. **-tèn** Repaired *PTs* *ten 'repair'.
too^H scoop rice. **tóo-** scoop out (and serve) rice
too^L spray. **tòo-** spray
too^L cause to fall. **-tòo** Cause to Fall
tok^H cluck. **tók-** cluck
tok^H move down. **tók-** move downward, not necessarily reaching a goal
tom^H show (someone something). **-tóm** Show Applicative
tor^H strong; hard; bulging. **tór-** exert force; be hard **at-tór** firm; hard **lii-tòr** hard, pure rock, without sandstone admixture **ii-tór** bucktooth(ed) **mee-tór** yeoman **nap-tór** protruding, of lips; snoutlike **ə-tòr** mature, strong bamboo *PTs* *tol 'strong'.
tor^L drape (vt.). **tòr-** drape
to^H leave; drop; discard. **tó-** leave; drop; discard **-tó** Perfective Aspect Marker
to^H wait. **tó-** wait
to^H ~ tu^H for first time. **-tó ~ -tú** For First Time **-tó...-káo** For First Time

tò^L grandfather; father-in-law. **a-tò** grandfather; father-in-law **atò-ajò** grandparents *PTs* *to
 ‘grandfather; father-in-law’.
tò^L agree. **tò-** agree
tə- PFX. **tə-pə** maize **tə-gùu** curved **tə-jəə** misdirected **təkér-təmér** curling **təgùu-təjəə** zig-zagged
təpə-bulúu popcorn
təə^H chop; hurt. **-təə** Hurt Result **təə-** chop **pə-təə** cup
təə^L pylon? **kə-təə** beam supporting a pillar
təə^L bamboo joint. **aa-təə** bamboo knot/joint **a-təə** section of bamboo including joint
tək^H hack/cut up/chip; length. **tək-** hack/cut up **tək-** Classifier for chips **a-tək** piece; wood chip; section
 of a long thing; length; stretch **lit-tək** penis tip **lə-tək** stinger on a bee **din-tək** hunk of meat *PTs*
 *tək ‘cut up’.
tək^H kettle? **tək-sfi** water kettle
təp^L fly/spin discus. **təp-** fly/spin, of a discus
təm^H upon. **-təm** Upon **nik-təm** eyebrow
tər^H support from side. **tər-** support from the side
tər^H limit; endpoint; last. **-tər** To Limit Result **-tər** Nzr:Endpoint
tər^L endpoint (temporal only?). **-tər** Temporal Endpoint
tə^H sit nontraditionally. **tə-** plunk oneself down; sit any old way
tə^H bounce; punch open-fisted. **tə-** bounce **tə-** punch open-fisted
tə^L big; first; elephant. **at-tə** big (Pugo) **tə-** (adj:mono) big **tə-** (vi.) swell; become big **-tə...-nòò**
 Majority Of **tə-bò** elephant bull **tə-cùu** small/dwarfish elephant **tə-lèe** wild elephant **tə-nə** elephant
 cow **tə-ò** elephant calf **tə-pìn** elephant skin **tə-rəə** elephant tusk **tə-tii** elephant herd **i-tə** variety of
 bee **o-tə** adult **kar-tə** giant wedding celebration **ki-tə** first maternal uncle **nam-tə** first daughter-in-
 law **ni-tə** rich (person) **no-tə** tiger **zir-tə** young woman **nə-tə** first brother’s wife **pin-tə** primary area
 of a house **puk-tə** bravery **baa-tə** large ladder **bo-tə** mithun bull **bi-tə** king cobra (*Ophiophagus*
hannah) **ho-tə** elephant **hii-tə** ninth moon cycle (high-water time) **ziitə-taatə** sun (poetic) *PTs* *tə/a
 ‘big’.
tə^L Distal demonstrative, up.
tii^H imbibe. **tii-** imbibe **tii-pák** drinking snack **dorik-tiirik** bridal gifts **donám-tiinám** sustenance *PTs* *tiŋ
 ‘drink’.
tii^H flock; herd; grove. **at-tii** group (of anything) **a-tii** group; flock; crowd **ak-tii** flock of ravens **ə-tii**
 herd of cattle **ə-tii** grove of bamboo **tə-tii** herd of elephants **cər-tii** herd of deer **pak-tii** banana grove
bee-tii group of monkeys **luu-tii** wild plantain grove **zo-tii** grove of *Bambusa tulda* *PTs* *tiŋ ‘Clf:
 Group of Animals’.
tii^H vagina. **tii-cər** clitoris **tii-mə** female pubic hair **tii-láa** vaginal fluid **tii-lò** female pelvic bone **tii-pòk**
 vaginal growth **tii-bák** vaginal lesion
tə^H vagina (alt.). **it-tə** vagina *PTs* *ti ‘vagina/vulva’.
tii^L rice flour. **i-tii** rice flour
tik[?] bunch? **tik-pùm** bunch
tik^H frog. **ta-tik** frog *PTs* *tik ‘frog’.
tik^H jerk. **tik-** jerk something **-tik...-rik** Jerkingly
tir^H break (vt.). **tir-** break (vt.) **-tir** Break Long Result *PTs* *tir ‘break’.
tir^H group. **tir-** Clf: (Animal) Group’ **a-tir** group (of anything) **kii-tir** pack of dogs **pee-tir** bunch or
 bushel of bunches **pi-tir** chicken carrier **luu-tir** group of people
tir^L last; extinct. **-tir** Last In Series **tir-** go extinct
ti^H pick; put. **tí-** pick; put *PTs* *ti ‘pick up’.

d

daa^H stick. **a-dáa** stick (of) **dáa-** Clf: Stick **daa-hák** single stick **bə-dáa** road **cəə-dáa** thumb finger **hii-dàa**
 stick **kob-dáa** loom framestick **koo-dàa** balcony
daa^H big; first; fast. **-dáa** Immediate **cəə-dáa** thumb finger **o-dáa** prime rice beer **ni-dáa** marriage **koo-dàa**
 balcony **gi-dáa** management of household affairs
daa^H target something. **dáa-** target something
daa^H high-step. **dáa-** high-step **daakóo-daalóo** stilts
daa^L stumble down. **dàa-** stumble and fall
daa^L prime; best. **am-dàa** prime rice crop **poo-dàa** prime opo, from first filtration
dak^L stand. **dàk-** stand **dàk-** be at (animate, standing position/inanimate, attached) **-dàk** Change of

State **-dakkòm** Even (though) *PTs* *dak ‘stand; be standing’.

dak^L tight. **a-dàk** tight; congested

dap^H volume; level. **dáp-** Clf: Things that come in volumes or levels, such as books or classes/levels in school.

dam^H handicapped; hindered? **ni-dám** handicapped person; person who can’t walk properly

dam^L sprout; straight. **dám-** sprout, of a rice plant **-dám** Straight Result

dar^H conscientious. **dár-** be conscientious; be a good boy

dar^L segregate. **dàr-** segregate

da^H feel with foot. **dá-** feel around with the foot **ar-dá (dakúp-dalék)** clever

da^L equal? **-dà** Equal

dii^H piledrive. **díi-** drive something into the ground *PTs* *dii ~ *diŋ ‘plant (vt.)’.

dii^L mountain. **a-dii** Adi tribespeople **moo-dii** mountain **pə-dii** popping corn **jor-dii** mountain (poetic)

dii-cùm butte **dii-mii** demon **tarúk-diicùp** white ant anthill *PTs* *di ‘mountain’.

dii^L again. **-dii** Again

dik^H bother; hassle. **-dík...-jík** scuttle; scurry; hassle

din^H meat. **a-dín** meat **pi-dín** egg white **din-páa** chopping block **din-jék** flesh **din-ták** hunk of meat

din-lèe fresh meat **din-sèn** dried meat *PTs* *din ‘meat’.

din^H reason. **-dín** Nzf: Reason

din^H fill. **dín-** fill (up with)

duu^H section of bamboo. **a-dúu** one section of bamboo **u-dúu** section of bamboo **dúu-** Clf: Bamboo

Section **duu-kám** old section of bamboo **duu-kii** penis sheath **duu-tùp** rice measure

duu^H upward. **-dúu** Upward **u-dúu** unmarrieds’ seating area **pum-dúu** upturned nose

duu^H sesame. **duu-púu** white sesame **duu-káa** black sesame **duu-zàp** flat (black) sesame

duu^L sit; stay; live. **dúu-** sit **dúu-** stay; be at (animate) **-dúu** Imperfective **duu-pər** stool **duu-gəə** bench

duu-nə married-off female relation **rəròo-duuròo** artifacts of youth *PTs* *duŋ ‘sit; stay; live’.

duk^H roll, of ball. **dúk-** roll, of a ball or spherical thing *PTs* *duk ‘run’.

duk^H frenzy. **hi-dúk** frenzy **dúk-** whip self into frenzy

dup^L chafing. **a-dùp** chafing

dum^H head; head hair; main. **a-dúm** head hair **nam-dúm** distant neighbor’s house **pa-dùm** confluence

dum-cì headache **dum-kə** black hair **dum-gú** main house pillar **dum-lá** red hair **dum-lúk** baby hair

dum-máa headless **dum-(m)ám** soft section of the head **dum-páa** pillow **dum-pə** long hair **dum-póo** head

dum-púu white hair **dum-púk** headscarf **dum-rík** pate **dum-zèe** green hair **pa-dùm** confluence

PTs *dum ‘head’.

dum^H purposeful. **-dúm** Purposefully

dum^H lidded cylindrical cane container. **u-dúm** lidded, cylindrical cane container

dum^L (barking) deer. **ho-dùm** barking deer (*Muntiacus* spp.) **dum-cùu** sambar deer (*Cervus unicolor*)

dum-pìn barking deer skin *PTs* *dum ‘barking deer’.

dum^L help. **-dùm** Help

dur^H headfirst. **dúr-** move headfirst, as when carrying a grain basket

dur^L great barbet. **pu-dùr** great barbet (*Megalaima virens*)

du^H forearm; elbow. **dú-** Clf: Forearm Length **a-dú** Clf: Forearm Length **lag-dú** forearm **lagdú-guursə** elbow *PTs* *du ‘elbow’.

du^H ~ do^H sound; noise. **a-dó** sound; noise **dú-** make audible sound **du-tə** loud sound *PG* *du; *PTs* *dut² ‘sound; noise’.

du^L dig with tool. **dù-** dig by scraping with a tool *PTs* *du ‘dig’.

dee^H soil. **ko-dée** soil; earth **dee-rí** plains area **dee-gók** cracking in the soil **kodée-deerí** plains **dee-rə** public hall **dee-cí** first moon cycle

dee^H split bamboo. **dée-** split bamboo

dee^H stew. **dée-** stew; cook something hard for a long time

dee^H may; possible. **dée-** may **-dée** Possible

dee^L Propositional. **-dèe** Propositional Modal Suffix

dek^L different (from previous). **-dèk** Different From Before

den^H convulse. **-dén(...-rén)** Convulsively *PTs* *dan ‘shake’.

den^H exhaust; use up completely. **-dén** Exhaust; Use Up Completely

den^L change. **-dèn** Change **dèn** Comparative Particle

deK^H be cracked. **déK-** be cracked **deg-gók** cracked, particularly of the soil

doo^H celestial; heaven; earth; rain; weather. **ni-dóo** rain **doo-gúm** storm; thunder **doo-hùk** steam **doo-jí** legend; advice **doo-kóo** hawk (generic) **doo-mə** cloud **doo-mùk** cloud vapor **doo-nùm** shade

doo-jùm shade **doo-ràk** lightning **doo-rə** wind **doorə-doojap** climate **dooliilə** groundswell of power/enthusiasm **ciigóo-doogóo** the whole world *PTs* *doŋ ‘rain; weather prefix’.

doo^H lie down. **dóo-** (vi.) lie down; be in lying position; be at (inanimate); be settled/living permanently

(animate) **-dóo** Stative Aspect **doo-gàə** bed **doo-lúu** village *PTs* *doŋ ‘lie down; exist’.
doo^L distant. **o-dòo ~ oo-dòo** far **a-dòo** distance; distant *PTs* *do ‘far’.
dok^L bead(s). **ta-dòk** bead(s) **dog-nə** large stone bead at ornament base **dog-mìn** variety of small stone bead
dom^H high. **(o)o-dóm** high, as of a mountain
dor^H pay. **dór-** pay
dor^H animal. **dór-** Clf: Four-Legged Animal **a-dór** Clf: Four-Legged Animal **a-dór** body of an animal
dor^L worm. **ta-dòr** earthworm **dor-kàa** earthworm **dorkàa-apík** earthworm mudpile **dorkàa-laabúu** footlong earthworm *PTs* *tol ~ *dol ‘earthworm’.
dor^L increase. **-dòr** Increase **dòr-** increase
do^H eat. **dó-** eat **do-kée** food; (animal) feed **do-pák** snack **do-lò** paddy **donám-tiinám** sustenance; daily maintenance **dorík-tiirik** bridal gifts **dopùk-liigòo** throatpipe *PTs* *do ‘eat’.
do^H slab trap. **o-dó** slab trap
do^L range. **-dò** Range Of Nominalizer
dəə^H short. **dəə-** short (adj:mono) **a-dəə** short **lə-dəə** short legs **bee-dəə** short-tailed macaque (prob. *Macaca munzala*, poss. *Macaca arctoides*) *PTs* *təŋ ~ *dəŋ ‘short’.
dəə^H continue; go on all day. **-dəə** Continuously; All Day
dəə^H third (?). **joo-dəə** elders’ seating area **nə-dəə** fourth brother’s wife **jəm-dəə** third daughter-in-law
dəə^L soar. **dəə-** soar; fly
dək^H sweep foot. **dək-** sweep the foot
dək^H different (thing). **a-dək** different (thing) **bə-dək** different
dəp^L cruise. **dəp-** cruise
dəm^H beat (hit). **dəm-** beat
dər^H tailbone? **kə-dər** backbone
də^H continually. **-də...-də** Continually
dii^{L?} wonder. **dii** Wonderment particle **ə-dii** incredible
dii^L pummel. **dii-** flog; hit with something heavy **dii-búu** spear *PTs* *diŋ ~ *ziŋ ‘beat; flog’.
dii^L strong; firm. **ad-dii** strong *PTs* *diŋ ‘firm’.
dii^L flow; rush forth. **i-dii** nosebleed **poo-dii** waterfall **hi-dii** waterfall **rag-dii** sheer cliff
dik^H irritation; poison. **a-dik** irritating; annoying **a-dik** burning sensation **dik-** irritate; whine; grovel **-dik** Irritated **rug-dik** poisonous fern *PTs* *tik ~ *dik ‘hot (spicy)’.
dir^H be broken (long); exhausted. **dír** break (vi.), of a long thing **dír-cì** small strips of *tabúm* bamboo used for binding **a-dír** (**a-mír**) exhausted **dír-cì** small bamboo strips *PTs* *dir ‘break (vi.)’.
dir^L unnatural shape/orientation; perpendicular. **-dir** Unnatural Shape/Orientation Result **a-dir** in an unnatural shape/orientation; perpendicular **i-dir** fishtrap variety **por-dir** angular; many-faced **moo-dir** rugged terrain **moo-dir** deformed face **lə-dir** lame
di^H peel; flay; cause pain. **dí-** peel (vt.) **-dí** Cause Pain *PTs* *di ‘skin; flay’.
di/ə^H time. **-də** Nzf: Time **dí-gò** summer **dí-cí** winter **dí-kà** each/every time **ja-dí ~ ja-də** how much/many
dí^L drip; drop. **dí-** drip *PTs* *di ‘drip’.

n

naa^H throw overhand. **naa-** throw overhand **gurnə-naanə** topmost element of a Galo loom, over which string is thrown
naa^L structure. **naa-húu** granary **naa-kùm** rest house **naa-kàa** ceiling **naa-kòr** hunting platform
nak^H whittle/gnaw. **nák-** whittle/gnaw **nak-kíi** (make) point(ed)
nap^H mouth area. **nap-kàp** pointy chin **nab-zòm** sloping-mouthed **nap-tór** protruding lips **nap-tú** short-nosed **nap-tùm** closed mouth **nab-dóo** protruding mouth **nap-páa** mouth **nap-pòr** buck teeth **nap-pùr** blunt tipped **nab-bèe** drool **nab-bèr** fat lips **nab-bik** shrug of the lips **nab-búu** snout **nam-mə** facial hair *PTs* *nap ‘mouth’.
nam(-ko^H) back. **naŋ-kó** back *PTs* *lam(-ku) ‘back’.
nam^H house. **nam-** Classifier for houses **nam-ə** house **nam-pòm** group of houses **nam-kòo** downward neighbor’s house **nam-cə** small house **nam-cí** permanent dwelling **nam-dúm** distant neighbor’s house **nam-pó** breadth of a house **nam-ràa** house interior **nam-jáa** decrepit house **nam-jàr** length of a house *PTs* *nam ‘house’.
nam^H sesame. **nam-zì** white (yellow) sesame **nam-dúu** black sesame
nam^L smell. **nam-** smell **nam-èe** musty odor **naŋ-kúu** sour-smelling **naŋ-kàr** body odor **nam-jàa** rotten odor **nam-sùu** stench; stinky **fi-namjàa** stinkweed (*Ajaratum* sp.) *PTs* *nam ‘smell’.
nar^H borrow/lend. **nár-** borrow/lend *PTs* *nar ‘borrow/lend’.

nii^H starting out bit by bit. **-nfi...-náa**
nii^H person (alt.). **ta-nfi** person (poetic); mankind; Abo Tani *PTs* *mi(i) ‘person’.
nii^H brain; marrow. **pi-nii** brain **loo-nfi** marrow *PTs* *(pVk-)ni (?) ‘brain’.
nin^H plenty. **a-nín** plenty
niK^H succeed/follow. **niK-** succeed/follow
nuu^H aflame. **-núu** Aflame Result *PTs* *-not² ~ -*jot² ‘kindle’.
nuu^L bob knees. **núu-** bob knees
nu^H knead; wrestle. **nú-** knead; wrestle
nu^H bellow/moo. **nú-** bellow, of a cow; moo
nu- Second person nonsingular formative. **nu-jù** 2.DL **nu-nù** 2.PL
nu^L cooked. **nù-** be fully cooked **-nú** Cooked Result *PTs* *nu ‘cooked’.
nu^L break. **-nù** Break Result
nek^L hate(ful). **a-nèk** hate; healous **-nèk** Bad Manner
nen^H progenerate; filter. **nen-** filter rice beer **nen-** progenerate **neŋ-kò** lineage
nen^L exit. **nen-** exit *PTs* *len ‘out’.
neK^H rub. **neK-** rub *PTs* *not² ‘rub (skin)’.
neK^H abdomen? **nep-pá** abdomen
noo^H prepare. **-nóo** As Preparation
no^H Second person singular pronoun. **nó** 2. SG *PTs* *noo ‘Second person pronoun’.
no^H knead/crush with fingers. **nó-** knead/crush with fingers
nəə^H season. **nəə-** season; spice up
nəə^H spear? **nəə-búu** spear
nəə^L Second person reflexive pronoun.
nəm^H satiated. **-ném** Satiated Result *PTs* *jem? ‘satiated’.
nər^H rub; bump; flatten. **-nér** Dislodge **-nér** rub; bump; flatten
nə^H leaf. **a-nə** leaf **nəə-nə** medicine (herbal) **hen-nə** dry leaf **paŋ-nə** banana leaf **nə-jáa** damaged leaf
nə-mñi grass **nə-rñi** ~ **lə-rñi** lower stem **nəhík-nəməi** ground cover **nə-túu** thread *PTs* *nə ‘leaf’.
nə^H with/instead. **-nə** Instead (of O) Applicative **-nə** With (Inst) Applicative
nə^H navel. **kii-nə** navel *PTs* *(kri-)ni ‘navel’.
nə^H budge. **-nə...-bó** Move; Budge
nə^H jealous. **nə-** be jealous
nə^L mother; female; large; cow. **a-nə** mother **nə-ì** brother’s last wife **nə-ir** first baby-washing **nə-zir**
female calf **nə-bùk** adolescent female calf **dog-nə** large stone bead at ornament base **bə-nə** main
road **bər-nə** husband’s brother’s wife **rig-nə** wife’s sister **kin-nə** child’s spouse’s mother **zig-nə**
buffalo cow **ə-nə** cattle cow **ho-nə** mithun cow **tə-nə** elephant cow **roŋ-nə** hen **kii-nə** female dog
pag-nə female slave **ig-nə** mature louse **lə-nə** big toe **cəə-nə** thumb finger **laŋ-nə** thumb finger
kaa-nə upper rapko shelf **lii-nə** boulder **jaa-nə** folksong sung by women **cər-nə** deer doe **ra-nə** boar
sow **nə-mám** placenta (tone?) *PTs* *nə ‘mother’.
nə^L brother’s wife. **nə-tə** 1st brother’s wife **nə-ròo** 2nd brother’s wife **nə-kòo** 3rd brother’s wife **nə-dəə** 4th
brother’s wife **nə-ì** 5th brother’s wife *PTs* *ni ‘younger brother’ (?).
nə^L plant; stem; trunk. **nə-** Clf: Plant **a-nə** tree trunk **ag-nə** stem **hi-nə** tree
nə^L fish. **nə-** Clf: Fish **a-nə** one fish **məə-nə** fish (Puugo)
nii[?] bamboo variety (*Dendrocalamus hamiltonii*). **ə-nii** *Dendrocalamus hamiltonii*
nii^L nudge. **nii-** nudge
nik^H near. **-ník** Near
nik^H punch; stab. **ník-** punch; stab *PTs* *nik ‘stab’.

p

pa- Pfx: Shape/disposition. **pa-gáp** clench **pa-gùu** bent **pa-kóo** crossed, of limbs **pa-kór** wavy **pa-gén**
hang **pa-gár** crooked **pa-zòo** supporting beam **pa-zòm** sloping **pa-dùm** confluence **pa-pòo** drape
one’s leg across something
paa^H long thing; banana; block. **a-páa** Clf: Long things, prototypically banana **páa-** Clf: Long **dim-páa**
chopping block **dum-páa** pillow **paa-pùk** banana flower
paa^H middle. **lə-pàa** shin; middle section **ə-pàa** middle-aged bamboo **ii-páa** immature bamboo *PTs* *praŋ
‘shin/shank’.
paa^H whippersnapper. **a-páa** whippersnapper **jaa-páa** young (masculine)
paa^L hover. **pàa-** hover
paa^L stack; pile. **pàa-** stack; pile **pum-pàa** beehive

paa^L get. **paa-** get **-paa** Attainment marker *PTs* *paa ‘get’.
paa^L animal corridor. **a-paa** animal corridor **bə-paa** animal corridor (var.)
paa^L dawn. **paa** dawn
pak^H stuff (n.). **ək-pák** these/those things **do-pák** pickle/relish **tii-pák** drinking snack
pak^H care about. **pák-** love; care about
pak^H suspend. **pák-** suspend (hang)
pak^L reject; dispose; garbage; slave. **-pák** ‘Rid Result’ **ə-pák** throw away **jaa-pák** gone off/rotten **pag-bò** male slave **pag-nè** female slave **ji-pák** non-hill-tribal **nii-pák** son of Abo Tani whose descendants became the non-hill-tribals
pak^L common banana (*Musa acuminata*). **ko-pák** common banana (*Musa acuminata*) **paŋ-nè** banana leaf **pag-lùu** banana grove *PTs* *(ko)-pak ‘banana’.
pam^H condensation. **ta-pám** snow/ice **aa-pám** fog *PTs* *pam ‘snow’.
pam^H dry by fire. **pám-** dry something by the fire **pam-cəə** bake in parcel *PTs* *fam ‘dry by fire’.
pam^L position against. **pàm-** set or position something against something else
pam^L blind? **jik-pàm** blind
par^H separate into sets. **pár-** divvy up **pár-** Clf: Team **a-pár** team **a-pár** Clf: Grinding’s worth **cii-pár** large mortar for pounding rice *PTs* *par ‘mortar’.
par^H stoke. **pár-** stoke a fire **-pár** Spread Result *PTs* *par ‘ignite’.
par^L dandruff. **ta-pàr** dandruff
pa^H cut by strike. **pá-** (vt.) cut by strike **pa-zùk** war dance *PTs* *pa ‘cut (as with machete)’.
pa^L braid. **pà-** braid, as rope or hair
pii^H spray. **píi-** spray
pii^H prick. **píi-** prick
pii^H four. **píi-** four **pii-nè** eight **ap-píi** four **lup-pii** bamboo hat in four-angled weave *PTs* *pri ‘four’.
pii^H Indian carp variety (*Cirrhina mrigala*). **ŋo-píi** *Cirrhina mrigala* **ŋopíi-piilík** *Cirrhina mrigala* minnow
pii^L boil over. **píi-** boil over
pii^L thin out. **píi-** thin out (branches) **tapíi-tamáa** ground cover
pii^L sweetie. **a-píi** sweetie; darling **buu-pii** small/young rat
pik^H pound; force through. **píK-** pound **-pík** Burst Result **a-pík** worm-discharged soil **ee-pík** dung **ee-pík-cunik** dung beetle **ee-pík-taín** cow dung mushroom **kobùu-apík** pile of dirt heaped by a rodent **dorkàa-apík** earthworm mudpile
pik^L foam. **a-pík** foam; bubble(s) **ta-pík** dust-casting insect (any variety) *PTs* *pit^l ‘foam’.
pin^L skin. **pìn-** harvest cane **a-pìn** skin **bin-pìn** goatskin **buu-pìn** ratskin **dum-pìn** deerskin **ə-pìn** cowhide **ho-pìn** mithun skin **kii-pìn** dogskin **men-pìn** tiger skin **ram-pìn** otter skin **rək-pìn** pigskin **rok-pìn** chicken skin **tum-pìn** bearskin **hotə-tapìn** elephant skin **hodùm-apìn** deerskin *PTs* *pìn ‘skin’.
pin^L snap. **-pìn** Snap **ta-pìn** loom shuttle
pin^L stop. **-pìn** Stop
pin^L scheme. **pìn-** scheme
pin^L home. **pìn-** Clf: Home **i-pìn** homestead **pin-tə** primary area of a house/area for principal family **pim-mèe** minor area of a house/area for extended family **pintə-imìk** primary fireplace **pimmèe-imìk** secondary fireplace
piK^H pound. **píK-** pound
piK^L undress. **píK-** undress *PTs* *prit ‘undress’.
puu^H white. **púu-** (vi.) be white **-púu** Make Clear **ja-púu** white **puu-lúu** white **aa-púu** white tea **gii-púu** white pillar **duu-púu** white sesame **dum-púu** white hair **hor-púu** Ceylon ironwood tree (*Mesua ferrea*) in new leaf **maa-púu** white tapioca **mír-púu** whitened **jik-púu** white of the eye **lii-púu** white stone **ta-púu** white one *PTs* *pun ~ *puŋ ‘white’.
puu^H spread. **púu-** spread, as a blanket on the ground **hi-púu** flood *PTs* *pru? ‘spread out’.
puu^H flower. **a-púu** flower **púu-** bloom *PTs* *pun ‘flower’.
puu^H tie. **púu-** tie (shoes)
puu^H flute. **ta-púu** flute *PTs* *pruŋ ‘flute’.
puu^L uproot. **púu-** uproot
puk^H burst (vt.); hasty. **púk-** (v:c.arg) crack knuckles **a-púk** (**a-rée**) hasty **-púk...-rée** Carelessly **lak-púk** finger joint/cracking point **lə-púk** toe joint/cracking point
puk^L particle; heart; inner substance. **a-púk** particle **aa-púk** heart **paa-púk** banana flower **ruu-púk** ear wax **puk-tə** bravery **apúk-alúk** particles; bamboo pith **dopúk-liigò** throatpipe *PTs* *(haŋ-)puk ‘heart’.
puk^L arrow. **u-púk** arrow **pug-zàr** headless arrowtip **puk-kò** shaft of a headed/metal-tipped arrow *PTs* *puk ‘arrow’.
puk^L kiss. **púk-** kiss **muu-púk** kiss *PTs* *pup ~ *puk ‘kiss’.
puk^L sell. **púk-** sell *PTs* *pruk ‘sell’.
puk^L scarf? **dum-púk** headscarf

pup^L lounge around. **pùp-** lounge around; laze about
pum^H nose. **ne-pùm** nose **pum-bək** right nostril **pum-cì** left nostril **pum-cì** noseache **pum-dúu** upturned nose **puŋ-g̃hì** bridge of the nose **pum-kàm** booger **puŋ-kíi** pointy nose(d) **puŋ-kòo** nose piercing **pum-mà** nose hair **pum-túp** nose tip **pum-zàp** flat nose **pumsi-pumláa** nose water *PTs* *pum ‘nose’.
pum^H insect. **ta-púm** insect **pum-pàa** beehive *PTs* *pum ‘insect; worm’.
pum^L heap. **a-pùm** heap; hulk (composite or unitary) **pùm-** (vt.) make a pile **pùm-** Classifier for heaps **lii-pùm** pile of stones **mip-pùm** ashpile in fireplace center **pum-sì** even-numbered set **pum-pèn** odd-numbered set
pur[?] filter? **poo-pùr** rice beer filtering platform
pur^H wrap over. **púr-** wrap over **poo-pùr** rice beer filter
pur^L blunt. **-pùr** Blunt O Result **nap-pùr** blunt
pu^H backbite. **pú-** backbite
pu^L tug. **pù-** tug *PTs* *pu ‘pluck’.
pu^L bundle. **pu-càə** (wrap in) meal packet *PTs* *pu ‘wrap in a bundle’.
pu^L owl. **pu-pə** owl **pu-pù** owl (Taipodia)
pee^H cut with knife. **pée-** cut with knife **-pée** Cut Result **joo-pée** flattened bamboo *PTs* *pee ‘cut’.
pee^H bean. **pee-rén** long bean **pej-ək** soy bean *PTs* *pee ‘bean’.
pee^H habit(ually use). **-pée** Nzf: Habit **-pée** Habitually Use To
pee^H bunch. **pée-** Clf: Bunch **a-pée** one bunch of bananas **pee-tír** bushel of bunches
pee^H flattened bamboo. **pee-càə** bamboo mat **joo-pée** flattened bamboo crosshatch wall **lup-pée** woven ritual bamboo hat
pee^L cramp. **a-pée** fatigued **lak-pée** arm cramp **lə-pée** leg cramp *PTs* *pe ‘tired; rest’.
pee^L sliced? **ii-pée** sliced, fermented bamboo **kuu-pée** bamboo shoot
pee^L part (vt.). **pée-** cross hatch (with flattened bamboo) **pée-** part (hair) **pée-** make a path (in the jungle)
pek^H on the way. **-pék** Along The Way
pek^L bubble; surface residue. **a-pək** bubble; milk scum
pek^L force through gap; persevere. **-pək** Through Gap Result **a-pək** (**a-rək**) perseverant **lə-pək** sitting with legs positioned through a gap **pakòo-ləpək** sitting Indian-style *PTs* *pet ‘force into (a crack)’.
pen[?] orphan; forget. **o-pèn** orphan **joo-pèn** lose; forget; leave behind *PTs* *(fio-)pran ‘orphan; forget’.
pen^H bat. **ta-pén** bat **hooz̃hì-hoopèn** jungle gecko *PTs* *pon ‘bat’.
pen^H break off. **pén-** break off **-pén** Miss From Sequence
pen^H packet. **pén-** make rice packet **ko-pén** rice packet
pen^L separate. **pèn-** tear off piece from whole **-pèn** Separate Result **hoo-pèn** chameleon (lizard whose tail can fall off) **pum-pèn** odd-numbered set **o-pèn** orphan *PTs* *pan ‘separate’.
pen^L carrying strap. **e-pèn** baby-carrying strap
peK^H sweep; wipe. **pék-** sweep; wipe
peK^H fool? **pec-cáa** fool
peK^H partition. **pék-** partition
peK^L spray. **pək-** spray
peK^L leech. **ta-pək** leech **per-rò** jungle leech *PTs* *pat¹ ‘leech (land)’.
peK^L tear (vt.). **pək-** tear something
poo[?] moon. **poo-lò** moon **dooní-poolò** Tani traditional religion *PTs* *po(-lo) ‘moon’.
poo[?] barren? **nə-pòo** barren; unable to conceive
poo^H trunk; breadth; rotund(ity). **póo-** Clf: Trunk **póo-** chop a trunk **-póo** Across Breadth **poo-nùu** dance line **poo-bò** hanging shelf **poo-kóo** skeleton **a-póo** broad; breadth **a-póo** one pole (solid, not hollow) **ar-póo** leg haunch **ur-póo** breadthwise crossbeam **ii-póo** torso **zii-póo** fat/rotund chameleon **dum-póo** head **nam-póo** breadth of a house **pa-pòo** drape(d) leg **bə-póo** road along breadth of mountain **lak-póo** arm, without hand; trunk of arm
poo^L liquor. **o-pòo** liquor **po-à** storage basket for fermenting rice mixture **poo-bòr** giant filter **poo-dàa** prime rice beer **poo-d̃hì** waterfall **poo-g̃hì** rice beer filtering framework **poo-kàa** black rice beer **poo-nà** fermented rice **poo-nùu** line dance **poo-pùr** rice beer filter **poo-r̃hì** second batch rice beer *PTs* *poŋ? ‘liquor’.
poo^L cover; thread loom. **pòo-** cover; prepare loom by spreading thread over **nik-pòo** wide open eyes **pa-pòo** drape leg across *PTs* *poŋ ‘spindle’.
poo^L variety of fish. **ta-pòo** variety of fish
poo^L feel empowered/advantaged. **-pòo** Have Advantage
pok^H hop. **pók-** hop **-pók** Over The Side **-pók** Beyond a Limit *PTs* *pok ‘jump’.
pok^L protrusion? growth? **tii-pòk** vaginal growth
pop^L yeast; starter culture. **o-pòp** rice beer starter culture *PTs* *pop ‘yeast’.
pom^H cluster; heap. **a-póm** group; pile **-póm** As Group *PTs* *pom ‘cluster’.
pom^H soak. **póm-** soak *PTs* *p(r)om ‘soak’.

pom^L cluster. **nam-pòm** cluster of houses; village *PTs* *pom ‘cluster’.
por^H random(ized). **-pór** Into Random Configuration **nap-pór** malformed mouth **por-dír** angular; many-faced
por^H pry. **pór-** pry (out); remove using tool
po^H male (animal). **a-pó** male animal **rok-pò** rooster
po^H basket (winnowing). **o-pó** winnowing basket
po^H limb; span. **ar-pó** leg haunch **ə-pò** bamboo variety
po^H sting. **pó-** sting **po-tíi** tip
po^H on time. **-pó** To Time Mark
po^H mediator. **lam-pó** mediator **po-léə** animal leg as ritual gift for mediator
po^L plait/roll up. **pò-** weave small bamboo strips; roll into a packet **po-hùm** meal packet **po-ñik** six-angled weaving pattern
po^L cure. **-pò** Cure *PTs* *-pro? ‘good (verbal particle)’ (?).
pə^H divert water. **pə-** divert water
p(V/ə)- Pfx: Bird/flying thing. **pə-táa** bird **pa-àk** crow **pə-bée** parrot (generic) **pə-gáa** great pied hornbill (*Buceros bicornis*) **po-kóo** peacock **po-róo** arrow flight **po-kòk** Blackbrowed tree pie (*Dendrocitta frontalis*) **pərcí-pərní** small moth **pə-róo** pigeon (genetic) **pír-sín** red jungle fowl (*Gallus gallus*) **pə-záp** duck (generic) **pə-zàa** (vi.) cluck **pə-zák** variety of bird **pu-rúu** whitecrested laughing thrush (*Garrulax leucolophus*) **pu-cùp** house sparrow **pí-mùu** whitecheeked hill partridge (*Arborophila atrogularis*) **pu-dùr** great barbet (*Megalaima virens*) **pí-tír** chicken coop **pí-má** variety of raptor (eagle?) **pí-rík** kaleej pheasant (*Lophura leucomelana*) **pí-hík** rufousnecked hornbill (*Aceros nipalensis*) **pí-làm** myna (*Acridotheres tristis*) **pí-tín** small owl spp., incl. forest eagle-owl (*Bubo nipalensis*) and collared scops owl (*Otus bakkamoena*) **pílfí-píkà** chicken louse **po-rók** chicken/domestic fowl **pu-rùp** field sparrow **pu-pə** owl (generic) *PTs* *pV- ‘Pfx: Bird’.
pəə^H hammer. **pəə-** hammer; bludgeon
pəə^H fart.1. **pəə-** fart (v:c.arg) *PTs* *pəə ‘fart.1’.
pək^H sweep. **pək-** sweep (with broom) *PTs* *pək ‘sweep’.
pək^L pull off; break. **pək-** pull off **-pək** Break Result
pək^L perfect. **-pək** Perfect **a-pək** perfect **apək-arək** perfect
pər^H rotate; butterfly. **pər-** rotate a circle **pərcí-pərní** small moth **japér-poomər** butterfly **uì-jaapér-poomər** variety of large moth
pə^H pellet; particle. **nep-pə** abdomen **pə-góo** circle; round **pə-mìk** chaff **pə-mír** dust
pə^H raft; mat. **hi-pə** raft **doo-pə** sleeping mat *PTs* *(si-)pi ‘boat’.
pə^H breadth (alt.). **a-pə** breadth **ta-pə** pumpkin **nam-pə** breadth of a house
pə^H maize/corn. **ta-pə** maize/corn **pə-kóo** corn cob **pə-cír** corn kernel **pə-zí** yellow corn **pə-dii** popping corn **pə-màr** brown maize **pə-mù** cornsilk **pə-líi** maize seed **təpə-bulúu** popcorn
pə^H container. **pə-ták** mug; container with handle **pə-tùp** container **pə-təə** cup **pə-rəə** container variety
pə^L compare. **pə-** compare
pə^L minnow. **ñír-pə** tInr minnow **ño-pə** (Noru) minnow
píi^H lay eggs. **píi-** lay eggs
píi^H steam in bamboo. **píi-** steam in bamboo
píi^H suffice/satisfy. **píi-** suffice/satisfy **-píi** Satisfied O Result
píi^L reach. **píi-** reach **-píi** (vs:adv) Reach Goal *PTs* *pij ‘arrive’.
píi^{RF} all/every. **ap-píi** all **bup-píi** everyone
pík^H (en)hollow. **com-pík** ~ **cok-pík** underside **-pík** Hollow Out Result **ko-pík** eroded area *PTs* *pik ‘cave’.
pík^H strip; skim. **pík-** strip (bark) **kam-pík** variety of oko **cim-pík** rice residue at base of pan
pír^H root. **a-pír** root; vein; nerve **raa-pír** root *PTs* *pír? ‘root’.
pír^L jungle fowl? **pír-sín** red jungle fowl (*Gallus gallus*)
pí^H egg. **ik-pə** louse egg **pí-kúk** eggshell **pí-cíi** pot **pí-tír** chicken coop **pí-dín** egg white **pí-pə** egg **pí-mír** egg yolk **pí-ráa** tenth month *PTs* *pi ‘egg’.
pí^L sharpen by grinding. **pí-** sharpen by grinding *PTs* *pi ‘grind; sharpen’.
pí^L pour out; create. **pí-** pour out; create
pí^L bark; woof. **pí-** bark, woof
pí^L sphere; bladder. **a-pə** sphere; apple-sized fruit **am-pə** rice husk **nep-pə** bladder/bladder area (interior and exterior) **ii-pə** dried bamboo chips *PTs* *pi ‘gall’.
pí^L fart.2. **əp-pə** fart **əpə-tarə** fart plant *PTs* *pi ‘fart.2’.
pí^L dry. **-pə** Dry Result **pí-tíi** dry **tum-pə** dry land

- baa^H** fast; big. **-báa** Quickly **baa-mìn** gaur (*Bos gaurus*) **baa-jír** ~ **ba-ír** approximate **tag-báa** sheer slope *PTs* *ba ~ *bə 'big'.
- baa^H** bedbug. **ta-báa** bedbug *PTs* *ba ~ *bə 'bedbug'.
- baa^H** haunch. **lag-báa** arm haunch **ar-bàa** thigh
- baa^H** bake; singe. **báa-** bake; singe **ba-ír** red hot steel *PTs* *braj 'singe/roast in fire'.
- baa^H** *Solanum* spp. **baa-jòm** eggplant (brinjal) **baa-kó** *Solanum* sp. (berry sized, extremely bitter) *PTs* *braj(-jom) 'eggplant'.
- baa^H** move head (vi.). **báa-** move, of a head
- baa^H** public; gathering; meeting. **báa-** hold a meeting (v:c.arg) **baa-kèn** unison **kə-báa** meeting
- baa^H** type; variety. **báa-** Clf: Type **a-báa** type
- baa^L** song. **a-bàa** Clf: Song **bàa-** Clf: Song
- baa^L** rice variety? **baa-lìi** red rice
- baa^L** ladder. **bàa-** (v:c.arg) set up ladder **koo-bàa** ladder **baa-tə** large ladder **baa-càk** small ladder *PTs* *braj 'ladder'.
- bak^H** migrate; become displaced; make skin raw. **bák-** migrate **bák-** make the skin raw by rubbing
- bag-rén** pancreas **mag-bák** penis lesion **tii-bák** vaginal lesion
- bak^L** sap. **a-bàk** sap; vegetable gum
- bam^H** together. **-bám** Together
- bar^H** large, loosely woven conical basket. **bár-** Clf: Loosely-Woven Conical Basket **bar-cì** smaller conical basket of loosely-woven bamboo **ə-bár** large, loosely woven conical basket
- bar^H** mold? **tajùm-tabár** mildew(y)
- bar^H** intone. **bár-** intone
- bar^L** metal. **a-bàr** one rupee **bàr-** Clf: Treasure **rog-bàr** flat side of a blade *PTs* *bal 'Clf: Round, Flat'.
- ba^H** vomit. **bá-** vomit *PTs* *b(r)at² 'vomit'.
- ba^H** cucumber variety. **məə-bó** cucumber variety **ba-ńín** ripe *məəbə* cucumber
- ba^L** cane? **ba-ńii** cane **ba-tàk** flooring
- bik^L** shrug? **nab-bik** shrugged lips
- bin^H** clear(ed). **a-bín** clearing **-bín** Clean By **rig-bín** cleared/weeded field **ta-bín** termite
- bin^L** goat. **ho-bín** goat (generic) **ba-bín** goat (generic, alt.) **bin-kír** goat odor **bin-cùu** goat kid **bin-pìn** goatskin *PTs* *ben ~ *bren 'taken (*Budoras taxicolor*)'.
- bin^L** snap. **bín-** snap
- bin^L** miserly. **-bìn** Miserly
- bin^L** uncooked rice. **am-bìn** uncooked, husked rice *PTs* *(am-)bín 'uncooked rice'.
- biK^H** flow. **bíK-** flow *PTs* *bit 'flow'.
- bi^L** as a pair. **-bì** As a Pair
- biK^L** pass (through time/process). **bìK-** pass (through time/process) **-bìk** Without Consequence **-bìk...-lìk** Without Finesse
- buu^H** river; pipe; beak. **a-búu** river **a-búu** Clf: Pipe (hollow tube) **búu-** Clf: Pipe **hi-búu** river **ii-búu** beak
- dii-búu** spear **nəə-búu** spear **nab-búu** snout **rəə-búu** horn(s) **geb-búu** quiver **kiinś-abúu** umbilical cord **cirúm-nabbúu** green bee-eater (*Merops orientalis*) **dorkàa-laabúu** footlong earthworm *PTs* *buŋ 'river; long, slender object'
- buu^H** suck. **búu-** suck **-búu** Outside-In *PTs* *bruŋ 'suck'.
- buu^H** grave. **ji-búu** grave *PTs* *bruŋ 'grave'.
- buu^H** shock. **búu-** shock
- buu^L** rodent; rat/mouse. **ko-bùu** rat/mouse **bu-ín** rat/mouse (poetic) **buu-cùu** rat/mouse baby **bu-ò** rat/mouse baby **buu-pìi** small/young rat/mouse **buu-pìn** ratskin *PTs* *(ku-)buŋ 'rat/mouse'.
- buu^L** priest (alt.). **buu-ləə** animal leg designated for priest *PTs* *(mji-)bu 'priest; shaman'
- buk^H** sheath. **ho-bùk** softcover sheath **buk-ták** hardcover sheath *PTs* *bruk 'sheath'.
- buk^L** pod; burst (vi.); sprout. **bùk-** burst; sprout **a-bùk** pod **-bùk** (vs:adv) Into Substance **ə-bùk** adolescent male calf **nə-bùk** adolescent female calf **mə-bùk** gun **am-bùk** variety of grain which pops like popcorn **ir-bùk** prickly heat **ram-bùk** smallpox **abùk-arùk** pockmark
- bum^H** lie face-down. **búm-** lie face-down
- bum^H** dusty. **-búm** Dusty
- bum^H** bamboo variety. **ta-búm** variety of smooth bamboo **ə-bùm** giant bamboo variety (*Dendrocalamus giganteus*?)
- bum^H** invade someone's space. **-búm** Invade Space
- bum^L** smooth; uncreased. **jiŋg-bùm** Mongoloid eyes; eyes with smooth, non-folded lids

bur^{HL?} curse. **a-bùr** curse(d) **ja-búr** cursed
bu^H explode? **tápá-bulúu** popcorn
bu^L uproot. **bù-** uproot
bu- Third person nonsingular formative. **bu-lù** 3.PL **bu-jì** 3.DL **bup-pái** all
bee^H curse (vt.). **bée-** curse someone; chant to spirits *PTs* *be ‘curse (v.)’.
bee^H monkey. **ho-bée** monkey (generic) **bee-túm** large monkey (generic) **bee-tíi** group of monkeys
 (generic) **bee-dáa** short-tailed macaque (prob. *Macaca munzala*, poss. *Macaca arctoides*) **bee-hòr**
 langur sp., poss. capped langur (*Trachypithecus pileatus*) **beò-koolíi** monkey sp. with red posterior,
 poss. hoolock gibbon (*Bunopithecus hoolock*) *PTs* *bee ‘monkey’.
bee^H halfheartedly. **-bée** Halfheartedly
bee^L drool. **bèe-** drool (v:c.arg) **nab-bèe** drool **cog-bèe** jawbone
bek^L starch? **kee-bèk** starchy; pasty
ben^H often; a lot. **-bén** Often; A Lot
ben^L separate from main body. **bèn-** separate from main body
ber^L rotund lip. **nab-bèr** fat lips *PTs* *bel ‘lip’.
beK^H nightingale. **bek-kó** bulbul **bet-túm** nightingale variety **bel-lòo** nightingale variety
beK^H start up; flick; release. **-bék** Start Up; Release **béK-** flick; release **arò-dobék** breakfast
boo^H hat. **boo-lùp** cane hat **boo-dá** umbrella hat **loo-bóo** comb *PTs* *broŋ(-pa?) ‘cane hat’.
boo^H stench? **boo-bíi** stench
boo^L cross over. **bòo-** cross over **-bòo** Across; Over **-bòo** Overly; Too Much
bok[?] dam. **hi-bòk** dam **bog-jàr** long, of a dam **bok-sòo** long, of a dam
bok^H down; south. **-bók** Downward; Southward
bocor^L thin. **bo-còr** thin *PTs* *(bV-)cor ‘shallow; thin (paper)’.
bor^H leaf; spread-out thing. **bór-** Clf: Thin, Flat **bor-èe** brass plate **a-bór** one spread-out thing **ma-bòr**
 tobacco leaf *PTs* *bor ‘Clf: Thin, Flat’.
bor^L enlarge; swell. **-bòr** Enlarge; Swell **poo-bòr** giant rice beer filter **lib-bòr** open umbrella
boho^H fear. **bo-hó** fear; be afraid *PTs* *bVsoo ‘fear’.
bo^H father; male. **a-bó** father **a-bó** cattle bull **ji-bó** guest **bi-bó** wild goat **bər-bó** wife’s sister’s husband
mag-bó younger sister’s husband **tum-bó** widow(er) **tə-bò** elephant bull **kii-bò** male dog **kim-bò**
 child’s spouse’s father **pag-bò** male slave **cər-bó** buck deer **zig-bó** buffalo bull *PTs* *bo ‘father’.
bo^H roll (wheel). **bó-** roll (a wheel) **-bó** shake/move result
bo^H cause to come. **bó-** invite; lead by force **ji-bó** guest; non-taboo person
bo^H mithun. **ho-bá** mithun **bo-kàa** black mithun **bo-líi** red mithun **bo-tə** mithun bull
bo^H thin bamboo variety. **ta-bó** variety of thin bamboo
bo^H envious. **-bó** Envious Manner
bo^L priest; shaman. **ji-bò** priest; shaman (Lare) **ji-bù** priest; shaman (Zirido) *PG* *ji-bù, *PTs* *(mji-)bu
 ‘priest; shaman’.
bəə^H hold. **bəə-** hold **-bəə** Durative
bək^L right. **lag-bək** right arm/hand **lə-bək** right leg/foot **jiŋ-bək** right eye **pum-bək** right nostril **ruu-bək**
 right ear *PTs* *(lak-)brik ‘right (hand)’.
bək^L come undone. **bək-** come undone; fall into disrepair **-bək** Clear On A Point **-bək...-rək** Unclear
bər^H peer in-law. **bər-nə** husband’s brother’s wife **bər-bó** wife’s sister’s husband
bər^H turn the head. **bər-** turn the head
bər^H snake (alt.). **bər-táa** viper *PTs* *bír(-taŋ) ‘poisonous snake/viper’.
bər^L yank out. **bər-** yank out
bə^H edge; skirt. **bə-** Classifier for edges **ab-bə** edge **a-bə** skirt **kə-bə** wool variety **gər-bə** effigy skirt
bə^H way. **bə** Dative/Adverbializer **bə-kóo** base of a road **bə-kòo** old road **bə-gúr** side road **bə-dáa** road;
 path; way **bə-dək** different **bə-nə** main road **bə-póo** road along breadth of mountain **bə-pàa** road
 made by an animal *PTp* *bə(ə) ‘way’
bə^H mithun (alt.). **ho-bə** mithun (*Bos frontalis*) **bə-kò** old bull (any bovine)
bə^L back? **gur-bə** back
bə^L sugar cane. **ta-bə** sugar cane
bii^H fill; swell. **bíi-** fill; swell **-bíi** To Brim **boo-bíi** stench **loo-bíi** huge bone **jir-bíi** full moon
bii^H shoulder/knee. **lə-bíi** knee **lə-bíi** shoulder *PTs* *biŋ ‘shoulder/knee’.
bii^L elder (brother). **a-bíi** elder **bíi-tə** elder brother (poetic) **jii-bíi** maternal aunt’s son *PTs* *biŋ ‘elder
 brother’.
bii^L Third person singular pronoun. **bíi** 3.SG *PTp* *ba^L + *i^H ‘Third person pronoun’ + ‘body; self’.
bik^H penetrate. **-bík** Penetrate Result
bik^L score; mark. **bík-** score; mark
bir^L (younger) sibling. **a-bir** younger sibling **bir-ò** brother *PTs* *bír(-məə) ‘sister (younger)’.
bí^H wild goat. **bi-bó** wild goat *PTs* *bri ‘serow (goat antelope)’.

bi^H carry on back. **bi-** carry on back
bi^H snake. **ta-bé** snake **bi-dóo** variety of green snake **bi-híi** variety of dry leaf-coloured snake **bikíi-biríi** cobra (generic) **bi-líi** variety of red snake **bi-pák** variety of poisonous mountain snake **bi-róm** python **bi-tè** king cobra (*Ophiophagus hannah*) **bi-ci** small snake **isí-bici** variety of non-poisonous water snake *PTs* *bi 'snake'.
bi^L swing. **bi-** swing *PTs* *bri 'move'.
bi^L rend with sharp tool. **bi-** rend with sharp tool

m

maa^H not (having). **-máa** Negator **máa ~ ma?** no **maabə, maaco, maadii** obviously; isn't it **maa-zí** very much **maa-zâa ~ maz-zâa** very; really; utterly **gom-máa** mute **dum-máa** headless **hi-máa** corpse **jə-máa** poor person **moo-màa** busy **ji-máa** poor person *PTs* *maŋ 'Negator'.
maa^H creep. **máa-** creep, of a plant **a-máa** creeper; tendril **tapli-tamáa** grass **aríi-amáa** vein **raapír-raamáa** root
maa^L dream. **ju-màa** dream **màa-** dream (v:c.arg) **jumi-juma** dreams *PTs* *maŋ 'dream'.
maa^L shadow? **ji-màa** shadow
mak^H son/brother-in-law. **mag-bó** younger sister/daughter's husband **mak-tè** elder sister/daughter's husband *PTs* *mak(-bo) 'son-in-law'.
mak^L penis. **ə-màk** penis **ji-màk** enemy; war **mak-cùu** penis **mac-cùu** small/cute penis **mag-bák** penis lesion **mag-məə** male pubic hair **mag-jùm** penis buncher **mag-làa** semen *PTs* *mrak 'penis'.
mak^L palm variety. **ta-màk** variety of palm **caa-màk** fibre obtained from **tamàk** tree leaf crook
map^H fall. **-máp** Fall Result
mam^H placenta. **nə-mám** placenta *PTs* *mam 'placenta'.
mam^H feel (with hands). **mám-** feel (with hands)
mam^L valley? **ko-màm** valley
mar^H angry. **már-** be angry
mar^L brown. **pə-màr** brown maize
ma^H search. **má-** search for something *PTs* *ma ~ *me 'search'.
ma^L tobacco. **ma-bòr** tobacco leaf **du-mé** tobacco
mii^H millet. **ta-míi** millet (generic) **amò-tamíi** crops
mii^L downward-pointing. **ji-g-mii** slanted/downward-pointing eyes **puu-mii** flash flood
mik^L fireplace. **i-mik** fireplace
mik^L powder (var.); pith. **əg-mik** fan palm pith **luu-mik** wild plantain pith
min^H chase. **mín** chase *PTs* *mon 'chase'.
min^H ~ **mi^H** together. **-mì(n)** Together
min^L name. **a-mìn** name **mìn-** (vt.) name; create *PTs* *mìn ~ *mrìn 'name'.
min^L small pieces; bits. **-mìn** Into Small Pieces/Bits **dog-mìn** variety of small stone bead
min^L buffalo; gaur. **baa-mìn** gaur **min-zík** buffalo
miK^H blow (vt.). **míK** blow (vt.) *PTs* *mut¹ 'blow (with mouth)'.
mii^H sleepy; lullabye. **míi-** sing a lullabye (v:c.arg) **ju-mii** sleepy **ni-mii** lullabye *PTs* *mi 'sleepy'.
muu^L suck from mouth. **mùu-** suck from the mouth **muu-pùk** kiss
muu^L partridge sp. **pi-mùu** partridge sp., possibly whitecheeked hill partridge (*Arborophila atrogularis*) or rufousthroated hill partridge (*Arborophila rufogularis*)
muk^L steam; gas. **a-mùk** gas **doo-mùk** steam **doo-mə** cloud **ŋo-mùk** fish variety *PTs* *mæk ~ *muk 'cloud'.
mum^H careless. **-múm** Careless; Haphazard **ə-múm** useless; casual
mur^L wrong. **-mùr** 'wrong' *PTs* *mul 'amiss'.
mu^L crazy. **mù-** crazy **pə-mù** cornsilk
mee^H young (masculine). **mee-tór** yeoman **o-mèe** kid **jaa-mée** boy **pim-mèe** minor area of a house/area for extended family
mee^H have many. **mée-** have many
mee^L mate (small animal). **mèe-** mate, possibly of relatively small animals
men^H weigh on. **mén-** weigh on; exert pressure on
men^L speak. **mèn-** speak *PTs* *ban ~ *man 'say/speak'.
men^L fun; play. **-mèn** As Play **a-mèn** gift **gə-mèn** ornament; jewelry **kii-mèn** hunting dog *PTs* *(soŋ-)man 'play'.
meK^H mate (large animal). **méK-** mate, of a relatively large animal
moo^H world; land; earth. **moo-kó** place; area **moo-tùm** jungle **moo-dii** mountain **moo-dír** rugged terrain

moo-d̥ɪr no-man's land **moo-bàa** plateau **moo-b̥i** cultivated mountain **moo-ré** virgin mountain
moo-r̥i plateau **moo-júm** shady side of a mountain **moodé-moobé** earthquake **mookó-isì** terrain
moodii-pen̥kò valley **moodii-puutúu** mountain summit **moodii-riké** mountain field **am̥r-amóo** hue;
 aura *PTs* *mroŋ 'world/land/earth'.

moo^L face; cheek. **juŋ-mò** face **moo-d̥ɪr** deformed face **moo-rò** cheek **uì-mooràm** blackhead **moo-m̥i**
 elephant trunk (?) **moo-móo** tingly flavor (?) *PTs* *-moo 'face/cheek'.

moo^L leisure. **moo-màa** busy *PTs* *mjoŋ 'leisure'.

mor^L good old days. **o-mòr** good old days

mor^L corrosion. **ma-mòr** rust **ta-mòr** ringworm

mo^H arrowhead. **o-mó** arrowhead **mo-jáa** arrow poison *PTs* *mro 'arrow poison (aconite)'.

mo^L make. **mò-** make **-mò** Causative/switch-subject

məə^H cucumber variety. **məə-bé** *Cucumis* sp. **məə-kùu** cucumber (garden variety)

məə^H think. **məə-** think; like; want *PTs* *mɪŋ 'think'.

mək^H careless. **amək-ahək** careless

məm^L casually. **-məm** Casually

mər^H stroke. **mér-** stroke

mə^H lie. **mé-** lie *PTs* *mə 'cheat/lie'.

mə^H seed; grain; woman. **a-má** seed **laa-mə** jackfruit seed **lug-mə** chili seed **o-mə** daughter **ji-mé** wife

mə^H plant variety (fish poisoning). **ta-mé** plant variety (fish poisoning)

mə^L fire. **ə-mə** fire **ta-mə** eclipse **əmə-iikò** hearth **mə-cì** matchlike ember **mə-cì** flint **məci-mərèe** spark

mə-dùu leaf for carrying coals **mə-gùu** firewood **mi-kə** smoke **mə-rèe** ember **mə-rò** torch **mə-òr**

torch (alt.) **mə-tùu** burnt firewood **mə-l̥** smoky complexion *PTs* *mə 'fire'.

mə^L body hair. **a-mə** body hair **t̥i-mə** female pubic hair **mag-mə** male pubic hair **nam-mə** facial hair

laŋ-mə arm hair **lə-mə** leg hair **niŋ-mə** eye hair (including brow and lashes) **pum-mə** nose hair

doo-mə cloud *PTs* *mit 'hair'.

mə^L yester. **mə-ŋ̃i** last year **mə-ròo** yesterday **mə-rùm** last evening **mə-jò** last night

mĩ^H char. **m̥ĩ-** char

mĩ^H multiply; moss. **m̥ĩ-** multiply; progenerate **ta-m̥ĩ** moss; lichen **nə-m̥ĩ** grass

mĩ^L grass. **nə-m̥ĩ** grass

mik^L powder. **-m̥ik** Into Dust **-m̥ik...-m̥ik** Into A Million Pieces **a-m̥ik** powder(y) **kar-m̥ik** small/ordinary

wedding celebration **pə-m̥ik** chaff **lĩ-m̥ik** gravel *PTs* *m̥ik 'powder'.

mir^H dust? **pə-m̥ĩ** dust

mir^L colour. **a-m̥ĩ** colour; hue; complexion **am̥r-amóo** hue; aura **pi-m̥ĩ** egg yolk

mi^H eagle. **mi-kóm** hawk sp. **pi-mé** raptor sp. (eagle?) *PTs* *mi 'eagle'.

j

jaa^H rot(ten); bad. **jáa-** (vi.) rot(ten) **jaa-pàk** rotten; gone off **ag-jàa** fermented soybean **am-jàa** dud rice
hĩ-jàa rotten wood **hĩg-jáa** rheume; common cold **lĩ-jàa** soft stone **mo-jáa** poison mixture **nam-jáa**
 decrepit house **nam-jàa** rotten odor **nə-jáa** rotten or damaged leaf **tahúu-tajáa** fruit fly *PTs* *jaŋ 'rot;
 rotten'.

jaa^H small; cute; love; sympathy. **a-jáa** love; sympathy; cute; small **jaa-páa** young (masculine) **jaa-mée**
 boy; male **jaa-nə** folksong **uu-jáa** shallow **rĩ-jáa** grown small **tag-jáa** narrow

jaa^H much. **-jáa** Much **jaa-káa** many

jaa^L more. **-jàa** More **jaa-jàa** much/many *PTs* *jaŋ 'more'.

jaa^L destroy. **-jàa** Destroy **am-jàa** dud rice (rice which has fruited but failed to seed)

jak^H cascade; crumble. **ják-** cascade, of water of grains; crumble, of an old house **-ják** Break Surface

jap^H area; space. **a-jáp** area; space; region

jap^{HL} fan; wave. **jàp-** wave **taa-jáp** fan **gaa-jáp** waving, of a hand **nĩg-jáp** blink; wink *PTs* *jap 'fan'.

jap^L continuous. **-jàp** Continuously

jar^L length(wise); long. **a-jàr** length(wise) **-jàr** Across Length **-jàr** Perpetually **ur-jàr** lengthwise

crossbeam **nam-jàr** house length **bog-jàr** long, of dam **jar-sòo** extended

ja^L Quantity interrogative pronoun formative. **ja-d̥ĩ** ~ **ja-də** how much/many

juu^L flex. **jùu-** flex; be flexible **ee-jùu** anus **-jùu...-jèə** Flex Result

jup^L sleep. **jùp-** sleep **-jùp** Applicative: Cause O to Sleep **jùp-** Clf: Night Cycle **a-jùp** Clf: Night Cycle

ju-m̥ĩ sleepy **ju-màa** dream *PTs* *jup 'sleep'.

jup^L stinging caterpillar. **ta-jùp** variety of stinging caterpillar

jum^H damp; shade. **ta-júm** damp **doo-jùm** shade; non-figured shadow **moo-jùm** shady side of a mountain

jum^L handful; clutch. **jùm-** Clf: Handful **mag-jùm** penis buncher

jek^H flesh. **din-jék** flesh *PTs* *jak ‘flesh (human)’.
jek^L cause to be stuck. **jèk-** adhere; cause to be stuck **-jèk** Get Stuck
jek^L millet (job’s tear). **ta-èk** job’s tear millet (*Coix lacryma-jobi*) *PTs* *jat¹ ‘millet (job’s tear)’.
jeK^H spin; dizzy. **jéK-** spin; dizzy
joo^L gallop. **jòo-** ~ **còo-** gallop *PTs* *rjo ‘gallop’.
joo^L what. **jòo-** what (content interrogative noun) **joo-lò** where **joo-gò** which one **jo(o)mbè** how
jom^H wrong direction. **-jóm** Wrong Direction Result
jom^L eggplant. **baa-jòm** eggplant *PTs* *(braŋ-)jom ‘eggplant’.
jo^H fornicate. **jó-** fornicate **jo-láa** semen **jo-ŋàk** overdo it (of sex) *PTs* *jo ‘copulate’.
jo^H Prohibitive. **-jó** Prohibitive *PTs* *jo ‘prohibitive’.
jo^L night. **a-jò** night **kenkə-jò** three nights ago **ken-jò** two nights ago **mə-jò** last night **jo-ràa** midnight
PTs *joo ‘night’.
jo^L grandmother. **a-jò** grandmother **atò-ajò** grandparents *PTs* *jo ‘grandmother’.
jəə^H to one side. **-jəə** To One Side **tə-jəə** misdirected *PTs* *rjəŋ ‘slanting.1’ (?).
jəə^L keel. **jəə-** keel **-jəə...** **-jəə** Flex Result *PTs* *rjəŋ ‘slanting.1’ (?).
jəə^L avoid. **jəə-** avoid
jək^H braid? **-jək** Braid? *PTs* *jək ‘knot’ (?).
jək^L affix; bind. **jək-** affix *PTs* *jək ‘knot’ (?).
jər^L mix. **-jər** Mixed Result
jə^H waste. **jə-máa** poor person **je-sì** urine
jii^H housefly. **tajii-tamáa** housefly **jii-pii** very small fly variety *PTs* *jin ‘housefly’.
jii^H copy(cat). **-jii** Copycat
jii^H waft. **jii-** waft
jii^L last remaining. **-jii** Last Remaining
jii^L wither. **-jii** Wither Result
jik^L search around; survey. **jik-** search around; survey
jir^H near to edge. **-jir** Around Edges **jir-bii** full, of the moon **cəə-jir** ringfinger **baa-jir** ~ **ba-ir**
approximate **rii-jir** bank of a river
jir^L small flylike bee. **ta-ir** small flylike bee **jir-kèn** wax made from *tair* bee
jir^L tree variety. **ta-jir** variety of tree with edible odiferous seed
jii^(L?) story; tale. **doo-jii** story; advice

r

raakop^H turtle. **raa-kóp** turtle *PTs* *raŋ-kop ‘turtle’.
raa^H odd one out. **-raa** Instead; As Odd One Out **toráa** wait (for others) *PTs* *rjaŋ ‘wait for’.
raa^L inside; empty. **a-ràa** inside; empty **-ràa** Pointless; No Result **jo-ràa** midnight **nam-ràa** interior of a house **rig-ràa** interior of a field **raa-kòp** turtle **raa-cəə** backpack **hiilùu-raalúu** deep, undisturbed jungle *PTs* *raŋ ~ *roŋ ‘empty’.
raa^L virile. **ràa-** be virile
raa^L stew. **ràa-** stew
rak^H lick. **rák-** lick *PTs* *rjak ‘lick’.
rak^H cliff; steep. **a-rák** cliff **ə-rák** steep (cliff) **rag-dii** sheer (cliff)
rak^H rhinoceros. **ho-rák** rhinoceros
rak^H act with reckless abandon. **rák-** be hyperactive **-rák** Hoard **-rák** Act With Reckless Abandon and No Definite Direction **ta-rák** out of control
rak^H plait; fence. **rák-** plait large strips; weave fencing
rak^L lightning. **doo-rák** lightning **rák-** flash, of lightning
rap^H door. **ə-ráp** door **luu-ráp** fence gate **rab-gò** doorway **rab-gúr** doorjamb *PTs* *rjap ‘door’.
rap^H across. **-ráp** Across **ráp-** cross *PTs* *rap ‘cross’.
rap^(L?) shelf. **bə-ráp** hanging shelf **rap-kò** fireplace shelving *PTs* *rap ‘shelf’.
ram[?] fireplace. **mə-ram** fireplace (Puugo) *PTs* *ram ~ *rom ‘fireplace; hearth’.
ram^H otter. **ho-rám** otter **ram-pin** otter skin *PTs* *ram ‘otter’.
ram^H fever(ish); decrepit. **rám-** ‘have a fever’ **-rám** Ill Result **ram-bùk** smallpox **bokù-borám** old and decrepit male animal **jikám-horám** old woman **uii-mooràm** blackhead; mole; freckle
ram^L brittle. **ràm-** brittle
ra^L boar. **ho-rə** boar **ra-nə** female boar *PTs* *ra ‘boar’.
rii^H thread; straight. **rrii-** thread; string (as flowers) **ho-rrii** line of fish; straight **o-rrii** coriander (Coriandrum sativum; prob. neo.) **mii-rrii** high section of a plant **cug-rrii** rice beer ladle **orrii-riiták**

flat-leafed coriander (*Eryngium foetidum*)
rii^L nit. **ta-rìi** variety of edible insect *PTs* *rì ‘nit’.
rik^H a lot. **-rik** A Lot **-rik** Fully; Completely
rik^L punish. **-rik** punish **ta-rik** poisonous insect variety
rin^H be burned. **rín-** be burned; be rubbed raw
rin^H bud. **a-rín** bud
rin^L hoard. **rìn-** hoard
rin^(L?) sphincter. **ee-rìn** anal sphincter
ru[?] poison. **-ru** Poisoned Result
ruu^H mosquito. **ta-rúu** mosquito *PTs* *ruŋ ‘mosquito’.
ruu^H economize. **rúu-** economize
ruu^H plan; will. **rúu-** plan; will to happen **-rúu** Definitely
ruu^{H/L?} hole; ear. **a-rúu** hole **-rúu** Into Hole **je-rúu** ear **ruu-bək** right ear **ruu-cì** left ear **ruu-cì** ear disease
 variety **ruucì-talki** ear water **ruu-kòo** ear piercing **ruu-pùk** ear wax **ruu-zí** deaf **arúu-agóm** all sorts of
 holes **udúu-arúu** hole in a bamboo section **hosí-sirúu** porcupine den *PTs* *ruŋ ‘hole; ear’.
ruu^L whitecrested laughing thrush. **pu-rúu** whitecrested laughing thrush
ruk^L ant. **ta-rùk** ant **ruk-cì** variety of small ant *PTs* *ruk ~ *rup ‘ant’.
ruk^L wither; barren. **rùk-** wither **aa-rùk** spent tea leaves
rup[?] pack? **kii-rùp** hunting party with dogs
rup^L field sparrow. **pu-rùp** field sparrow
rum^H tapioca. **a-rúm** tapioca
rum^H evening. **a-rúm** evening **rúm-** Clf: Night **mə-rùm** last night **arum-roorì** dusk **ko-rùm** ancient times
hì-rùm tonight *PTs* *rjum ‘evening’.
rum^H shout. **rúm-** shout
rum^H evenly. **-rúm** Evenly
rum^H family. **rum-túm** family **azen-arum** circle of friends **ko-rùm** ancestor(s)
rum^L brittle. **u-rùm** brittle
rum^L scorpion. **ta-rùm** scorpion
rum^L piled barrier. **a-rùm** piled barrier **rùm-** form a piled barrier
ru^H bury. **rú-** bury *PTs* *rju ~ *rji ‘bury’.
ru^H slide. **rú-** slide
ru^L torch (vt.). **rù-** burn something with a torch *PTs* *(mə-)ru ‘torch (n.)’.
reK[?] banyan. **hii-rèk** banyan **rem-mìn** banyan variety **ret-tà** banyan variety
ree^H closed eyes? **jig-rée** examination dance
ree^L non-uniform; busy; multicoloured. **gaa-rèe** wreathed hornbill (*Rhyticeros undulatus*) (**hiibò**) **no-rèe**
 leopard **ja-rèe** multicoloured **apùk-arée** hasty; hurried; rushed **tagám-tarèe** pockmarked **tacùp-reenùp**
 variety of poisonous fly **zecì-koorèe** festival clothing
ree^L lay out (flooring). **rèe-** lay out flooring
rek^H usurp. **-rék** Usurp
rek^L glance off. **-rèk** Glance Off
ren^H long bean. **pee-rén** long bean **bag-rén** pancreas
ren^H miserly. **-rén** Miserly
reK^H twist (rope). **réK-** twist rope **réK-** roll; flatten by rolling **réK-** shave a voluminous thing *PTs* *rjat¹
 ‘twist (strands of rope)’.
reK^H sharp; blade edge. **réK-** be sharp **a-rék** sharp (edge of blade) **-rék** Sharp Result **-cek...-rek** shard
rog-rék sharp edge of a blade *PTs* *rat¹ ‘sharp(-edged)’.
roo^H trailblaze. **-róo** Trailblaze; Go First With Others Following **ko-róo** ditch **po-róo** arrow flight
roo^H scold. **róo-** scold
roo^H second. **ki-róo** second maternal uncle **jam-róo** second daughter-in-law
roo^H pigeon **pə-róo** pigeon
roo^L complete; point of completion. **-ròo** Complete **-ròo** Nzr:Point of Completion **-ròo** Clear Away
am-ròo rice stalks which remain standing after the rice has been harvested **mə-ròo** yesterday **roo-rìi**
 dusk
rok^H chicken. **po-rók** chicken **rog-lii** breeding fowl **rok-pìn** chicken skin **rog-zír** medium-sized chicken
rok-pəə chicken feed **rok-pò** cock **ron-nə** hen **ro-ò** chick *PTs* *rok ‘chicken’.
rok^L iron; blade. **o-ròk** dao/machete **rog-dír** iron **rog-ñ** blade handle **rok-cik** knife **rok-sì** sword/old dao
rog-bàr flat side of a blade **rog-rék** sharp edge of a blade *PTs* *rjok ‘iron; knife’.
rom^H incinerate. **róm** incinerate (burn completely to ash) **rig-róm** post-burn debris *PTs* *rom ‘burn/roast
 over fire’.
rom^H boar? **i-róm** male boar
rom^L ghost. **o-ròm** ghost **uii-oròm** denizens of the netherworld *PTs* *rom ‘ghost (ancestral)’.

ro^H tongue. **ró-** extend the tongue (v:c.arg) **a-ró** tongue **ro-zám** lisp **am-ró** rice stalks post-harvest *PTs* *rjo ‘tongue’.
ro^L bundle. **rò-** Clf: Bundle **a-rò** bundle of staffs (as bamboo) **mə-rò** torch; burning bundle of sticks
aa-rò lungs **kii-rò** large intestine **moo-rò** cheek *PTs* *(mə-)ru ‘torch (n.)’.
ro^L secret. **-rò** (In) Secret
ro^L place of origin. **-rò** Place of Origin Nominalizer
ro^L morning. **a-rò** morning **hi-rò** this morning **mə-rò** yesterday **ro-ò** two days hence **ro-rə** three days hence **ro-tèn** four days hence **roo-rìi** dusk **arò-komcí** early morning **arò-dobék** breakfast *PTs* *ro ‘morning’.
rəə[?] evil; nasty. **kii-rəə** bad/evil dog; asshole
rəə^H horn; point. **rəə-búu** horn **ta-rəə** elephant tusk **rəə-tə** stinging nettle variety **tuu-rəə** end of a stick *PTs* *rəŋ ‘horn’.
rəə^H spring(y); alive. **ə-rəə** alive **go-rəə** rodent trap **rəə-pəə** bird trap
rəə^H ~ **ləə^H** deep; depth; extent. **cə-rəə** corner **tuu-rəə** end of a stick **pə-rəə** container **ta-ləə** sky **pee-ləə** side **hi-ləə** deep portion of a river **isì-hiləə** lake; pond; pool *PTs* *riŋ ‘deep’ (?).
rəə^L keel. **rəə-** stagger; keel *PTs* *rjəŋ ‘slanting.’¹ (?).
rəə^L lively. **ə-rəə** lively; well-seasoned
rəə^L roost? **pə-rəə** chicken roost
rə^H dormitory/meeting hall? **dee-rə** meeting hall
rək^H pig. **ə-rək** pig **rək-cùu** piglet **rək-pìn** pigskin *PTs* *rjek ‘pig’.
rək^H notch. **ga-rək** notch
rək^H ~ **rek^H** gnaw; grind; roll; flatten. **réK-** ~ **rək-** gnaw; grind; roll; flatten *PTs* *rit ‘grind (crush into powder)’.
rək^L mark; make symbol. **-rək** Mark; Make Symbol
rək^L roll; run over; gnaw. **rək-** roll; run over; gnaw
rək^L archer support ring. **ta-rək** archer support ring
rəp^H upright. **-rəp** Upright; Inceptive *PTs* *rop ~ *rəp ‘stand up/get up’.
rəm^H python. **bi-rəm** python *PTs* *(bi-)rem ‘python’.
rəm^H look askance. **rəm-** look askance **jig-rəm** lazy-eyed
rə^H price. **a-rə** price; bride price; dowry *PTs* *rə (~re?) ‘price’.
rə^H buy. **rə-** buy *PTs* *rəə ‘buy’.
rə^H wind (n.). **doo-rə** wind *PTs* *rji ‘wind’.
rə^H virgin mountain. **moo-rə** virgin mountain *PTs* *(mloŋ-)rji ‘shady side of mountain’.
rə^H live/exist. **rə-** live/exist (animate) **-rə** Irrealis
rə^H bamboo strip (for weaving). **ta-rə** bamboo strip
rə^H odor. **a-rə** odor *PG* *ri; *PTs* *rii ‘odor’.
rə^L taboo. **a-rə** taboo; spurn
rə^L border; boundary of ownership. **-rə** Mark Something (as in ownership) **a-rə** border; boundary
rə^L dust? **jig-rə** dust particles in the eye
rə^L cane variety. **ta-rə** variety of thornless cane
rii^H plain. **a-rii** plains area **dee-rii** plains area **moo-rii** plateau **rii-jír** bank; shore **rii-zòo** plateau
rii^H ten. **i-rii** ten **o-rii** second batch rice beer **poo-rii** second batch rice beer (alt.) *PTs* *rjiŋ ‘ten’.
rii^H tie up; connect. **rii-** tie up an animal **kii-rii** small intestine **arí-amáa** vein
rii^L similar; imitate. **-rii** Similarly; Imitatingly **ga-rii** resemble
rii^L staff. **a-rii** Clf: Staff **rii-** Clf: Staff
rii^{L?} deep; bottom **uu-rii** deep **nə-rii** base of a pole *PTs* *riŋ ‘deep’.
rik^H field. **rik-** Clf: Field **rik-ó** field **rig-áa** second use field **rig-ìi** lower field boundary **rig-bin** cleared field **riŋ-məə** cultivated area **riŋ-mám** virgin field **rig-ràa** field interior **rig-róm** post-burn debris
je-rik wild taro **pi-rik** kaleej pheasant (*Lophura leucomelanos*) *PTs* *rik ‘swidden’.
rik^H wash clothing. **rik-** wash clothing
rik^H meet. **-rik** Meet Applicative **dorík-tiirik** bridal gifts
rik^H bundle (of sticks). **rik-** Clf: Bundle **a-rik** one bundle of sticks
rik^L cold. **a-rik** cold
ri^H bow (for arrows). **i-rə** bow *PTs* *rji ‘bow (n.)’.
ri^H work. **ri-gée** reciprocal labour
ri^L do. **ri-** do *PTs* *rji ‘do’.

- laa^H** juice. **aa-láa** juice; broth **paa-láa** juice **njin-láa** honey **nig-láa** tear **tii-láa** vaginal fluid **mag-làa** semen **jo-láa** semen **pumsi-pumláa** nose water **niksi-nigláa** eye water *PTs* *lanj ‘soup’.
- laa^H** joke. **-láa** Jokingly
- laa^L** jackfruit. **bə-làa** jackfruit **laa-mə** jackfruit pit/seed (inside pod)
- laa^L** take. **làa-** take **-là(a)** Non-final (?) **laa-də** harvest time **laa-jəp** marriage engagement *PTs* *lanj ‘take’.
- laa^L** able. **-là(a)** Ability *PTs* *lanj ‘can/able to (verbal particle)’.
- lak^H** arm/hand. **a-lák** hand/arm **kə-lək** beating stick **lag-áa** ~ **lag-dáa** pulse **lag-báa** arm haunch **lag-bfi** elbow **lag-bək** right hand/arm **lag-bór** palm of the hand/open fist **lak-cəə** finger (generic) **lak-ci** left hand/arm **lag-dú** forearm **lagdú-guurəə** elbow **lag-góo** bow-armed **lak-pəe** arm cramp **lak-póo** arm not including hand **lak-púk** finger joint/finger crack **lak-sín** fingernail **lak-təm** palm of the hand **lak-tùm** (closed) fist **lanj-mə** arm hair **lanj-nə** thumb finger *PTs* *lak ‘hand/arm’.
- lak^H** miss; leave untouched; disclose. **-lák** Miss; Leave Untouched; Disclose **alák-aák** miss someone **alák-acák** misplace something **lák-kaamáa** just as I needed (lit. no miss)
- lak^L** capable; possible. **-lək** capable; possible
- lap^H** wing. **a-láp** wing *PTs* *lap ‘wing’.
- lap^L** slippery; scrape. **láp-** scrape backhand **a-ləp** slippery **o-ləp** variety of slippery vegetable *PTs* *lap ‘slippery’.
- lap^L** snot. **ta-ləp** snot *PTs* *nap ~ *nop ‘snot’.
- lap^L** spring onion. **ta-ləp** spring onion *PTs* *lap ‘wild green onion’.
- lam^H** way. **-lám** Nzf: Waypoint **lam-pó** mediator **aa-lám** entry waypoint **ii-làm** descending waypoint **in-lám** leaving waypoint **ka-lám** side **caa-làm** ascending waypoint **cə-lám** side **nen-làm** exit waypoint *PTs* *lam ‘road; way’.
- lam^L** myna. **pi-làm** myna (*Acridotheres tristis*)
- lar^H** pumpkin; squash. **ta-lár** pumpkin; squash
- lii^H** seed; propagator. **líi-** propagate (plants) **lii-túp** heirloom grains **a-líi** clan; heirloom seed; breeder **am-líi** first rice crop **pə-líi** maize seed **rog-líi** breeding cock **rumtúm-alfi** clan **alfi-anə** seeds **apə-liilùm** perfectly round *PTs* *li ‘seed’.
- lii^H** flea. **ta-líi** flea **pilli-pikə** chicken louse
- lii^L** new. **líi-** new (adj:mono) **a-líi** new **japci-cilfi** little devil child
- lik^H** uneasy. **alík-aék** uneasy; troubled
- lik^H** small? **ɲopfi-piilík** *ɲopii* minnow
- lik^L** bamboo bark. **a-lik** outer bark of bamboo
- lin^L** fitting; suited. **-lín** Fitting; Suited
- lik^H** penis; unsheathed (staff). **lík-** be unsheathed, of a stafflike thing **liŋ-ŋək** overstretched/overused penis **liz-zùp** uncircumsized penis **lit-tək** very tip of penis **lib-bòr** open umbrella
- luu^H** place; enclosure; group; crowd. **lúu-** be a crowd (v:c.arg with ñiluu) **luu-gfi** fencepost **luu-góo** enclosure **luu-tír** group of people **luu-ráp** fence gate **gu-lúu** fireplace border **cər-lúu** herd of deer **ni-lúu** crowd **ta-lúu** wall plank **doo-lúu** village **bee-lúu** group of monkeys **ho-lúu** fence *PTs* *luŋ ‘place’.
- luu^H** wild plantain. **ko-lúu** wild plantain **luu-mik** wild plantain pith **luu-tfi** wild plantain grove
- luu^H** white. **puu-lúu** white **təpə-bulúu** popcorn
- luu^L** grove. **ə-lúu** bamboo grove **əg-lúu** fan palm grove **pag-lúu** banana grove **hor-lúu** grove of ceylon ironwood trees **njin-lúu** grove of tapioca vines **rel-lúu** banyan grove **hii-lu-raalu** virgin jungle **hii-lúu** grove of trees
- luu^L** boat. **u-lúu** boat
- luk^L** chili pepper; irritate. **-lùk** Irritate **a-lùk** burning sensation **a-lùk** depressed; annoyed **ja-lùk** chili pepper **luk-kòo** chili stem **luk-cəi** bird’s eye chili **luk-tər** chili paste **lug-mə** chili seed **lug-lúk** burning sensation
- lup^L** cover up. **-lùp** Cover Up **boo-lùp** hat **lub-ər** brimmed hat; hat brim **lup-pii** bamboo hat in four-angled weave **lup-pəe** woven ritual bamboo hat
- lum[?]** spider. **tatùm-beelùm** spider *PTs* *rum ‘spider’.
- lum^L** clump; cluster; coil. **lùm-** coil e.g. thread or rope into a ball **lùm-** Clf: Cluster **a-lùm** clump; cluster **mír-lùm** dustpile; dusty **hii-lùm** variety of fruit tree **nəmii-alùm** clump of grass **itúm-gaalùm** giant black bumblebee **apə-liilùm** perfectly round *PTs* *lum ‘round (globular)’.
- lum^L** submerge. **lùm-** submerge
- lu^H** say (archaic). **porók-lugó** cockscrow
- lu^L** Pronominal plural suffix. **ɲu-nù** 1.PL **nu-nù** 2.PL **bu-lù** 3.PL

lee^H tie up. **lée-** tie up, as an animal or a prisoner
lee^H plant variety. **ta-lée** variety of plant
lee^L raw; fresh; wild (animal); furious. **lèe-** be crazed with aggression **-lèe** Crazed with aggression
lee-làk raw; fresh **ta-lèe** wild elephant **zig-lèe** wild buffalo **càr-lèe** wild deer **kii-lèe** still-living
sacrificial dog **din-lèe** fresh meat *PTs* *le 'raw'.
lek^H rightside up. **-lék** Rightside Up **-kúp...-lék** Helter Skelter
len^L exit (alt.). **-lèn** Exit *PTs* *len 'exit (verbal particle)'.
liK^H slip. **lík-** unsheathe *PTs* *lut¹ 'slip'.
loo^H bone. **a-lóo** bone **loo-níi** marrow **loo-bóo** comb **tii-lòo** female pelvic bone *PTs* *loŋ 'bone'.
loo^H day. **lóo-** of time, to progress through its course **a-lóo** day **hi-lóo** today **loo-gàa** noon; lunch *PTs*
*loŋ 'day'.
loo^H roll. **lóo-** roll, of a wheel
loo^L (e)spouse. **ji-lòo** husband **ja-lòo** slut; sexy; transgressor **ta-lòo** male slut *PTs* *(mi-)lo 'husband'.
loo^L descend. **-lòo** Descend **uulòo** shining downwards **uukò-uulòo** holes of various kinds **-kòo...-lòo**
Make Hole Result
lom^L shock; frighten. **lòm-** be shocked **-lòm** Frighten Result *PTs* *lom 'startle'.
lor^L radiant? **niŋ-lòr** coloured eyes
lo^H salt. **a-ló** salt *PTs* *lo 'salt'.
lo^H bee? **i-ló** bee
lo^H fish variety. **ta-ló** fish variety (*Ophiocephalus* sp?)
lo^H soul. **(ja-zí-)ja-ló** soul *PTs* *(ja-)lo 'soul'.
lo^L sun; day. **lò-** sun-dry **lo-ù** light **lo-bò** fourth month **i-lò** fifth month **ten-lò** sixth month **ag-lò** second
month **poo-lò** moon **al-lò** tomorrow **ken-lò** two days back **do-lò** paddy *PTs* *lo 'day'.
lə(K)- Ordinal prefix. **lə-kèn** once **lə-ní** twice **lə-úm** thrice **ləp-píi** four times **ləŋ-ŋó** five times **lək-káo** six
times **lə-kíi** the time before; way back when
ləə^H swing something; slanted. **ləə-** swing something *PTs* *ləŋ 'slanted.2'.
ləə^H forepaw. **a-ləə** forepaw(s) **buu-ləə** animal leg as ritual gift for priest **po-ləə** animal leg as ritual gift
for mediator
ləə^L gradually. **-ləə** gradually **ləə-ləə** gradually
lək^H leaf through; do in stages. **lək-** leaf through **-lək** In Stages
lək^L slide something. **lək-** slide something
ləp^L slip. **ləp-** slip
lə^H good; slow. **a-lə** good **ál-aləə** slow **alzà** real; true **alə labén zâa** too bloody good *PG* *la 'good'.
lə^L foot/leg. **a-lə** leg including foot **lə-bàk** right leg **lə-bíi** knee **lə-bòr** top of the foot **lə-càə** toe (general)
ləcàə-cei pinky toe **lə-ci** left leg **lə-dàə** short-legged **lə-dàk** crack in the foot **lə-dàr** lame **lə-dò** heel
lə-gàp underknee **lə-gòk** crack in the foot **lə-gòo** bowlegged **lə-hín** toenail **lə-kíi** talon? **ləkò-ləpèk**
cross-legged **lə-kòo** blade anchor **lə-mà** leg hair **lə-mèn** ankle **lə-nə** big toe **lə-ŋək** ankle tendon
lə-pàa shin; middle **lə-pèe** leg cramp **lə-pùk** toe joint **lə-ríi** lower stem of a plant **lə-tàk** stinger (of a
bee) **lə-tə** calf of the leg **lə-tèn** underfoot **lə-tùu** half-legged **lə-tùm** legs folded Indian-style **lə-zàə**
lame **lə-zùu** knock-kneed **lə-** (vt.) plant *PTs* *lə (~ *le?) 'foot/leg'.
lə^L whip; flick. **lə-** flick
líi^H red. **líi-** redden **ja-líi** red **líi-cíi** red **mír-líi** red-coloured **aa-líi** red (black) tea **gií-líi** cockfeathers
taa-líi red bird **dum-líi** red (brown) hair **baa-líi** red rice **bo-líi** red mithun **bi-líi** variety of red snake
maa-líi sweet potato **uucíi-uulíi** dim light **ukcíi-baalíi** firefly *PTs* *líi 'red'.
líi^L stone. **i-líi** stone **líi-càk** pebble **líicàk-borée** pebble **líicíi-borée** pebble **líi-cìk** cooking tripod **líi-cùm**
green stone bead **líi-jàa** soft stone **líi-kàa** igneous stone **líi-kə** black stone bead **líi-kàr** blue stone
bead **líi-mìk** gravel **líi-mìk** algae **líi-nə** boulder **líi-òr** hard stone **líi-pə** sharpening stone **líi-pùu** white
stone **líi-pùm** stone pile **líi-tàk** huge boulder **líi-tə** boulder **líi-tòr** hard stone *PTs* *líi 'stone'.
líi^L neck. **líi-gòo** neck **líi-pòo** neck **líi-hàk** crack in the voice **dopùk-líigòo** throatpipe (foodpipe or
windpipe) *PTs* *líi 'neck'.
líi^L want. **-líi** Desiderative
lík^L insert. **lík-** insert **-lík** Into Applicative *PTs* *lík 'exchange; pour'.
lə/i^H boil (n.). **i-lə** boil (n.)

h

haa^H tense inner muscles. **háa-** tense inner muscles, as when defecating
hak^H breathe. *PTs* *çak 'breathe'.
hak^H ~ **ak^H** branch. **ak-cə** branch **daa-hák** single stick *PTs* *fiak 'branch'.

hap^H pinch; nip. **háp-** pinch; grasp with pincers **koo-háp** tongs *PTs* *çep ‘hold; nip’.
hap^H count. **háp-** count
hap^L net. **ə-hàp** net *PTs* *çap ‘net’.
ham^H step. **hám-** step
har^H ruffhouse. **hár-** play; naked noise; fornicate *PTs* *far ‘run’.
har^L untie. **hàr-** untie; be untied
ha^H Nrz: Irrealis/Obligative. **-há** Nrz: Irrealis/Obligative
hi[?] tick. **horé-tasi** flat tick *PTs* *pi ‘tick’.
hik^H ~ **hík^H** join lengths. **-hík** ~ **-hík** Join Lengths
hik^L brush against. **-hík** Brush Against
hik^L vegetable variety? **o-hík** variety of vegetable
hik^L rufousnecked hornbill. **pi-hík** rufousnecked hornbill (*Aceros nipalensis*)
hin^H liver. **a-hín** liver *PTs* *zin ‘liver’.
hin^H nail; claw. **pir-sín** red jungle fowl (*Gallus gallus*) **lak-sín** fingernail; claw **lə-hìn** toenail *PTs* *(lak-)zin ‘nail’.
hir^H sweet? **tii-hír** sweet
hi^H Reflexive. **-hí** Reflexive *PTs* *çu ‘Reflexive’.
hi^H die. **hí-** die **hicin-doma** famine *PTs* *çi ‘die’.
hi^H water (var.). **gar-sí** dew **hi-pé** raft **hi-túm** ~ **hit-túm** mud **hi-záa** swamp
hi^H porcupine. **ho-sí** porcupine **hos-sirúu** porcupine den *PTs* *kret ‘porcupine’.
hiK^H whack. **hík-** whack; beat or hit with a stick *PTs* *zít ‘beat.2’.
hi^L Proximate. **hi** Speaker-proximate demonstrative **hi-gì** Speaker-proximate individuating demonstrative **hi-lòo** today **hi-jhì** this year **hi-rùm** this evening **hi-rò** this morning **ho-gò** Speaker-proximate locative demonstrative **hə-kə** Speaker-proximate semblative demonstrative **həmbə** Speaker-proximate pro-adverbial *PG* *çi; *PTs* *çi ‘this’.
hi^L water; urine. **i-sì** water **je-sì** urine **pumsì-pumláa** nose water **niksì-nigláa** eye water **hi-bòk** dam **hi-bùu** river **hi-dhì** falling water **hi-gò** hot water **hi-ləə** deep section of a river **hi-lək** bamboo water carrier **hi-lìi** sand **hi-lùm** pipe (for smoking) **hi-mòo** sideburn area **hi-pəə** paddy field border **hi-pùu** flood *PTs* *çi ‘water; urine’.
huu^H smell; stink. **húu-** smell; stink **kə-húu** rabbit **nam-sùu** stinky **tahúu-tajáa** fruit fly
huu^H granary. **naa-húu** granary **húu-** Clf: Granary *PTs* *çun ‘granary’.
huu^L rise (steam). **húu-** rise, of steam
huk^H de-handle. **húk-** de-handle **-húk** Dehandle Result
huk^H wash. **lak-súk** wash hands
huk^{HL} fail (crop). **húk-** fail, of a crop **am-súk** fail(ed), rice **ko-húk** dried oko leaf
huk^L overcome. **-húk** Overcome Obstacles
huk^L scent; emission. **a-húk** scent **doo-húk** steam; vehicle emission
huk^L start; go ahead. **-húk** Start; Go Ahead (and)
huk^L ladle. **húk-** Clf: Ladlefull **húk-** ladle/scoop *PTs* *çuk ~ *zuk ‘scoop/ladle (v.)’.
hup^H nest. **a-húp** nest *PTs* *çup ‘nest’.
hup^L disorder. **-húp** Disorderly **-húp...jap** Beyond Reasonable Limit **a-húp** disorderly
hum^H shellfish. **ta-húm** shellfish (generic)
hum^L enclose. **hùm-** enclose **-hùm** Conceal **po-hùm** meal packet
hur[?] bladder. **hur-pò** bladder *PTs* *çur ‘bladder’.
hur^H loose. **a-húr** loose, as a shirt
hur^L spill out. **hùr-** spill out **-hùr** Spill Out Result
hu^H group of four. **a-hú** one group of four **hú-** Clf: Fours
hu^H wash (body). **hú-** wash (body)
hee^L fruit; berry. **a-hèe** berry **a-hèe** inner flesh of bamboo **apó-ahèe** fruit *PTs* *ze ‘fruit’.
hee^L unmake. **hèe-** unmake
hek^H separate; come off/away. **-hek** Separate Result
hen^H climb. **hén-** climb
hen^L wither(ed). **hèn-** dry; wither **hen-nə** dry/fallen/dead leaf **a-hèn** smoke-dry/smoke-dried **din-sèn** dried meat *PTs* *çan ‘wither’.
heK^H release; come off/away. **hek-** (vt.) pull out **-hek** release; come off/away result
he^L drag. **hè-** pull
ho[?] thin bamboo? **ə-sò** very thin variety of bamboo
hoo^H rope; long thing. **hóo-** dance **a-hóo** one stick; one long thing **o-hóo** rope **hóo-** Clf: Stick **ho-à** noose **hoo-tí** skewer **hoo-zèn** wire **ho-am** ~ **ho-om** hanging bridge; rope bridge **ho-bùk** softcover sheath **ho-lúu** fence **ho-rfi** line of fish; straight *PTs* *çon ‘Clf: Long, Slender’ (?).
hoo^L long; lizard. **hòo-** grow up, of a human being (v:c.arg) **hòo-** long (adj:mono) **-hòo** Long/Far **a-hòo**

- long/tall **bok-sòo** long, of a dam **jar-sòo** long **hoo-pèn** chameleon **hoo-zhì** chameleon *PTs* *çon ‘Clf: Long, Slender’ (?).
- hok^L** score length. **hòk-** score along the length of an object **bis-sòk** racing-striped
- hor^L** long; lizard. **hòr-** (vt.) to make a line across a space with a rope **a-hòr** long **bee-hòr** langur sp., poss. capped langur (*Trachypithecus pileatus*) **hor-gòk** tree variety **hor-kèk** lizard sp. **hor-mèn** crocodile (poss. neo.)
- hor^L** roam; de-restrict. **hòr-** roam **-hòr** loosen; free up
- ho^H** fear. **bo-hó** fear; afraid **ho-ṅàk** terrified
- ho^L** nurture. **hò-** nurture
- ho^L** small wildcat. **ta-sò** small wildcat *PTs* *çeo ‘wildcat’.
- həə^H** drag; grasp; tug. **həə-** drag; grasp; tug
- hii^H** live lifespan. **hii-** live a lifespan; survive *PTs* *çin ‘grow (vi.)’.
- hii^H** sludge through. **hii-** sludge through
- hii^H** wild citrus. **ta-hii** wild citrus sp. (*Citrus assamensis*?) **hii-pìn** wild citrus sp.
- hii^H** water (alt.); urine (alt.). **hii-** urinate (v:c.arg) **hi-ò** eighth month (low water point) **hii-gòm** urinate improperly **hii-tə** ninth month (high water point) **ji-hii** Aryan person **tək-sii** water kettle
- hii^H** support? **-hii** supporting/caring manner; firm result
- hii^L** wood. **i-hii** timber; firewood **hii-bò** length of a tree **hii-dàa** stick **hii-jàa** rotten wood **hii-kòo** wood skewer **hii-kùk** tree bark **hii-lòk** tree variety **hii-lùm** tree variety (jungle, fruit-bearing) **hii-luu** grove **hii-nə** plant **hii-tàk** wooden pole **hii-pə** wood (as raw material) **hii-pòo** tree trunk **hii-rèk** banyan **hii-tuu** tree stump **hii-zì** tree variety (*Albizzia procera*?) **hii-zò** tree variety (*Zanthoxylum rhetsa*) variety **hii-luu-raaluu** virgin forest **hii-nə-hii-bò** plants **hii-tuu-taín** chanterelle mushroom **hii-z-injín** cassava *PTs* *çin ‘wood’.
- hii^L** press. **hii-** press
- hii^L** origin. **a-hii** origin **ko-hii** stream head **dii-hii** Village name (head of the *Kidii* river) **puu-hii** (**doo-kèe**) head of the *Sipuu* River, and name of a nearby village **abúu-ahii** river head **koróo-kohii** channel head
- hik^H** scales; skin. **a-hik** fish skin or scales **hik-** thresh underfoot **hik-ir** cold; shivery **nəhik-nəməi** ground cover, as moss or short grass *PTs* *çik ‘skin’.
- hik^H** hunt. **hik-** hunt
- hik^H** cough. **hik-** cough (v:c.arg) **i-hik** cough **hik-ir** shivery feeling **hig-jáa** rheume
- hir^H** whittle. **hir-** whittle; strip bark finely
- hir^L** interesting. **-hir** Interesting (experience) **pi-hir** ultimate; best
- hir^L** snail. **ta-hir** snail (alt.)

Appendix B: Summary of PTB – PT – PG – Lare, Pugo Correspondences³²⁹

Simple Initials

| poa | PTB | PTs | PG | Lare | Pugo | | poa | PTB | PTs | PG | Lare | Pugo |
|------|----------------------------------|-----|-----|------|----------------------|-----|----------------------|------------------------|-----|-----|------|------|
| Lab | *p- | *p- | *p- | p- | p- | Pal | ? | *c- ³³⁰ | *c- | c- | c- | s- |
| | | | *c- | c- | c- | | | | | | | h- |
| | *b- | *b- | *b- | b- | b- | | *dz-?, *dy-? | *z- | *z- | z- | z- | z- |
| | | | *z- | z- | z- | | *n- | *ɲ- | *ɲ- | ɲ- | ɲ- | |
| | *m- | *m- | *m- | m- | m- | | *y- | *j- | *j- | j- | j- | |
| | | | *ɲ- | ɲ- | ɲ- | | | | | Ø- | Ø- | |
| | *ts-, tś-, *s-, *sl-, *śr- | *f- | *Ø- | Ø- | Ø- | | *t-, *tś-, *s- | *ç- ³³¹ | *ç- | s- | s- | |
| *hw- | *v- | *Ø- | Ø- | Ø- | *z-, *tś-, *s- | | *ʒ- | | | | | |
| Alv | *t- | *t- | *t- | t- | t- | | Vel | *k-, *kr-, *kl-? | *k- | *k- | k- | k- |
| | *d-, *dz- | *d- | *d- | d- | d- | | | | | *c- | c- | s- |
| | *n- | *n- | *n- | n- | n- | | | | | h- | | |
| | *r- | *r- | *r- | r- | r- | *g- | | *g- | *g- | g- | g- | |
| | *l- | *l- | *l- | l- | l- | | | | *z- | z- | z- | |
| | | | | | | Glo | *ɥ- | *ɥ- | *ɥ- | ɥ- | ɥ- | |
| | | | | | | | | | *ɲ- | ɲ- | ɲ- | |
| | | | | | | | | | *ɲ- | ɲ- | ɲ- | |
| | | | | | | | | | *ɲ- | ɲ- | ɲ- | |
| | | | | | | | | | *ɲ- | ɲ- | ɲ- | |
| | | | | | | Glo | ? | *h- | *Ø- | Ø- | Ø- | |
| | | | | | | | *z-, *s-, *hy- | *f- | *Ø- | Ø- | Ø- | |
| | | | | | | | *-w- | *Ø- | *Ø- | Ø- | Ø- | |
| | | | | | | | | | | | | |

³²⁹ PTB correspondences are as determined by Sun (1993b), following Benedict's (1972) reconstruction and transcription. PTs and, PG and Lare/Pugo Galo transcriptions follow Post (this work), with divergences from Sun's (1993b) transcription noted below. ** marks a reconstruction with relatively little empirical support. ? indicates an uncertain correspondence.

³³⁰ Sun (1993b) symbolizes our *c/z* as *č/ž*. No phonetic contrast is implied.

³³¹ Sun (1993b) symbolizes our **ç/*ʒ* via *alveolar* fricative symbols **s/*z*. Since alveolar and

(alveo-)palatal fricatives are seemingly non-contrastive throughout Tani, and since *ç ~ s* variation is sometimes found (either as within-speaker free variation or across-speaker dialectal variation, choice of one or the other set to represent the PT categories is to an extent arbitrary. However, as Sun (1993b:§1.5.1 and elsewhere) also notes, where conditioned changes *are* found, **ç/*ʒ* reflexes usually pattern with (alveo-)palatal consonants, *not* with alveolars. Moreover, where the directionality of change can (at least for a given stage) be established, as it can in post-PG Galo, the alveolar form appears to be innovative. Thus the decision has been made to represent PT **ç/*ʒ* rather than **s/z*, however, this should be viewed only as a slight shift in bias rather than as a revision of Sun's conclusions.

Cluster Initials

| PTB | PTs | PG | Lare | Pugo |
|---------------|-------|------|------|----------|
| *pr-, *pl- | *pr- | *p- | p- | p- |
| *bl- | *br- | *b- | b- | b- |
| *ml- | *mr- | *m- | m- | m- |
| *kr- | *kr- | *k- | k- | k- |
| *gr-? | *gr- | *g- | g- | g- |
| ? | *pj- | *c- | c- | s- h- |
| ? | *bj- | *z- | z- | z- |
| ? | *mj- | *ɲ- | ɲ- | ɲ- |
| *l-, *ly- | *rj- | *rj- | r- | j- |
| *kw- | **kw- | *k- | k- | k- |

Open Rhymes

| PTB | PTs | PG | Lare | Pugo |
|-----------------------------------|--------|-------|------|------|
| *-a | *-a | *-a | -a | -a |
| | | | -ə | -ə |
| | *-aa | *-aa | -aa | -aa |
| *-i, *-əy | *-i | *-i | -i | -i |
| | | *-ii | -ii | -ii |
| | *-ii | *-ii | -ii | -ii |
| *-u, *-ow, *-wa- | *-u | *-u | -u | -u |
| | | | -o | -o |
| | | *-i | -i | -i |
| | ** -uu | ? | ? | ? |
| *-e, *-ay *-ey | *-e | *-e | -ee | -e |
| | | | -e | |
| | | | -ə | -ə |
| | | *-i | -i | -i |
| | *-ee | *-ee | -ee | -ee |
| *-a | *-o | *-o | -o | -o |
| | *-oo | *-o | -o | -o |
| | | *-oo? | -oo? | -oo? |
| *-ey | *-ə | *-ə | -ə | -ə |
| | *-əə | *-ə | -ə | -ə |
| | | *-əə? | -əə? | -əə? |
| *-aaw?, *-əy, *-əw, *-ow | *-i | *-i | -i | -i |
| | | | -ə | -ə |
| | *-ii | *-i | -i | -i |
| | | *-ii? | -ii? | -ii? |

Rhymes in Nasal Coda

| PTB | PTs | PG | Lare | Pugo |
|-------------------------|-------|-------|------|------|
| *-am | *-am | *-am | -am | -am |
| ? | **-im | *-in | -in | -in |
| *-um | *-um | *-um | -um | -um |
| ? | **-em | *-əm | -əm | -əm |
| *-am | *-om | *-om | -om | -om |
| *-an? | *-an | *-en | -en | -en |
| *-in, *-en, *-iŋ? | *-in | *-in | -in | -in |
| ? | *-un | *-un | -un | -un |
| | | *-uu? | -uu? | -uu? |
| *-en | *-en | *-en | -en | -en |
| | | *-in? | -in? | in? |
| *-an? | *-on | *-en | -en | -en |
| | | *-in | -in | -in |
| *-iŋ? | *-in | *-in | -in | -in |
| *-aŋ, *-eŋ | *-aŋ | *-aa | -aa | -aa |
| *-iŋ | *-iŋ | *-ii | -ii | -ii |
| *-uuŋ, *-oŋ? | *-uŋ | *-uu | -uu | -uu |
| ? | **-eŋ | *-əə | -əə | -əə |
| *-aŋ, *-oŋ? | *-oŋ | *-oo | -oo | -oo |
| ? | *-əŋ | *-əə | -əə | -əə |
| *-iŋ, *-uŋ | *-iŋ | *-ii | -ii | -ii |
| | | | -əə | |

Rhymes in Liquid Coda

| PTB | PTs | PG | Lare | Pugo |
|-------------------------|-------|------|------|------|
| *-ar, *-âr, *-er? | *-ar | *-ar | -ar | -ar |
| ? | *-ur | *-ur | -ur | -ur |
| ? | **-er | *N/A | N/A | N/A |
| ? | *-or | *-or | -or | -or |
| ? | **-ər | *-ər | -ər | -ər |
| ? | *-ir | *-ir | -ir | -ir |
| ? | | | -ər | N/A |
| ? | *-al | *-ar | -ar | N/A |
| ? | *-il | *-ir | -ir | -ir |
| ? | | | -ir | |
| ? | *-ul | *-ur | -ur | -ur |
| ? | *-el | *-er | -er | -ə? |
| *-al, *-âl | *-ol | *-or | -or | -or |
| ? | **-il | *-ir | -ir | -ir |

Rhymes in Stop Coda

| PTB | PTs | PG | Lare | Pugo |
|-------------------------|----------------------------------|------|--------------------|----------|
| *-ap | *-ap | *-ap | -ap | -ap |
| *-up | *-up | *-up | -up | -up |
| ? | **-ep | *-ap | -ap | -ap |
| *-ap | *-op | *-op | -op | -op |
| *-at | *-at ¹ | *-eK | -eK | -iK/-eK? |
| *-as, *-âs | *-at ² | *-a | -a | -a |
| *-it | *-it ¹ | *-iK | -iK | -iK |
| ? | *-it ² ³³² | *-ii | -ii | -ii |
| *-ut | *-ut ¹ | *-iK | -iK | -iK |
| ? | *-ut ² | *-u | -o | N/A |
| | | *-uu | -uu | -uu |
| ? | *-et | *-eK | -eK | -eK? |
| *-ot? | **-ot ¹ | *-eK | -eK | N/A |
| ? | *-ot ² | *-oo | -oo | -oo |
| ? | *-it ¹ | *-iK | -iK | -iK |
| *-is | *-it ² ³³³ | *-i | -ə | -ə |
| *-ak *-aak | *-ak | *-ak | -ak | -ak |
| | | *-ek | -ek | -ek |
| *-ik | **-ik | *-ik | -ik | -ik |
| | | | -ik | |
| *-uuk | *-uk | *-uk | -uk | -uk |
| ? | **-ek | *-ek | -ək ³³⁴ | -ek |
| *-ak | *-ok | *-ok | -ok | -ok |
| ? | *-ək | *-ək | -ək | -ək |
| | | *-ek | -ek | N/A |
| *-ik, *-uk, *-uuk | *-ik | *-ik | -ik | -ik |
| | | | -ək | |

³³² Only one *-it rhyme is posited by Sun (1993b); however, evidence from Galo suggests that two rhymes *-it¹ and *-it² must be posited, as *tit¹ > tiK- ‘wipe’ and *fiit² > ii- ‘heavy’.

³³³ Only one *-i rhyme is posited by Sun (1993b); however, evidence from Galo suggests that two rhymes *-i¹ and *-i² must be posited, as *biit¹ > biK- ‘flow’ and *miit² > mî/ə- ‘body hair’.

³³⁴ Vowel is probably conditioned by preceding rhotic in the only attested form. Additional data from non-conditioning environments is required.

Appendix C: Illustration of PT – PG – Lare changes

The following Tables C1 and C2 illustrate the set of PT – PG and PG – Lare changes which are posited in §2.4, using a sample set of 43 lemma (roots and/or words). Table C1 presents PT – PG changes, numbered (1) – (18). Table C2 presents PG – Lare changes, numbered (19) – (26).

In Table C1, only a few prefixes and compound elements are included to illustrate stages (1) – (3), which schematize the basic process of prefixation and root-nuclear harmonization. As discussed in §2.4.3.1, prefixation and root-nuclear harmonization were probably not in fact punctual changes, but rather gradual and irregular processes of lexicalization which occurred at various historical points. They are presented as numbered stages in Table C1 simply in order to enable a straightforward visualization of the stepwise process. In general, however, prefixes and compound elements have not been represented in Table C1, both to save space and because it is not yet certain in most cases exactly when a prefixed or compounded form first appeared or was lexicalized.

Table C2 presents the corresponding set of PG reconstructions, together with those prefixes and compound elements which are known to have been lexicalized by the PG stage. Tones are also applied for the first time at the PG stage; although it is my belief that the same basic set of suprasegmental categories was in fact represented at the PT stage, a full PT reconstruction is not yet possible. Changes in Galo dialects other than Lare which are hypothesized in §2.4 to have post-dated PG are *not* represented here, nor are any non-Lare modern Galo forms.

Table C1 – Proto-Tani to Proto-Galo

Key to rules: (1) Prefixation 1. (2) Root-nuclear harmonization. (3) Prefixation 2. (4) Non-palatal fricative deletion. (5) Final liquid merger. (6) Final nasal merger. (7) Voiced fricative devoicing. (8) Initial cluster simplification 1. (9) Regressive palatalization. (10) Initial cluster simplification 2. (11) Vowel fronting 1. (12) Labial/palatal raising. (13) Vowel fronting 2. (14) *əə/oo*-shortening. (15) *e*-centralization. (16) Non-palatal *ɬ*-lengthening. (17) Final coronal stop deletion. (18) Final velar nasal deletion.

(Table overleaf)

| Gloss | PTs | pre-PG | | | | | | | | | | | | | | | | | |
|------------------|-------------------------|----------------|----------------|--------------|------------|--------------|-------------|-------------|------------------------|--------------|-------------|-------------------------|----|----|----|----|----|-------------|-------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| ‘pig’ | <i>*rjek</i> | <i>*a-rjek</i> | <i>*e-rjek</i> | | | | | | | | | | | | | | | | |
| ‘cooked rice’ | <i>*pim</i> | | | | | | <i>*pin</i> | | | <i>*cin</i> | | | | | | | | | |
| ‘fat/grease’ | <i>*fu</i> | | | | <i>*u</i> | | | | | | | | | | | | | | |
| ‘blood’ | <i>*vii</i> | | | | <i>*ii</i> | | | | | | | | | | | | | | |
| ‘distribute’ | <i>*hor</i> | | | | <i>*or</i> | | | | | | | | | | | | | | |
| ‘child’ | <i>*ho</i> | | | | <i>*o</i> | | | | | | | | | | | | | | |
| ‘nail’ | <i>*zin</i> | | | | | | | <i>*cin</i> | | | | | | | | | | | |
| ‘water’ | <i>*ci</i> | | | | | | | | | | | | | | | | | | |
| ‘cut/reap’ | <i>*gja²</i> | | | | | | | | <i>*ga²</i> | | | | | | | | | <i>*ga</i> | |
| ‘fiber’ | <i>*pjak</i> | | | | | | | | | <i>*cjak</i> | <i>*cak</i> | | | | | | | | |
| ‘give’ | <i>*bi</i> | | | | | | | | | <i>*zi</i> | | | | | | | | | |
| ‘float; swim’ | <i>*bjaŋ</i> | | | | | | | | | <i>*zjaŋ</i> | <i>*zaŋ</i> | | | | | | | | <i>*zaa</i> |
| ‘eye’ | <i>*mik</i> | | | | | | | | | <i>*jik</i> | | | | | | | | | |
| ‘sister (elder)’ | <i>*me</i> | | | <i>*a-me</i> | | | | | | <i>*a-pe</i> | | | | | | | | | |
| ‘soft’ | <i>*mjak</i> | | | | | | | | | <i>*jak</i> | | | | | | | | | |
| ‘pain(ful)’ | <i>*ki</i> | | | | | | | | | <i>*ci</i> | | | | | | | | | |
| ‘know’ | <i>*ken</i> | | | | | | | | | <i>*cen</i> | | | | | | | | | |
| ‘spittle’ | <i>*kjul</i> | | | | | <i>*kjur</i> | | | | <i>*cjur</i> | <i>*cur</i> | | | | | | | | |
| ‘clothes’ | <i>*ge</i> | <i>*a-ge</i> | <i>*e-ge</i> | | | | | | | <i>*ze</i> | | | | | | | | | |
| ‘laugh’ | <i>*ɲil</i> | | | | | <i>*ɲir</i> | | | | <i>*ɲir</i> | | | | | | | | | |
| ‘one’ | <i>*kon</i> | | | | | | | | | | | <i>*ken</i> | | | | | | | |
| ‘filth’ | <i>*kot^l</i> | | | | | | | | | | | <i>*ket^l</i> | | | | | | <i>*keK</i> | |
| ‘meat’ | <i>*dɪn</i> | | | | | | | | | | | <i>*din</i> | | | | | | | |

| Gloss | PTs | pre-PG | | | | | | | | | | | | | | | | | |
|-------------|----------------|--------------|---------------|---|---|---|---|---|---|-------------|--------------|--------------|-------------|--------------|------------|-------------|----------------|-------------|-------------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| ‘undress’ | <i>*prɪtʰ</i> | | | | | | | | | | <i>*pɪtʰ</i> | <i>*pitʰ</i> | | | | | | <i>*piK</i> | |
| ‘blow’ | <i>*mutʰ</i> | | | | | | | | | | | <i>*mitʰ</i> | | | | | | <i>*miK</i> | |
| ‘lie down’ | <i>*grətʰ</i> | | | | | | | | | | <i>*gətʰ</i> | <i>*getʰ</i> | | | | | | <i>*geK</i> | |
| ‘chase’ | <i>*mon</i> | | | | | | | | | | | <i>*men</i> | <i>*min</i> | | | | | | |
| ‘say’ | <i>*man</i> | | | | | | | | | | | | | <i>*men</i> | | | | | |
| ‘escape’ | <i>*katʰ</i> | | | | | | | | | | | | | <i>*ketʰ</i> | | | | <i>*keK</i> | |
| ‘buy’ | <i>*rəð</i> | | | | | | | | | | | | | | <i>*rə</i> | | | | |
| ‘night’ | <i>*joo</i> | | | | | | | | | | | | | | <i>*jo</i> | | | | |
| ‘finger’ | <i>*keŋ</i> | | | | | | | | | <i>*ceŋ</i> | | | | | | <i>*cəŋ</i> | | | <i>*cəð</i> |
| ‘guts’ | <i>*kri</i> | | | | | | | | | | <i>*ki</i> | | | | | | <i>*kii</i> | | |
| ‘mountain’ | <i>*di</i> | | | | | | | | | | | | | | | | <i>*dii</i> | | |
| ‘four’ | <i>*pri</i> | | | | | | | | | | <i>*pi</i> | | | | | | <i>*pii</i> | | |
| ‘seed’ | <i>*li</i> | | | | | | | | | | | | | | | | <i>*lii</i> | | |
| ‘brain’ | <i>*pV-ni</i> | | <i>*pi-ni</i> | | | | | | | | | | | | | | <i>*pi-nii</i> | | |
| ‘spirit’ | <i>*ju</i> | <i>*a-ju</i> | <i>*u-ju</i> | | | | | | | | | | | | | | | | |
| ‘wind’ | <i>*ɪji</i> | | | | | | | | | | | | | | | | | | |
| ‘wild boar’ | <i>*ra</i> | | | | | | | | | | | | | | | | | | |
| ‘snake’ | <i>*bɪ</i> | | | | | | | | | | | | | | | | | | |
| ‘warm/hot’ | <i>*g(j)u?</i> | | | | | | | | | | | | | | | | | | |
| ‘think’ | <i>*miŋ</i> | | | | | | | | | | | | | | | | | | <i>*mɪ</i> |

Table C2 – Proto-Galo to modern Lare

Key to rules: (19) *rj*-split. (20) Palatal fronting and raising. (21) Rhotic-adjacent backing. (22) Word-final weakening. (23) Intervocalic glide deletion. (24) Fricative splits. (25) Lare lowering. (26) Lare Palatal-adjacent backing.

| Gloss | PG | pre-Lare | | | | | | | | Lare |
|------------------|----------------|---------------|----------------|---------------|----|----|----------------|----|---------------|---------------|
| | | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | |
| ‘pig’ | <i>*e-rjék</i> | <i>*e-rék</i> | | <i>*ə-rǝk</i> | | | | | | <i>ə-rǝk</i> |
| ‘cooked rice’ | <i>*a-cín</i> | | | | | | | | | <i>a-cín</i> |
| ‘fat/grease’ | <i>*a-ú</i> | | | | | | | | | <i>a-ú</i> |
| ‘blood’ | <i>*ìi</i> | | | | | | | | | <i>ìi</i> |
| ‘distribute’ | <i>*ór-</i> | | | | | | | | | <i>ór-</i> |
| ‘child’ | <i>*a-ò</i> | | | | | | | | | <i>a-ò</i> |
| ‘nail’ | <i>*lǝ-çìn</i> | | | | | | <i>*lǝ-hìn</i> | | | <i>lǝ-hìn</i> |
| ‘water’ | <i>*i-çì</i> | | | | | | <i>*i-sì</i> | | | <i>i-sì</i> |
| ‘cut/reap’ | <i>*ga-</i> | | | | | | | | | <i>gá-</i> |
| ‘fiber’ | <i>*ta-càk</i> | | <i>*ta-cèk</i> | | | | | | | <i>ta-cèk</i> |
| ‘give’ | <i>*zí-</i> | | | | | | | | | <i>zí-</i> |
| ‘float; swim’ | <i>*zàa-</i> | | | | | | | | | <i>zàa-</i> |
| ‘eye’ | <i>*a-ník</i> | | | | | | | | <i>*a-ník</i> | <i>a-ník</i> |
| ‘sister (elder)’ | <i>*a-né</i> | | <i>*a-ní</i> | | | | | | | <i>a-ní</i> |
| ‘soft’ | <i>*rǝ-nàk</i> | | | | | | | | | <i>rǝ-nàk</i> |
| ‘pain(ful)’ | <i>*a-cì</i> | | | | | | | | | <i>a-cì</i> |
| ‘know’ | <i>*cèn-</i> | | | | | | | | | <i>cèn-</i> |
| ‘spittle’ | <i>*ta-cúr</i> | | | | | | | | | <i>ta-cúr</i> |
| ‘clothes’ | <i>*e-zè</i> | | <i>*e-zì</i> | | | | | | | <i>e-zè</i> |
| ‘laugh’ | <i>*nír-</i> | | | | | | | | <i>*nír-</i> | <i>nír-</i> |

| Gloss | PG | pre-Lare | | | | | | | | Lare |
|-------------|-----------------|----------------|--------------|----------------|----------------|----|-------------|-------------|----|----------------|
| | | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | |
| ‘one’ | <i>*a-kèn</i> | | | | | | | | | <i>a-kèn</i> |
| ‘filth’ | <i>*ta-kèk</i> | | | | | | | | | <i>ta-kèk</i> |
| ‘meat’ | <i>*a-dín</i> | | | | | | | | | <i>a-dín</i> |
| ‘undress’ | <i>*pìK-</i> | | | | | | | | | <i>pìK-</i> |
| ‘blow’ | <i>*míK-</i> | | | | | | | | | <i>míK-</i> |
| ‘lie down’ | <i>*géK-</i> | | | | | | | | | <i>géK-</i> |
| ‘chase’ | <i>*mín-</i> | | | | | | | | | <i>mín-</i> |
| ‘say’ | <i>*mèn-</i> | | | | | | | | | <i>mèn-</i> |
| ‘escape’ | <i>*kéK-</i> | | | | | | | | | <i>kéK-</i> |
| ‘buy’ | <i>*rǝ-</i> | | | | | | | | | <i>rǝ-</i> |
| ‘night’ | <i>*a-jò</i> | | | | | | | | | <i>a-jò</i> |
| ‘finger’ | <i>*lak-cǝǝ</i> | | | | | | | | | <i>lak-cǝǝ</i> |
| ‘guts’ | <i>*a-kíi</i> | | | | | | | | | <i>a-kíi</i> |
| ‘mountain’ | <i>*a-dìi</i> | | | | | | | | | <i>a-dìi</i> |
| ‘four’ | <i>*ap-píi</i> | | | | | | | | | <i>ap-píi</i> |
| ‘seed’ | <i>*a-lìi</i> | | | | | | | | | <i>a-lìi</i> |
| ‘brain’ | <i>*pi-nìi</i> | | | | | | | | | <i>pi-nìi</i> |
| ‘spirit’ | <i>*u-jù</i> | | <i>*u-jì</i> | | | | <i>*u-ì</i> | | | <i>u-ì</i> |
| ‘wind’ | <i>*doo-rjí</i> | <i>*doo-rí</i> | | <i>*doo-rí</i> | <i>*doo-rǝ</i> | | | | | <i>doo-rǝ</i> |
| ‘wild boar’ | <i>*ho-rá</i> | | | | <i>*ho-rǝ</i> | | | | | <i>ho-rǝ</i> |
| ‘snake’ | <i>*ta-bí</i> | | | | <i>*ta-bǝ</i> | | | | | <i>ta-bǝ</i> |
| ‘warm/hot’ | <i>*a-gù</i> | | | | <i>*a-gò</i> | | | | | <i>a-gò</i> |
| ‘think’ | <i>*mí-</i> | | | | | | | <i>*mǝ-</i> | | <i>mǝ-</i> |

Appendix D: Text corpus

| Code | Name | Type | Speaker(s) | Lines | h:m:s | Description |
|------------|--|-------------------------------------|-------------|-------|---------|---|
| TG | Toopo Gona | Folktale | LN | 96 | 0:07:46 | Widely-known folktale about a girl (Toopo Gona) who was to be married off. En route to her new husband's village, she was to eat the ritual bridal rice, and insisted upon eating it on a giant boulder (despite the wishes of her elders). The boulder ended up slowly swallowing her. |
| CC | Collecting cane | Personal narrative | RmR, AO, BH | 203 | 0:09:01 | RmR tells about multi-day trip into the jungle to collect cane for rope-making, and various mishaps that occurred. Interspersed with side conversations about life in the jungle as well as reactions to events happening outside the recording area (people passing by, etc.). |
| MDS | Migration from Daring to Sili | Personal narrative | NyR, TN | 128 | 0:09:34 | NyR's recollection of the migration of his group from Daring, his village of birth, to Sili, a village which was established in 1962 along the Assam border, followed by a story requested by TN about chasing a wild stag to death (a feat of great hunting prowess) shortly after their arrival; closed by NyR's observations about the changing nature of today's society. |
| FA | Forest animals | Picture story | TR | 87 | 0:05:50 | Picture book narrative about a group of animals lost in the forest, their happening on a house, the subsequent arrivals of several other types of (also lost) animals, and the final arrival of the house's owner, a bear. |
| FA | Forest animals | Picture story | IR | 110 | 0:08:47 | IR narrates Forest animals. |
| TOT | Traditional ornaments and treasures | Cultural description | LN | 166 | 0:08:22 | Description of traditional Galo ornaments, especially heirloom beads, and treasures, particularly brass platters and cast lead or bronze objects of uncertain origin. |
| FS | Frog story | Picture story | TR | 79 | 0:06:17 | Picture book narrative about a boy and a dog, and the escape of their pet frog into the forest, their search for the frog, and eventual discovery that the frog had eloped and had babies. |
| FS | Frog story | Picture story | MN | 71 | 0:05:45 | MN narrates Frog story. |
| FYG/ MH | Future of the young Galo, Mithuns in the hills | Cultural description | LN, MN | 56 | 0:06:55 | MN asks LN to give her views on the future of young Galo people and their ability to speak Galo language; MN then asks LN to explain why mithuns are kept in the highlands, but not foothills. |
| OPO | How to make rice beer | Cultural/ procedural description | LN, MbN | 84 | 0:06:02 | LN explains the process of making rice beer, at the same time as her daughters-in-law are engaged in one aspect of the process (charring rice husks). MbN occasionally asks her to elaborate. |

| Code | Name | Type | Speaker(s) | Lines | h:m:s | Description |
|-------------|---------------------------------------|-------------------------|--------------|-------|---------|---|
| HC | House construction | Conversation | IR, IRw, IkR | 46 | 0:02:26 | Conversation during a break from house construction, discussing past and planned events. |
| MPO | Max planck objects | Instruction-giving task | IR, IRw | 118 | 0:06:36 | Speaker A views a photograph of a set of objects (rope, feather, bamboo, stones) arranged in a particular array, and gives speaker B instructions to reproduce the array. IR and IRw take turns giving and receiving instructions. |
| GMW | Galo men and women | Cultural description | LN, MN | 103 | 0:09:46 | LN describes the traditional duties and tasks of Galo men and women, what they do from sunrise to sunset, etc. |
| LAT | Legend of Abo Tani | Folktale | NyPB, MN | 349 | 0:14:16 | NyPB tells the story of Abo Tani's search for a wife, moving progressively from low forms of life to higher forms (a dried-up leaf, a tree, fire, a bird and so on); eventually, he espouses his own daughter. |
| LW | The loss of writing | Folktale | MK, IR | 77 | 0:04:38 | Story of the loss of writing and the separation of the hill people and the plains people. The hill people kept their writing on a barking deer skin, which was roasted and eaten during a famine, thus disappearing. The plains people (primarily viewed as Indo-Aryans) kept theirs on paper, thus maintaining it to this day. |
| OAM | The origins of the Adi and the Mising | Historical narrative | TB, MN | 335 | 0:17:51 | Story of the legendary migration of the Tani tribes from the highlands of Tibet to the Himalayan foothills (modern-day Arunachal Pradesh), and the subsequent migration of the Mising tribe to the Assam plains. |
| TT | Tazi and Taro | Folktale | MK, IR, BnR | 341 | 0:19:39 | Story of Tazi and Taro's effort to sacrifice ten mithuns to marry off their daughters, and Abo Tani's (ultimately successful) effort to steal the mithuns from them. |
| MF | Moopin festival | Cultural description | LN, MN | 155 | 0:07:28 | Description of the Moopin festival, the Galo harvest festival and most important occasion of the year. |
| WGD | When a Galo dies | Cultural description | LN, MN | 80 | 0:04:42 | Description of the various rituals performed when a Galo person dies. |
| THC | The harvest cycle | Cultural description | KT | 52 | 0:03:21 | Description of the agriculture calendar, cycling through the months of the year. |
| AV | About a vision | Personal narrative | KT | 73 | 0:04:51 | KT recounts visions or apparitions encountered in his youth. |
| Total texts | 21 | -- | -- | 2808 | 2:49:52 | -- |

**Appendix E: Text 1 – *igò ribáa* (IR), *ikòm ribáa* (IkR) and *igò ribáa*'s wife (IRw),
House Construction (HC)**

Three-participant conversation recorded in *dípó* village during a break from *rigée-geenám* ‘reciprocal labour’, in which the new house of a relative – referred to here as *tukkáa* ‘Blackie’ – was being built. Due to their kin relation to *tukkáa*, the family of speaker IR is responsible for *alóo-loonám*, the provisions for the day’s work (usually, rice beer, tea, rice, vegetables and meat (such as a pig or fish) for around 30-40 people), on at least one of the two or three days needed to complete construction. This conversation concerns their planning for *alóo-loonám*, and also their general feelings about how construction has proceeded thus far. Although the speakers were all born some distance from the Assam border area, having lived in *dípó* village – only a kilometer north of the border – for several years now they have all adopted many characteristics of foothills Galo speech, such as frequent use of Indic and English loanwords, Assamese-derived particles and Assamese-derived semi-reduplication patterns.

(1187) *jôo lòk, mərə́a...sarali?*

jòo lòkə mərə́a sarali
what ABL HEST four.corners(<Asm)
‘(You want me to get the eggs) from where, um... (the shop at) four corners?’³³⁵
(IR, HC 002)

(1188) *hók paamāa rəm, pipə́b làat/...*

hokə pàa-máa-rə = əəm pipə́ = bó làa-tó/
SPRX.ABL get-NEG-IRR=TSUB egg=DAT take-IPTV.ODIR/
‘If they’re not available here, have the eggs b/...’ (IRw, HC 003)

(1189) *píp’ duí tərè, tín tərè, jòog laalāana...*

pipə́ dui tərèe tínə tərèe joogò làa-laanà
egg two(<Ind) flat(<Ind) three(<Ind) flat(<Ind) something take-IPTV.SOFT
‘You ought to get around two or three flats of eggs.’ (IR, HC 004)

(1190) *kaanə́má dá <laughs> allônə <laughs>*

káa-nam = əə da allò = nè
look-NZR:RLS=TOP CNTR tomorrow=IRR.TMP.PUNC
aló-loosə kaapāa kumà né! <laughs>
alóo-lóo-há káa-pàa-kú-máa né
day-provide.provisions-NZR:IRR/OBLG have/exist-ATTN-CMPL-NEG DECL.ADM
‘By the looks of things though <laughs> there won’t be any need to make food and drink tomorrow [because the construction will be nearly finished]!’ (IRw, HC 005)

³³⁵ *sarali* here refers to the intersection of NH51, the highway running parallel to the Arunachal Pradesh-Assam border which demarcates the limit of the Galo area, with the road leading to *dípó*, a Galo village.

(1191) *nammám...allô nè...*

namá = əm allô nè
house=ACC tomorrow IRR.TMP.PUNC
'The house...tomorrow...' (IkR, HC 006)

(1192) *allô nè mîlôo kadbé níjé*

allô nè mîlôo káp-dó(o) = bə ní = əə
tomorrow IRR.TMP.PUNC roof shingle-STAT=SBRD person=TOP
məráa jáarə pə mənəm ná.
məráa-jàa-rə pə məə-nam = əə na
whatever-COMP-IRR UCRT think-NZR:RLS=COP.IPFV DECL
'I suppose that more people will (come) tomorrow to make the roof (than came today).' (IRw, HC 007)

(1193) *ŋó dá mîlôəm mənəm ná.*

ŋó da mîlôo = əm məə-nam = əə na
1.SG CNTR roof=ACC think-NZR:RLS=COP.IPFV DECL
'As for me, I'm concerned about the roof.' (IR, HC 008)

(1194) *aaé! ləjé nâ! jò rídaglò jò rídaglò.*

aaé ləjé = əə na jòo rì-dàk = lo jòo rì-dàk = lo
IJE similar=COP.IPFV DECL any do-COS=LOC any do-COS=LOC
'Aa! Whatever happens, it's all the same.' (IkR, HC 009)

(1195) *ŋó dá hìrò...mîlôəm kapcôo jaadè b́é...*

ŋó da hìrò mîlôo = əm káp-còo-jàa-dó(o) = b́é
1.SG CNTR this.morning roof=ACC shingle-FIRST-COMP-STAT=SBRD
ríjâa tokà, taléa tèm tikoná maí?
rì-jàa-tó = kaa taléa tèm = m tikona-máa = (ə)í
do-COMP-IPTV.ODIR=HORT.ADVSKY DST.UP=ACC foretell(<Asm)-NEG=ETAG
'But as for me, I (thought that) it would have been better to have made the roof this morning...better do it, (because) we can't be sure about that sky up there, eh?' (IkR, HC 010)

(1196) *əə.*

əə
AFF
'Yeah.' (IRw, HC 011)

(1197) *cokpík ál rîP rədó kubé...*

compík ál rî-là(a) ŕé-dó(o)-kú = bə
underside DST.LOC.SLEV do-NF live/exist-STAT-CMPL=SJNC
'(So) that we could go on working on the underside over there....' (IkR, HC 012)

(2-3 seconds are inaudible due to baby kicking microphone) (IR/IRW/IkR, HC 013)

(1198) *talə təə...məráa dũubə rĩmâa dagzè.*

taləə təə məráa-dũu = bə rĩ-máa-dàk zee
 sky HDST.UP whatever-IPFV=SBRD do-NEG-COS REAS
 ‘Because we can’t, you know (predict) what that sky up there will do.’ (IR, HC 014)

(1199) *kappôp agərém rĩjə/...rĩjâa boló alrəkú*

káp-pòo-là(a) á-gərə = əəm rĩ-jâa-boolo alə-rə-kú
 shingle-TO.MARK-NF keep-CONC/DISJ=ACC.TSUB do-COMP-COND good-IRR-CMPL
məəlâ.
 məə-làa
 think-NF
 ‘I had thought it would be better to do it after thoroughly shingling the roof.’
 (IRw, HC 015)

(1200) *ə dakkòm, bulù...tukâa bulù, apúk-anág bə...caamâa rə.*

əgə dakkòm bulù tukâa bulù apúk-anák = bə càa-máa-rə
 ANAP.IND CONC 3.PL blackie 3.PL hasty=AVZR ascend-NEG-IRR
allò-rôə nè
 allò-roò nè
 tomorrow-day.after.tomorrow IRR.TMP.PUNC
caatâr dóo/...dagêe bə,
 càa-tər-dó(o)/-dàk-ée = bə
 ascend-TO.END-STAT/-COS-IPFV.DISJ=AVZR
allône...alĩbə rĩpənam rũuəm
 allò = nè allĩ = bə rĩ-pə-nam = rũu = əəm
 tomorrow=IRR.TMP.PUNC well=AVZR do-PFV-NZR:RLS=CERT=ACC
riĩk rĩjēgla...
 rĩ-jĩk rĩ-ék-là(a)
 do-NOT.LEAVING.REMAINDER.1 do-NOT.LEAVING.REMAINDER.2-NF
pôob-rapkò, jôojo allĩb...
 poobò-rapkò joojòo allĩ = bə
 shelf.hanging-fireplace.shelving.complex and.all.that.sort well=AVZR

kîlêr bô rigərəl, rîmên rîjèn

kîler = bô rî-gərô-là(a) rî-mên³³⁶ rî-jèn-là(a)
clear(<Eng)=AVZR do-CONC/DISJ-NF work-AS.PLAY do-RDUP-NF
rîrêku arú!

rî-rô-kú aru

work-IRR-CMPL CONC.CEXP(<Asm)

‘However, Tuka and all them won’t move in in such a rush. So that they can move up tomorrow or the next day, tomorrow after we properly do all the things that must be done...all the interior fixtures, after we do it all nice and properly, we’ll have a good old time doing it, you know!’ (IkR, HC 016)

(1201) *m̐m.*

mm

right

‘Right.’ (IRw, HC 017)

(1202) *ŋó dá, aarûu hó mæbólo cìn caadêe dùu*

ŋó da áa-rúu-há mæð-boolo cìn càa-dêe-dùu
1.SG CNTR come≡CERT≡NZR:IRR/OBLG think-CONDADD ascend-PROS-IPFV
daràm; êg dakkòm...apúk-aré ôí!

daram ægə dakkòm apúk-arée æə = ôí

CONC ANAP.IND CONC hasty COP.IPFV=ETAG

‘In my opinion, if we think about (their) definitely moving in (to the new house), it too can be done; however, it would be rushing it, eh?’ (IkR, HC 018)

(1203) *caarûu lapè mæðém...caalâa rô.*

càa-rûu-lapè mæð-rô = æəm càa-lâa-rô
ascend≡CERT≡CTZR:PURP/INTNthink-IRR=ACC.TSUB ascend-ABIL-IRR
‘If they definitely want to move in, they’ll be able to.’ (IRw, HC 019)

(1204) *allô nè moŋol bàr bəcìn*

allô = nè moŋol bàr bô = cìn
tomorrow=IRR.TMP.PUNC Tuesday(<Ind) day/term(<Ind) DAT=ADD
rîtə gərô.

rî-tà-gərô

do-INCP-ACNC

‘And also, tomorrow’s going to be a Tuesday...’³³⁷ (IkR, HC 020)

³³⁶ *rî-jèn* “should” be followed by a Non-final suffix *-là(a)* or Adverbializing enclitic *bô* here – the speaker seems to have undershot while speaking quickly.

³³⁷ Tuesday and Saturday are unlucky days for starting something in Assamese astrology. This is not a traditional Galo belief.

(1205) *tukâa nè batám...batám jôo doorám...*

tukkâa = nè batam batam jôo dóo-ró = əəm
 blackie=NAGT beam(<Ind) beam(<Ind) and/or.such LOC.EXIS.INAN-IRR=ACC.TSUB
batám jôo doodá booló...mərəám cìn...
 batam jôo dóo-dó(o)-boolo mərəa = əəm cìn
 beam(<Ind) and/or.such LOC.EXIS.INAN-STAT-COND whatever=ACC ADD
kaík-rapkòm cìn dá...allîb
 kaík-rapkò = əəm cìn da allî = bó
 fireplace.shelf.upper-fireplace.shelving.complex=ACC ADD CNTR well=AVZR
motè kê əmdûu nà ná.
 mò-tó kâa = ʔ əm-dûu-nà = əə na
 make-IPTV.ODIR HORT.ADV=FI tell-IPFV-NZR:SUB=COP.IPFV DECL
 ‘I’ve been telling Tuka that...that should there be any (leftover) beams and
 such...if there are any beams and so on, that he should also (use them to) make a
 fireplace shelving complex up nicely, see?’ (IR, HC 021)

(1206) *bî əm purnâm pagbéə lîgləpə əmdù!*

bî əəm purna = əəm pák-bəə-lîk-lapə əm-dùu
 3.SG APRX.ACC old.one(<Ind)=ACC suspend-CONT-APPL:INTO-INTN say-IPFV
 ‘He says he’ll just keep hanging that there old one!’ (IR, HC 022)

(1207) *purnaə...*

purna = əə
 old.one(<Ind)=TOP
 ‘The old one...’ (IkR, HC 023)

(1208) *kaík...ə, rapkòm...*

kaík əə rapkò = əəm
 fireplace.shelf.upper HEST fireplace.shelving.complex=ACC
 ‘The...um, fireplace shelving complex...’ (IRw, HC 024)

(1209) *purnaə jômb rîduukù cóm?*

purna = əə joombə rî-dùu-kú com
 old.one(<Ind)=TOP how do-IPFV-CMPL GUES
 ‘I wonder how the old one’s doing [i.e., what’s its condition]?’ (IkR, HC 025)

(1210) *purnâə nám əgə*

purna = əə namə əgə
 old.one(<Ind)=TOP house APRX.IND
dagbêə nà.
 dàk-bəə-nà = əə
 LOC.EXIS.CONTAINED-CONT-NZR:SUB=COP.IPFV
 ‘The old one is the one which has always been there in the house.’ (IR, HC 026)

(1211) *kajâ kajâab rîdù əmtə addî gəb dà, addîdu*

kajâa-kajâa = bə rî-dùu əm-tó-là(a) addî gobə da addî-dùu
black-black=AVZR do-IPFV say-PFV-NF strength LMT.UNIT CNTR strong-IPFV
bennà...<inaudible due to IR's coughing>.

ben na

EVID DECL

‘It’s black as black can be, but when it comes to strength, it seems to be strong...’
(IRw, HC 027)

(1212) *bəə...allîb həmbə batāmjo*

bə allî = bə həmbə batām = jòo
DST.DOWN well=AVZR PTOV.PADV beam(<Ind)=and/or.such
lîggərəm, modî boolò alrə məədù.

lîk-gərə = əəm mò-dîi-boolo alə-rə móa-dùu
insert-ACNC=ACC.TSUB make-AGAIN-COND good-IRR think-IPFV
‘I think it would be best if we put in some (new) beams and so on down there properly like this [i.e., as I’m suggesting] and rebuild it.’ (IR, HC 028)

(1213) *batām kaanám kaamá [agómə]³³⁸.*

batām káa-nam káa-máa [agóm = əə]
beam(<Ind) have/exist-NZR:RLS have/exist-NEG [speech=COP.IPFV]
‘[It’s a question of] whether there are any (remaining) beams or not.’ (IkR, HC 029)

(1214) *m̄m.*

mm

right

‘Yeah.’ (IRw, HC 030)

(1215) *batām cindà kaarúu paarúu kudá maadúu bèn.*

batām cìn da káa=rúu pàa=rúu=kú-dá(a)-máa-dùu ben
beam(<Ind) ADD CNTR have=CERT RDUP=CERT=CMPL-ACHV-NEG-IPFV EVID
‘And it seems that beams may not in fact be so readily available.’ (IR, HC 031)

(1216) *káad kaamó...*

káa-dó(o) káa-móo

have/exist-STAT have/exist-NEG

‘Whether they got any er not...’³³⁹ (IRw, HC 032)

³³⁸ According to my consultants, this sentence is ungrammatical without *agóm = əə*, which was believed to have been ellipsed due to its high predictability in this situation.

³³⁹ The speaker here is playfully repeating part of a preceding construction using a non-Lare pronunciation.

(1217) *əə, rənə/...rənám tətəbə rənám əəkú*

əə rə-nà rə-nam tətə = bə rə-nam əə = kú
AFF buy-NZR:SUB buy-NZR:RLS nothing.but=DAT buy-NZR:RLS COP.IPFV=CMPL
zē.

zee

REAS

‘Yeah, beca/...because it’s been nothing but buying on top of buying.’³⁴⁰ (IRw, HC 033)

(1218) *amíə hēmaabə rənámə rənám əəcìn*

amí = əə hē-máa = bə rə-nam = bə rə-nam əə = cìn
self=TOP saw-NEG=SBRD buy-NZR:RLS=DAT buy-NZR:RLS TOP=ADD
mamí ēré.

mamuli əə ree

toss-off(<Ind) COP.IPFV PQ

‘Is it in fact such a simple thing to do it by buying everything and not sawing it yourself?’ (IkR, HC 034)

(1219) *hísap lokkə í, amíə hebból tù*

hisap lokkəə əí amí = əə hē-boolo tu
judgement(<Ind) ABL=TOP ETAG self=TOP saw-COND RFOC(<Asm)
rizək-sizəkəm...

rizək-sizək = əəm

reject(<Eng)-RDUP³⁴¹=ACC

‘According to reason, if you saw it yourself, the rejects and so on... (can be used)’ (IkR, HC 035)

(1220) *amíə heerəm aṇnúi gó "māa" əmdāk kòm...*

amí = əə hē-rə = əəm aṇnúi go máa əm-dakkòm
self=TOP saw-IRR=ACC.TSUB bit IND no say-CONC

‘If you saw it yourself, although some may deny it... (you end up relatively well-off)’ (IRw, HC 036)

<inaudible talking over IRw> (IkR, HC 037)

³⁴⁰ The speaker is implying that since the group has been buying all their wood instead of sawing it out themselves, there may not be anything left to buy in the event that more were suddenly needed.

³⁴¹ Semi-reduplication with an *s*-initial is the typical Assamese semi-reduplication pattern, and has the basic sense ‘and suchlike’.

(1221) *rizək lokcìn ìlên ìâa maabə rîdûu bə*

rizək lokə = cìn ìl-ên ì-âa-máa = bə rî-dûu = bə
 reject(<Eng) ABL=ADD saw-OUT saw-OFF/AWAY-NEG=SBRD do-IPFV=SBRD
rîdûu tù.

rî-dûu tu

do-IPFV AURV(<Asm)

‘From the rejects, would you not also saw out (some usable parts), surely.’ (IRw, HC 038)

(1222) *herəm...joojooə...kusúr-musurə*

hè-rə = əm joojòo = əə kusur-musur = əə
 pull-IRR=ACC.TSUB what.sort=TOP scrap(<Ind)-RDUP³⁴²=TOP
doodə ná jí...

dóo-dó(o)-nà = əə ní

LOC.EXIS.INAN-STAT-NZR:SUB=COP.IPFV DISC

‘What it ultimately comes down to is that if you saw it (yourself)...at least some sort of, you know, scraps may be there.’ (IkR, HC 039)

(1223) *rənám/...daadîi daadîi là rənám tətə*

rə-nam dáa-dîi dáa-dîi-là(a) rə-nam tətə
 buy-NZR:RLS target-AGAIN target-AGAIN-NF buy-NZR:RLS nothing.but
əəkù zè.

əə = kú zee

COP.IPFV=CMPL REAS

‘See, he’s been constantly aiming to buy everything (rather than doing it himself).’ (IkR, HC 040)

(1224) *taləə dá...allîb dooní zilà hərii booló...hiləə*

taləə da allî = bə dooní zí-là(a) hərii-boolo hiləo = əə
 sky CNTR well=AVZR sun give-NF HEST(<Asm)-COND today=TOP
neekô rûuəm rîgərəm əî?

neekòo rûu = əm rî-gərə = əm əî

ground.space.around.home CERT=ACC do-ACNC=ACC.TSUB ETAG

‘As for the sky, if it grants us a good bit of sun, today if we absolutely do the ground floor properly, right?’ (IR, HC 041)

(1225) *allôm taək kabbóo ló*

allò = əm taək káp-boolo
 tomorrow=IRR.TMP.SPAN fan.palm shingle-COND
tarík cəə haé nà.

tarík=cəə=há = ee na

correct≡PREC≡NZR:IRR/OBLG=COP.PFV DECL

‘(Then), if we make the roof tomorrow it will have been right on.’ (IR, HC 042)

³⁴² Another Assamese-derived semi-reduplication pattern.

(1226) *ĩi nè acín dobbóo ló...mərəám...koodāa-batəkəm*

izì nè acín dó-boolo mərəáa = əəm koodāa-batək = əəm
 now IRR.TMP.PUNC cooked.rice eat-COND whatever=ACC balcony-flooring=ACC
reerə.

rèe-ró

lay.out-IRR

‘If we eat pretty soon...we’ll [then] lay out the flooring.’ (IR, HC 043)

(1227) *búl əmpāa dù.*

bulù əm-pāa-dùu

3.PL say-AS.SET-IPFV

‘(That’s what) they’re all saying.’ (IR, HC 044)

(1228) *acín dót/...mĩlòəm kaptér ból acín*

acín dó-tó mĩlòo = əəm káp-tér-boolo acín
 cooked.rice eat-PFV roof=ACC shingle-TO.LIMIT-COND cooked.rice
dotə là koodāa batəkəm reelāa ró.

dó-tó-là(a) koodāa batək = əəm rèe-là(a)-ró

eat-PFV-NF balcony flooring=ACC lay.out-ABIL-IRR

‘After eat/...If we finish laying the roof, (then) after eating lunch we’ll be able to lay out the balcony flooring.’ (IkR, HC 045)

(1229) *ogò gôor kul pənà.*

ogò gòo-ró-kú = lapə na

ANAP.LOC pass.time-IRR-CMPL=PRD DECL

‘The day will end up on that.’ (IkR, HC 046)

Appendix F: Text 2 – *miilîi kaalîi* (MK) and *igò ribáa*, The Story of *tazî* and *tarò* (TT).

Recorded in *daari* (Daring) Village, April 2006. Speaker MK, a lifelong resident of *daari*, was approximately 70 years old at the time of recording. Speaker IR (approximately 40 years old) was born in *daari*, but has since lived in several other Galo villages, as well as outside the Galo area. The story is one of a great many involving the exploits of *abó-tanîi* ‘(The) Father of Man’. Despite *abó-tanîi*’s traditional importance to Galo culture, or perhaps because of it, he is often represented as a trickster-like character, using his wits and skills to outdo rivals and gain advantage. In this extract, the main protagonists *tazî* and *tarò* must sacrifice ten mithuns – traditionally, the highest possible ritual gesture, representing an enormous expense of resources – in order to marry off two of their female relations, Whitecrested Laughing Thrush (*Garrulax leucolophus*), and *pə́əə* (an as-yet-unidentified nightingale-sized bird). *abó-tanîi* is selected to officiate as the presiding shaman, and immediately sets about hatching a plan to steal the ten mithuns...

(1230) *korûm ogó, tâz-tarò...hób-panəmə...hób*

korûm ogó tazî-tarò hobó-pá-nam əə hobó
ancient.times TMP.EPIS.RLSNAME-NAME mithun-chop-NZR:RLSTOP mithun
paləp əmlà...buppîî .gə..dorrí

pá-lapə óm-là(a) buppîî = gə dór-rîi
chop-CTZR:PURP/INTN say-NF all=GEN CLF:4.LEG.ANIMAL-ten
paləp əmlà...

pá-lapə óm-là(a)
chop-CTZR:PURP/INTN say-NF

‘Once upon a time, being that Tazi and Taro sacrificed mithuns; (in order) to sacrifice a mithun...(in order) to sacrifice ten mithuns like everyone else...’ (MK, TT 002)

(1231) *dorrí paləp əmlà buppîî pətá-kobù...*

dór-rîi pá-lapə əmlàa buppîî pətáa-kobùu
CLF:4.LEG.ANIMAL-ten chop-CTZR:PURP/INTN say-NF all bird-rodent
əgə, hottúm-horé...hottumém-horrém...pîrk-taakú ém...

əgə hottúm-horé hottúm = əəm horé = əəm pîrk-taakú = əəm
HEST bear-boar bear=ACC boar=ACC kaleej.pheasant-bird.variety=ACC
pîrsin əm...purúu əm, pə́əəəm.

pîrsin = əəm purúu = əəm pə́əə = əəm
jungle.fowl.red=ACC whitecrested.laughing.thrush=ACC bird.variety=ACC

‘...in order to sacrifice ten mithuns, all the small animals...the large animals...the bears and the boars...the game birds...the jungle fowl...the whitecrested laughing thrush and the *pere* bird...’ (MK, TT 003)

(1237) “*ḡó dorrí patê rənnà.*”

ḡó dór-rí pá-tà-ré-nà = əə
1.SG CLF:4.LEG.ANIMAL-ten chop-INCP-IRR-NZR:SUB=COP.IPFV
“‘I am going to sacrifice ten (mithuns)!’” (MK, TT 035)

(1238) *okkə...ôkə jibbò...taní...abə-taní...ôkə jibbò.*

okkəə okə jibò əə taní abó-taní okə jibò = əə
SCNJ ANAP.ABL priest=TOP Tani Abo.Tani ANAP.ABL priest=COP.IPFV
‘And then...the priest of (the occasion)...Tani...Abo Tani...was the priest of (the occasion).’ (MK, TT 036)

(1239) *tāz-tarò gə...mərá...jibbò kù.*

tazì-tarò = gə məráə jibò = əə kú
NAME-NAME=GEN HEST priest=COP.IPFV CMPL
‘He became Tazi and Taro’s priest.’ (MK, TT 037)

(1240) *dorrí...togùu*

dór-rí togùu
CLF:4.LEG.ANIMAL-ten mithun.sacrifice.ritual
zùrtə rənnà əmlà...áb-taní...
zùr-tà-ré-nà = əə ém-là(a) abó-taní
priest.perform.ceremony-INCP-IRR-NZR:SUB=COP.IPFV say-NF Abo.Tani
əgə...toguəm, zùrləp əmmə, bî.
əgə togùu = əəm zùr-lapə = əəm = əə bî
HEST festival=ACC priest.perform.ceremony-CTZR:PURP/INTN=TSUB=TOP 3.SG
‘(In order) to follow all the rules of the ten (mithun) ritual sacrifice, Abo Tani...so...being that he was to follow all the ritual ceremonies, he...’ (MK, TT 038)

(1241) *əgə...togùu zurləp*

əgə-m togùu zùr-lapə
ANAP.IND-ACC mithun.sacrifice.ritual priest.perform.ceremony-CTZR:PURP/INTN
əmlà...məráə dù; îtə bardù.
ém-là(a) məráə-dùu itə bár-dùu
say-NF whatever-IPFV ritual.chant intone-IPFV
‘...in order to perform the ceremony, he, you know, intoned a chant.’ (MK, TT 039)

(1242) *m̩m.*

m̩m
right.
‘Mm.’ (IR, TT 040)

(1243) *itə barnəmá...ogò, homôí ogò...taní.*

itə bár-nam = əə ogò homoi ogò taní
ritual.chant intone-NZR:RLS=TOPTMP/EPIS.RLS time(<Asm) TMP/EPIS.RLS Tanii
budí.ruudù

bud(d)i rúu-dùu
brains(<Ind) plan-IPFV

‘Intoning the chant, then, at that time...Tani was planning something (else).’ (MK, TT 041)

(1244) *əə.*

əə

AFF

‘Hm.’ (IR, TT 042)

(1245) *“tāz-tarə gə, hobə dorrí hīgùm né... ŋó*

tazì-tarə = gə hobə dór-rí hīgì-m nè = ʼ ŋó
Tazi-Taro=GEN mithun CLF:4.LEG.ANIMAL-ten Ptop.IND-ACC NAGT=NF1 1.SG
jôomb rilà...lâarek deedə naabə rè?”

joombə rì-là làa-rék-dée-dó(o)-nà = əə bəre
how do-NF take-USURPINGLY-PROS-STAT-NZR:SUB=COP.IPFV CJEC
əmlà. budí ruudù.

əmlàa bud(d)i rúu-dùu
say-NF brains(<Ind) plan-IPFV

“‘How might I manage to snatch Tazi and Taro’s ten mithuns?’ Like that. He was planning.’ (MK, TT 043)

(1246) *budí ruunəmá...bolò...əttám...robəə*

buddi rúu-nam = əə bolò əttám robə
brains(<Ind) plan-NZR:RLS=TOP DST.LOC.DOWN cliff.sloping edge.cliff
bolò, isì, isì robəə bolò... əttám

bolò isì isì robə bolò əttám
DST.LOC.DOWN water water edge.cliff LOC.DOWN cliff.sloping

oodóo rúu kogə lò...mərə...kolú-luupóo gó

oodòo-rúu-kò = go = lo mərəa kolúu-luupóo = go
far-CERT-NZR:LOC IND=LOC HEST banana.wild.variety-wild.banana.trunk=IND
póogə rəmá...mərə’...zebbò pootûml alá.

póo-gərə = əəm = əə mərəa zebò = əə pòo-túm-là(a) á-là(a)
chop.trunk-CONC/DISJ=TSUB=TOP HEST tunic=TOP cover-CLOSE-NF keep-NF
‘Therefore he...down at a cliff edge, down at a river drop, on a cliff which was a very high place...having chopped a wild plantain trunk, he...wrapped it up in a tunic.’ (MK, TT 044)

(1247) *bôpə zebò mennəm əi.*

bopò zebò mèn-nam (?ə)i
tunic.variety tunic speak-NZR:NSUB ETAG
‘What is called a “bopo zebo” (tunic), right?’ (MK, TT 045)

(1248) *m̩m.*

mm
right.
‘Yeah.’ (IR, TT 046)

(1249) *zebbò pootûml alá.*

zebò = əə pòo-túm-là(a) á-là(a)
tunic=TOP cover-CLOSE-NF do.completely-NF
‘He wrapped it up in a tunic, and...’ (MK, TT 047)

(1250) *əə.*

əə
AFF
‘Right.’ (IR, TT 048)

(1251) *pootûml apêə m̩ə... “ŋókə...loobó-gambú huulà.”*

pòo-túm-là(a) á-p̩ə = əəm = əə ŋó-kə loobó-gambú húu-là(a)
cover-CLOSE-NF keep-ATTN=ACC.TSUB=TOP 1.SG-GEN healing.crest chant.variety-NF
‘Having properly covered and kept it like that/in that order...“I’ve prepared all the ceremonial apparatus.”’ (MK, TT 049)

(1252) *“əgə...p̩r̩nə-togù...tòì-togùu gə...əgə...n̩ə/...*

əgə p̩r̩nə-togù tòì-togùu = gə əgə
ANAP.IND mithun.sacrifice.aspect mithun.sacrifice.aspect=GEN ANAP.IND
zəgərəm...îṭə-kaatə...
zəgər = əəm îṭə-kaatə
ceremonial.preparations=ACC ritual.chant.variety-ritual.chant.variety
b̩r̩ù-mugl̩i gə, alí-amp̩r̩ gə...
b̩r̩ù-mugl̩i = gə alí-amp̩r̩ = gə
river.spirit-lightning.earthbound=GEN seed.heirloom-seed=GEN
zəgərəm...garnâm h̩mn̩ə
zəgər = əəm gār-nam h̩-m = nè
ceremonial.preparations=ACC ritual.chant.variety-NZR:RLS SPRX-ACC=NAGT
ŋók ann̩ə...tam̩n̩ là...mólə p̩ə.”
ŋó-kə an̩ə = nè tá-mèn-là(a) mò-lap̩ə
1.SG-GEN mother=NAGT listen-AS.PLAY-NF make-CTZR:PURP/INTN
‘I’ve prepared all the ceremonial apparatuses and appeasements for the various spirits so that my mother can hear.’³⁴³ (MK, TT 050)

³⁴³ Abo Tani is addressing the audience to demonstrate what a good priest he is by doing everything properly, covering all the bases, as though to impress his (absent) mother.

(1253) “əgə...aôwə əmbə cənla paalà, nîbə lakù,

əgə aò = əə əmbə cèn-là(a) pàa-là(a) nîbò-là(a)-kú
ANAP.IND child=TOP ANAP.PADV know-NF get-NF be.priest-NF-CMPL
əm cənla paalà.”

əmbə cèn-là(a) pàa-là(a)

ANAP.PADV know-NF get-NF

“‘My son has become such an accomplished priest; he’s become such an accomplished one,’ (she’ll say).’ (MK, TT 051)

(1254) “alí-ampír, gutê-japóm gə...əə,

alíi-ampír gutê-japóm = gə əə
seed.heirloom-seed fairie.variety=GEN HEST
îta-kâatə gə...moozî-moopîn gə...

itê-kaatə = gə moozîi-moopîn = gə
ritual.chant.variety-ritual.chant.variety=GEN festival-festival.harvest=GEN
zəgərəm...garâa nammém...mərâ,

zəgər = əəm gâr-âa-nam = əəm mərâa
ceremonial.preparations=ACC ritual.chant.variety-ICEP-NZR:RLS=ACC HEST
takên bə tâmə lapə...”

tá-kèn = bə tá-mò-lapə

listen-GOOD/EASY=AVZR listen-APPL:CAUS-CTZR:PURP/INTN

‘In order that she may hear me nicely/properly chanting to all the various spirits...’
(MK, TT 052)

(1255) *m̩m.*

m̩m

right.

‘Right.’ (IR, TT 053)

(1256) “ŋôk annè...goktâa ká, aə,

ŋó-kə anə = nè gók-tà(a) = kaa aə
1.SG-GEN mother=NAGT call-MOT=HORT.ADVS HDST.SLEV
bottâa ká.” *ənà.*

bó-tà(a) = kaa əə = na

invite-MOT=HORT.ADVS AFF=DECL

“‘Go, call my mother, go invite her.’ Thus it was.’ (MK, TT 054)

(1257) “*nôk annə jôolo*

nó-kə anə = əə jòo = lo
2.SG-GEN mother=TOP what=LOC
doodée naanà?”

dóo-dée-nà = əə na
LOC.EXIS.ANIM.PERM-PROS-NZR:SUB=COP.IPFV DECL
“Where can your mother be found?” (they asked). (MK, TT 055)

(1258) *taní anə, korûm hiéenə/, əə...taní anə...*

taníi anə korûm hí-ée-nà/ əə taníi anə
Tanii mother ancient.times die-IPFV.DISJ-NZR:SUB/ AFF Tanii mother
dûuna maadî.
dûu-nà = əə maadii
LOC.EXIS.ANIM-NZR:SUB=COP.IPFV isn't.it
‘Tani’s mother in the old times passed aw/...aah...Is it not the case that Tani’s mother...was still alive.’ (MK, TT 056)

(1259) *əə.*

əə
AFF
‘Yes.’ (IR, TT 057)

(1260) *duudù; mîi budí rilà...mərəá...tù.*

dùu-dùu bìi bud(d)i rì-là(a) mərəáa-tùu
LOC.EXIS.ANIM-IPFV 3.SG brains (<Ind) do-NF whatever-CONT
‘She’s alive; (and) he made a plan, he...did this.’ (MK, TT 058)

(1261) *əgə, baŋii gó...pazí gərəmá...paakó-taí nè...paakó-taí nè,*

əgə baŋii = go pá-zí-gərə = əəm = əə paako-tai nè
HEST cane=IND chop-APPL:BEN-CONC/DISJ=TSUB=TOP NAME NAGT
nó...ŋôk annə bottâa kàm.
paako-tai ne nó ŋó-kə anə = nè bó-tà(a) = kaa = m
NAME NAGT 2.SG 1.SG-GEN mother=NAGT invite-MOT=HORT.ADVS=RSOL
‘Having cut a walking stick (for Paako Tai, he says to him), “you...go invite my mother.”’ (MK, TT 059)

(1262) *paakó/...*

paako
NAME
‘Paako...’ (IR, TT 060)

(1263) *baŋii gò zigərəmá.*

baŋii = go zí-gərə = əəm = əə
cane=IND give-CONC/DISJ=TSUB=TOP
‘Having given him a walking stick.’ (MK, TT 061)

(1264) *paakó?*

paako

NAME

‘Paako?’ (IR, TT 062)

(1265) *əə, paakó-tai nè.*

əə paako-tai = nè

AFF NAME=NAGT

‘Yeah, to Paako Tai.’ (MK, TT 063)

(1266) *paakó-taí naí?*

paako-tai na = (ə)ì

NAME DECL=ETAG

‘Paako Tai, is it?’ (IR, TT 064)

(1267) *m̩m, paakó-tai nè.*

m̩m paako-tai = ne

right NAME=NAGT

‘Yeah, to Paako Tai.’ (MK, TT 065)

(1268) *paakó-taí zontuə naí?*

paako-tai zontuu = əə na = (ə)ì

NAME animal(<Asm)=COP.IPFV DECL=ETAG

‘Paako Tai is an animal, is he?’ (MK, TT 066)

(1269) *m̩m, zontù; takó garĩ dũ nà ná!*

m̩m zontuu takó garĩ-dũu-nà na

right. animal(<Asm) squirrel resemble-IPFV-NZR:SUB=COP.IPFV DECL

‘Yeah, an animal. Similar to a squirrel, you know?’ (MK, TT 067)

(1270) *əə.*

əə

AFF

‘Okay, I see.’ (IR, TT 068)

(1271) *n̩ə̀k, ə̀gè...ə̀m...paakó-tai n̩è, “nó...ŋók annè...*

n̩ə̀k-k̩ə̀ ə̀gè ə̀m paako-tai = nè nó ŋók-k̩ə̀ an̩è = nè
2.REFL-GEN HEST ANAP.ACC NAME=NAGT 2.SG 1.SG-GEN mother=NAGT

bottâ kâ” ə̀mn̩ə̀m̩, “j̩òlò” ə̀mn̩ə̀m̩,

bó-tà(a) = kaa ə̀m-nam = əə joolò ə̀m-nam = əə
invite-MOT=HORT.ADV tell-NZR:RLS=TOP where tell-NZR:RLS=TOP

“á...m̩ə̀ráa g̩...ə̀gè...is̩...m̩ə̀rá, abú...luuj̩r̩ g̩...

á m̩ə̀ráa g̩ ə̀gè is̩ m̩ə̀ráa abúu luuj̩r̩ g̩
HDST.SLEV whatever GEN HEST water whatever river riverbed.edge GEN

ə̀tt̩m̩ od̩o r̩ũuko ah̩...jubl̩a

əttám oodòò=rûu=kò áa = hi jùp-là(a)
 cliff.sloping far=CERT=NZR:LOC/OBL DST.SLEV=PTOP sleep-NF
doodée naalà.”

dóo-dée-nà = əə laa
 LOC.EXIS.ANIM.PERM-PROS-NZR:SUB=COP.IPFV ASSR
 ‘Your...um...I mean...having told Paako Tai, “you...go invite my mother,” (and Paako Tai) having asked him “where”, (he replied) “she’ll be there...umm...sleeping on the high point of the cliff on the riverbank there.”’ (MK, TT 069)

(1272) “*ḡó zebbò pootûml appêe nammó.*”

ḡó zebbò = əə pòo-túm-là(a) á-pà-ée-nam = əə
 1.SG tunic=TOP cover-CLOSED-NF keep-PFV.2-IPFV.DISJ-NZR:RLS=COP.IPFV
 “‘I left her there wrapped up in a tunic.’” (MK, TT 070)

(1273) “*jûblə doodée nà. əm bottâa kà.*”

jûp-là(a) dóo-dée-nà = əə əəm bó-tà(a) = kaa
 sleep-NF lie.down-PROS-NZR:SUB=COP.IPFV ANAP.ACC invite-MOT=HORT.ADVS
 “‘She’ll be there sleeping. Go over and call to it [i.e., the package supposedly containing Abo Tani’s mother].’” (MK, TT 071)

(1274) *bottâk əmrôo ogò...paakó, baḡièḡm*

bó-tàa = kaa əm-ròo ogò paako baḡi = əəm
 invite-IPTV:MOT=HORT.ADVS tell-NZR:CMPL TMP/EPIS.RLS Paako cane=ACC
bəələ iḡká.
 bóə-là(a) ín-káa
 hold/carry-NF go-PF
 ‘Having been told to go...Paako took the stick and went.’ (MK, TT 072)

(1275) əə.

əə
 AFF
 ‘Uh-huh.’ (IR, TT 073)

(1276) “*ḡôk àn ruuzí nagó nà!*”

ḡó-kə anə ruuzí-nà = go na
 1.SG-GEN mother deaf-NZR:SUB=IND DECL
 “‘My mother’s a deaf one, see!’” (MK, TT 074)

(1277) əə.

əə
 AFF
 ‘M-hm.’ (IR, TT 075)

(1278) “*nó aṇṇíi gó...acì rûubə níktə ká!*”

nó aṇṇíi = go acì-rûu = bə ník-tó kaa
 2.SG bit=IND harsh-CERT=AVZR punch-IPTV.ODIR HORT.ADV
 “‘You’ll have to...give her a really good poke!’” (MK, TT 076)

(1279) “*acì rûubə níggə.rəmə, nígbə lò, ṇòk anə...*

acì-rûu = bə ník-gə.rə = əmə = ə ník-boolo ṇó-kə anə
 harsh-CERT=AVZR punch-CONC/DISJ=TSUB=TOP punch-COND 1.SG-GEN mother
ogò...mərá “jôogo bərə” əmlà lomrə,
 ogò mərá jòo = go bərə əmlàa lòm-rə
 TMP/EPIS.RLS HEST what=IND CJEC say-NF be.shocked-IRR
gə.rəp rəlapə là.” əgəmə meṇkà.
 gə-rəp-rə = lapə la əgə-m mèn-káa
 carry/wear-UPRIGHT-IRR-CTZR:PURP/INTN ASSR ANAP.IND-ACC say-PF
 “‘After giving her a really good poke, when you poke her, my mother...then...you
 know, she’ll be shocked, thinking “what on earth is this,” and so she’ll get up.”
 That’s what he told him.’” (MK, TT 077)

(1280) “*əgə boló,” paakó inlā. kaanəmə...əttám robə*

əgə boolo paako ín-lāa káa-nam = ə əttám robə
 ANAP.IND COND NAME go-NF look-NZR:RLS=TOP cliff.sloping edge.cliff
bəhì...
 bə = hi
 DST.DOWN=PTOP
 ‘(Saying) “ok, then,” Paako left. Looking...down at this cliff edge...’ (MK, TT 078)

(1281) *ḡigə əttám...əttámə...hogò,*

ḡigə əttám əttám = əə hogò
 SPRX.IND cliff.sloping cliff.sloping=TOP SPRX.TMP
odāa mahāmbə doonāa ṇì.
 ò-dāa-māa-há = əmbə dóo-nà = əə ṇi
 fall-ACHV-NEG-NZR:OBL=ANAP.PADV LOC.EXIS.INAN-NZR:SUB=COP.IPFV DISC
 ‘He finds (to his shock) that this cliff...(on) the cliff here, it’s lying there just about
 to fall.’ (MK, TT 079)

(1282) *m̄m.*

mm
 right.
 ‘Mm.’ (IR, TT 080)

(1283) *zēb/...zebbò pootûml apà.*

zebò = əə pòo-túm-là(a) á-pà
 tunic=TOP cover-CLOSE-N keep-PFV2
 ‘It was found wrapped in...in a tunic.’ (MK, TT 081)

(1290) *níktá ká əmrô ogò...əmdək eenà*

ník-tó kaa óm-ròo ogò óm-dàk-ée = na
 punch-IPTV.ODIR HORT.ADVSTell-NZR:CMPL TMP/EPIS.RLS tell-COS-IPFV.DISJ=DECL
əmlà, “bokə...ləpàa garîi hiccə bokə...
 óm-làa bokə ləpàa garîi-hí-cəə bokə
 say-NF ABL.DOWN middle equidistant-REFL-NZR:PREC ABL.DOWN
nigdánəmə, bokə accô!”
 ník-dá-nam = əə bokə accô!
 punch-SWIFTLY-NZR:RLS=TOP ABL.DOWN aha!
 ‘Having said to poke her, he told him thus, “right down in the utter center, pushing all at once, oh my!”’ (MK, TT 088)

(1291) *məráa kaakú...əttám bokə... “wá” əmlà,...əgə,*

məráa-káa-kú əttám bokə óm-là(a) əgə
 whatever-PF-CMPL cliff.sloping ABL.DOWN tell-NF HEST
məraə...zebbò kú... zebbò “huá” əmlà, bə,
 məráa = əə zebbò = əə kú zebbò = əə óm-là(a) bə
 whatever=TOP tunic=TOP CMPL tunic=TOP tell-NF DST.DOWN
dəələ mĩngə kaakú.
 dəə-là(a) mín-gə-káa-kú
 soar-NF chase-APPL:CARRY-PF-CMPL
 ‘Here’s what happened: from the cliff, making a “wa” sound, the tunic now...the tunic saying “hua”, it followed it, down.’ (MK, TT 089)

(1292) *əə.*

əə
 AFF
 ‘Huh.’ (IR, TT 090)

(1293) *luupóo nə dəələ mĩnkáa kú.*

luupóo = nə dəə-là(a) mín-káa-kú
 wild.banana.trunk=NAGT soar-NF chase-PF-CMPL
 ‘It chased the wild plantain trunk.’ (MK, TT 091)

(1294) *əgə...paakó kú...aakûr lakù.*

əgə paako kú áa-kûr-là(a)-kú
 HEST NAME CMPL come-RETURN-NF-CMPL
 ‘So then, in the end...Paako returned.’ (MK, TT 092)

(1295) *aakûr dookú əmə... “nôk abò...” ə, anə...*

áa-kûr-dó(o)-kú = əəm = əə nó-kə abó əə anə
 come-RETURN-STAT-CMPL=TSUB=TOP 2.SG-GEN father HEST mother

“taniá...nôk annè ñó...ñîmè-ñigó, tuupâa kumá.”

taníi = aa nó-kè anè = əə ñó ñîmè-ñí = go túu-pàa-kú-máa
Tanii=VOC 2.SG-GENmother=TOP 1.SG glimpse=IND survey-ATTN-CMPL-NEG
‘After having returned...“your father/...” – uh, (I mean) mother – “Hey Tani...your mother, I...couldn’t catch so much as a glimpse of her.”’ (MK, TT 093)

(1296) *“ñó, kaapâ/...kaapâ kumá.”*

ñó káa-pàa káa-pàa-kú-máa
1.SG look-ATTN look-ATTN-CMPL-NEG
“I...couldn’t see her.” (MK, TT 094)

(1297) *“amîrè...ñuñmôo-nappá kaatô kumá!”*

amîr = əəm ñuñmôo-nappáa káa-tó-kú-máa
aura=ACC face-mouth look-PFV-CMPL-NEG
“I couldn’t sense so much as a hint of her!” (MK, TT 095)

(1298) *“nôkə mennəmè, ñó...əgè...ñîgdáa paktô nammé...”*

nó-kè mèn-nam = əəm ñó əgè nîk-dáa-pàk-tó-nam = əə
2.SG-GEN speak-NZR:NSUB=ACC 1.SG HEST punch-SWIFTLY-RID-PFV-NZR:RLS=TOP
əttám bokè...kəbô jaacik gè...hîtəpè,
əttám bokè kəbô jaacik = gə hitəp = əə
cliff.sloping ABL.DOWN wool.variety scarlet=GEN flight=TOP
təbdə keekù ñiino.
təp-dàk = ee = kú ñiino
fly.discus-COS=COP.PFV=CMPL CERT.DIR
“(According to) what you said, I gave her a sudden poke...From the cliff, the fabric whirled on down.” (MK, TT 096)

(1299) *“hîlîi-higik gò, hidô-higik gò, gîddə keekù*

hîlîi-higik = go hidô-higik = go gîK-dàk = ee = kú
sand-water.dirty=IND mud-water.dirty=IND be.dirty.water-COS=COP.PFV=CMPL
ñiino.
ñiino
CERT.DIR
“The river flowed with mud (due to the impact).” (MK, TT 097)

(1300) *“ñó...kaapâa tokú má.”*

ñó káa-pàa-tó-kú-máa
1.SG look-ATTN-PFV-CMPL-NEG
“I...couldn’t see a thing anymore.” (MK, TT 098)

(1301) *mm.*

mm
right.
‘Mm.’ (IR, TT 099)

(1302) əmlà. “bokkə...mərá...niglôo là...kód/...kodeám...

ám-làa bokə = əə məráa nɪk-lòo-là(a) kodée = əəm

say-NF DST.ABL.DOWN=TOP HEST punch-DOWN-NF soil=ACC

aabəa aée là aalôo kunəmə...issə...zicí zí/...

áa-bəə áa-èe-là(a) áa-lòo-kú-nam = əə isì = əə

come-CONT come-AWAY-NF come-DOWN-CMPL-NZR:RLS=COP.IPFV water=TOP

ziccî-ziccîb rîpə kunəmə ənà.”

ziccîi-ziccîi = bə rî-pà-kú-nam əə = na

muddy.EXPR-muddy.EXPR=AVZR happen-ATTN-CMPL-NZR:RLS COP.IPFV=DECL

‘Like that. “From there I...pushed her down...she came down bashing against the cliff, and...and set the river dizzy with mud.”’ (MK, TT 100)

(1303) ənè.

əə né

AFF DECL.ADM

‘Indeed.’ (IR, TT 101)

(1304) ogò, ziccî-ziccîb rînəmə, bîi...

ogò ziccîi-ziccîi = bə rî-nam = əəm bîi

TMP/EPIS.RLS muddy.EXPR-muddy.EXPR=AVZR happen-NZR:RLS=ACC 3.SG

kaatûu kunəmə ənà.

káa-tùu-kú-nam əə = na

look-CONT-CMPL-NZR:NSUB COP.IPFV=DECL

‘So then, (the river’s) becoming muddy was all that he could see.’ (MK, TT 102)

(1305) kaabóg là káalə mîngə lakù.

káa-bók-là(a) káa-là(a) mín-gə-làa-kú

look-DOWN/SOUTH-NF look-NF chase-APPL:CARRY-NF-CMPL

‘Looking downward he followed it away (with his eyes).’ (MK, TT 103)

(1306) ogò, əmbə rîdəkè. əmbə nà. kaapâa mà.

ogò əmbə rî-dək = ee əmbə na káa-pâa-máa

TMP/EPIS.SEQ ANAP.PADV do-COS=COP.PFV ANAP.PADV DECL look-ATTN-NEG

‘So, thus it was. Like that. He couldn’t see.’ (MK, TT 104)

(1307) əgè...məraś, boppə zebbò dēələ

əgè məráa = əə bopə zebò = əə dēə-là(a)

HEST whatever=TOP tunic.variety tunic=TOP soar-NF

mîngə dagée kù. əmbə nà.

mín-gə-dək-ée-kú əmbə na

chase-APPL:CARRY-COS-IPFV.DISJ-CMPL ANAP.PADV DECL

‘The, you know, clothing was following it. Like that.’ (MK, TT 105)

(1308) *m̄m*.

mm

right.

‘Right.’ (IR, TT 106)

(1309) *taníi kú...îṭə-bartuəṃ*

taníi kú itə-bár-túu = əəm

Tanii CMPL ritual.chant.variety-intone-NZR:MIDPOINT=ACC

âpə kuəmə...budí lokkû nà...

á-pà-kú = əəm = əə

bud(d)i lokə = kú na

do.completely-PFV2-CMPL=TSUB=TOP brains(<Ind) ABL=CMPL DECL

əətúu lakù.

əə-tùu-là(a)-kú

scoot-STOP/DOWN.S/O-NF-CMPL

‘So now Tani...stopped in the middle of his chanting...due to his planning. He collapsed (out of worry).’ (MK, TT 107)

(1310) “*ḡòk annə hé/...heekú naḡni.*”

ḡó-kə anə = əə hí-ée-kú-nà = əə

ni

1.SG-GEN mother=TOP die-IPFV.DISJ-CMPL-NZR:SUB=COP.IPFV DISC

“‘It turns out that...my mother is dead!’” (MK, TT 108)

(1311) “*ə, ḡòk annə hée kunnâa booló...taní*

əə ḡó-kə anə = əə hí-ée-kú-nà = əə

boolo taníi

AFF 1.SG-GEN mother=TOP die-IPFV.DISJ-CMPL-NZR:SUB=COP.IPFV COND Tanii

nôk hób dorriəṃ ḡó puráa

nó-kə hobə dór-rí = əəm

ḡó puraa

2.SG-GEN mithun CLF:4.LEG.ANIMAL-ten=ACC 1.SG everything(<Asm)

lâarə kú.” əmlâa kú.

lâa-rə-kú əm-lâa-kú

take-IRR-CMPL say-NF-CMPL

“‘So, if my mother is in fact dead...Tani,³⁴⁴ I’ll take all your ten mithuns.’ That’s what he said.’ (MK, TT 109)

(1312) “*taníi nôk hób dorriṃ ḡó purá*

taníi nó-kə hobə dór-rí

ḡó puraa

Tanii 2.SG-GEN mithun CLF:4.LEG.ANIMAL-ten 1.SG everything(<Asm)

lâarə kú.”

lâa-rə-kú

take-IRR-CMPL

“‘Tani, I’ll take all of your ten mithuns.’” (MK, TT 110)

³⁴⁴ Speaker MK intends to refer to Tazî and Tarò here, but mentions Taníi by mistake. He recognizes the error in line (1315).

(1313) *taníig hób dorriém...togù...*

taníi = gə hobó dór-ríi = əəm togùu
NAME=GEN mithun CLF:4.LEG.ANIMAL-ten=ACC mithun.sacrifice.ritual
pâṭə nám əṅkú, hób dorriém...taní...

pá-tà-nam əəm = kú hobó dór-ríi = əəm taníi
chop-INCP-NZR:NSUB ACC=CMPL mithun CLF:4.LEG.ANIMAL-ten=ACC Tanii
laakâa kú!

làa-káa-kú

take-PF-CMPL

‘Tani’s ten mithuns, those which were to be sacrificed at togu, Tani took them!’

(MK, TT 111)

(1314) *əə.*

əə

AFF

‘Oh.’ (IR, TT 112)

(1315) *tâz-tarogè. tâz-tarogè...hób dorri*

tazì-tarò = gə tazì-tarò = gə hobó dór-ríi
Tazi-Taro=GEN Tazi-Taro=GEN mithun CLF:4.LEG.ANIMAL-ten
əṅkú ná!

əəm = kú na

ACC=CMPL DECL

‘Tazi and Taro’s. Tazi and Taro’s...ten mithuns, right?’ (MK, TT 113)

(1316) *taní laakâa kú!*

taníi làa-káa-kú

Tanii take-PF-CMPL

‘Tani took them!’ (MK, TT 114)

Appendix G: Text 3 – *tomóo ribáa* (TR), The Frog Story (FS).

Picture story elicited text based on Frog, Where Are You by Mercer Mayer (1964). The speaker is a native of Daarî, approximately 48 years old, currently resident in Likabali, where the recording was taken in September 2004. The story was narrated to a group of four children and one adult. Speaker TR uses a distinctive narrative intonation in much of the text, basically a variant falling-rising form of Non-Final Intonation type 1 (notated here ˘).

(1317) *tatík kaanáam doojî ǎi?*

tatík káa-nam doojîi (?ǎ)i
frog look-NZR:RLS story ETAG
‘The story of looking at the frog, eh?’ (TR, FS 002)

(1318) *âjo gollô...n/..homoí/..ǎǎ, ǎǎkâ gollô...*

ajò go = lo = ǎǎ = ˘ homoi ǎǎ ǎkâ go = lo = ǎǎ
night IND=LOC=TOP=NF11 time(<Asm) HEST HEST IND=LOC=TOP
lǎkî.ogǎ...omêego kaató.
lǎkî ogò = ˘ omèe = go káa-tó
time.way.back TMP/EPIS.RLS=NF11 kid=IND have/exist-PFV
‘One night...I mean...um... Once upon a time...there was a boy.’ (TR, FS 003)

(1319) *âg omê ǎgǎ...tatíg golǎ...ikîi gǎ...*

ǎgǎ omèe ǎgǎ = ˘ tatík go = la = ˘ ikîi = go = ˘
ANAP.IND kid ANAP.IND=NF11 frog IND=NCNJ=NF11 dog=IND=NF11
ootò.
óo-tó = ˘
tend-PFV=FI
‘That there boy...was raising a dog...and a frog.’ (TR, FS 004)

âjo golló...jòo rîkǎ?

ajò go = lo = ǎǎ jòo rî-káa = ˘
night IND=LOC=TOP what happen-PF=NF11
‘One night...what happened?’ (TR, FS 005)

(1320) *bîàm...tatík ǎmnè...tatík oonám ǎmnè botál arú*

bîi-ǎm tatík ǎm = nè tatík óo-nam ǎm = nè botál arúu
3.SG-ACC frog ACC=NAGT frog tend-NZR:RLS ACC=NAGT bottle(<Eng) hole
gollô...pætùp arú golló lîgP atò.
go = lo = ǎǎ = ˘ pætùp arúu go = lo = ǎǎ lîk-là(a) á-tó = ˘
IND=LOC=TOP=NF11 container hole IND=LOC=TOP insert-NF keep-PFV=FI
‘It...(he) kept the frog, the pet frog, inside a bottle...inside a container.’ (TR, FS 006-7)

(1321) *ók/...ogó līgP ató reelă...mǎ...jûptə kù.*

ogò lĭk-là(a) á-tó-rée-là(a)=_~ bìi=_~ jùp-tó-kú=_~
 ANAP.LOC insert-NF keep-PFV-PSEQ-NF=NF1 3.SG=NF1 sleep-PFV-CMPL=FI
 ‘Having kept it in there, he...went to sleep.’ (TR, FS 008)

(1322) *jupkú/...jubdâk kú ogó...mĭk jubrə kù/...*

jùp-kú jùp-dâk-kú ogò bìi-kə jùp-rə-kú
 sleep-CMPL sleep-COS-CMPL TMP/EPIS.RLS 3.SG-GEN sleep-IRR-CMPL
mĭm jubrô mòt kulă...
 bìi-əəm jùp-ròo-mò-tó-kú-là(a)=_~
 3.SG-ACC sleep-FINISH-APPL:SSUB-PFV-CMPL-NF=NF1
 ‘Sleepi...while he was sleeping..after his slee...after letting the boy go to sleep,’
 (TR, FS 009)

(1323) *tatĭkə...pə̀tùp arú lokkə...nendù kulă...*

tatĭk=əə pə̀tùp arúu lokkə=_~ nèn-dùu-kú-là(a)=_~
 frog=TOP container hole ABL.SOURCE=NF1 exit-IPFV-CMPL-NF=NF1
kekka kù.
 kéK-káa-kú=_~
 flee-PF-CMPL=FI
 ‘...the frog got out of the container and escaped.’ (TR, FS 010)

(1324) *âr óg kaarəp kunəmə...tatĭkə*

arò ogò káa-rəp-kú-nam=əə tatĭk=əə
 morning TMP/EPIS.RLS look-ICEP-CMPL-NZR:RLS=TOP frog=TOP
dūuku mà.
 dùu-kú-máa=_~
 LOC.EXIS:ANIM-CMPL-NEG=FI
 ‘The next morning, when he started looking, the frog wasn’t there anymore.’ (TR, FS 011)

(1325) *əm...tatĭk...əm, kaalák tokú là bǎ...zutá aruəm....*

əm tatĭk əm káa-lák-tó-kú-là(a) bìi=_~ zutaa arúu=əəm
 ANAP.ACCfrog ACC see-MISS-PFV-CMPL-NF 3.SG=NF1 shoe(<Asm) hole=ACC
nám lók cə̀rəə-cə̀kòəm buppĭəm makáa tò.
 namə lokə cə̀rəə-cə̀kòo=əəm buppĭi=əəm má-káa-tó=_~
 house LOC.GEN corner-cranny=ACC all=ACC search.for-TENT-PFV=FI
 ‘When he couldn’t find the frog, he searched inside the shoe (and) every corner of the house.’ (TR, FS 012)

(1326) *okkə, ikî əəcín...mîk mák'ló*

okkəə ikîi əə = cìn bìi-kə má-kò = lo
 SCNJ dog TOP=ADD 3.SG-GEN search.for-NZR:LOC=LOC
mamíŋ gətò.
 má-mín-gə-tó = ̣
 search.for-JOIN-APPL:CARRY-PFV=FI
 ‘And the dog also searched where he could.’ (TR, FS 013)

(1327) *mamíŋ gə'là...pətùp arúu ló...*

má-mín-gə-rə-là(a) pətùp arúu = lo
 search.for-JOIN-ACNS-NF container hole=LOC
ŋəəbú kunəmə...
 ŋəə-búu-kú-nam = əə = ̣
 crawl-INTO-CMPL-NZR:RLS=TOP=NF1
 ‘Searching along with (the boy), he peeped inside the mouth of a container...’ (TR, FS 014)

(1328) *pətùp ló mǎ...cək/ mîm...cəpkaa kù.*

pətùp lo bìi = ̣ bìi = əəm cəp-káa-kú = ̣
 container LOC 3.SG=NF1 3.SG=ACC pinch-PF-CMPL=FI
 ‘...and got stuck inside the container.’ (TR, FS 015)

(1329) *əm cəru'...ôk kókîi bǎ...bunə...kirkí əm...*

əəm okə kookîi = bə = ̣ bunì = əə kirkii = əəm
 ANAP.ACC ANAP.GEN back.side=DAT=NF1 3.DL=TOP window(<Asm)=ACC
ləkkôk paalà...kaabók bihî tò.
 lək-kók-pàa-là(a) káa-bók-bì-hí-tó = ̣
 slide-OPEN-ATTN-NF look-DOWN/SOUTH-AS.PAIR-REFL-PFV=FI
 ‘Getting stu...After that...they two opened the window and together looked down.’
 (TR, FS 016)

(1330) *əm kaabók daglǎ...íkíə...pətùp nè*

əmbə káa-bók-dàk = lo = ̣ ikîi = əə pətùp = nè
 ANAP.PADV look-DOWN/SOUTH-COS=LOC=NF1 dog=TOP container=NAGT
gəbəə tokú lǎ...
 gə-bəə-tó-kú-là(a) = ̣
 carry/wear-CONT-PFV-CMPL-NF=NF1
 ‘When they looked down, the dog, wearing the container...’ (TR, FS 017)

(1331) *kirkí akkə olóo kaakù.*

kirkii akkə ò-lòo-káa-kú = ̣
 window(<Asm) DST.ABL.SOURCE.SLEV fall-AT/TO.DOWN.S/O-PF-CMPL=FI
 ‘...fell down from the window.’ (TR, FS 018)

(1332) *olô kún'má...*

ò-lòo-kú-nam = əə

fall-AT/TO.DOWN.S/O-CMPL-NZR:RLS=TOP

olô kún'má bôl acîbə

ò-lòo-kú-nam = əə

bolò

acî = bó

fall-AT/TO.DOWN.S/O-CMPL-NZR:RLS=TOP DST.LOC.DOWN harsh=AVZR

ôP leekù lă pətûp ə...takkáa kǔ.

ò-lòo-lèe-kú-là(a) = ʔ

pətûp = əə

ták-káa-kú = ʔ

fall-AT/TO.DOWN.S/O-SSEQ-CMPL-NF=NF1 container=TOP split-PF-CMPL=NF1

‘Having fallen down...having fallen down, he having fell down with great force, the container smashed, and...’ (TR, FS 019-20)

(1333) *okkáə...omê əəcín maazíb məəkên là biəm*

okkáə omêə əə = cìn maazí = bó mǎə-kên-là(a) bi-əəm

SCNJ kid TOP=ADD very.much=AVZR think-GOOD/EASY-NF 3.SG-ACC

gombə tokú...

gòm-bǎə-tó-kú

hug-CONT-PFV-CMPL

‘And...the boy hugged him with great happiness, and...’ (TR, FS 021)

(1334) *íkì əəcín...mǎəm dadǎ...ajá ñùrto kù.*

íkì əə = cìn = ʔ bi-əəm dada = ʔ ajáa-ñùr-tó-kú = ʔ

dog TOP=ADD=NF1 3.SG-ACC RCUR=NF1 love-RECP-PFV-CMPL=FI

‘...and the dog also reciprocated his love.’ (TR, FS 022)

(1335) *okkáə buɲɲə mabǎə dǔ.*

okkáə buɲɲə = əə má-bǎə-dǔu

SCNJ 3.DL=TOP search.for-CONT-IPFV

‘And so they two continued the search.’ (TR, FS 023)

(1336) *mabǎə inzǎ?...mootùm ló...bə maín duəmǎ...*

má-bǎə-ín-/ mootùm = lo bə má-ín-dǔu = əəm = əə

search.for-CONT-FWD jungle=LOC DST.DOWN search.for-FWD-IPFV=TSUB=TOP

‘While going and searching down in the jungle...’ (TR, FS 024)

(1337) *həri nám...áa...əkə nammǎ...omêə...jaamé əgə,*

hərii-nam aa əkə-nam = əə omêə = əə jaamée əgə

HEST(<Asm)-NZR:RLS HEST HEST-NZR:RLS=TOP kid=TOP boy ANAP.IND

omê jaamé əgəcín gogdǔ...

omêe jaamée əgə = cìn

gók-dǔu = ʔ

kid boy ANAP.IND=ADD call-IPFV=NF1

‘like, um...it’s like...the boy was calling on the one hand...’ (TR, FS 025)

(1338) *okkó ìkì ǎkú dá...immín gǎnnà...*

okkóǎ ìkì ǎǎ = kú = da ín-mín-gó-nà = ǎǎ
 SCNJ dog TOP=CMPL=CNTR go-JOIN-APPL:CARRY-NZR:SUB=TOP
ǎgǎm...ǎrgǎa jaabǎ mǎǎmǎ gǎrǎ mǎ,
 ǎgǎ-m ǎrgǎa-jǎa = bǎ mǎǎ-mǎa-gǎrǎ = ǎǎm = ǎǎ
 APRX.IND-ACC interesting-COMP=AVZR think-NEG-ACNS=TSUB=TOP
íl-pumpǎ ǎk³⁴⁵..atí gó...dǎǎm paalǎ...
 iló-pumpǎa = ǎkǎ atí = go dǎǎ-mò-pǎa-lǎ(a)
 bee-beehive=IND.PL group=IND soar-APPL:SSUB-ATTN-NF
kaaǎǎk hílǎ dǎura híkǎ.
 kǎa-ǎǎk-hí-lǎ(a) dǎu-rǎa-hí-kǎa = _
 see-INTENSELY-REFL-NF stay-ISOL-REFL-PF=FI

‘and now the dog, on the other hand...the one who was (supposed to be) searching along with him...didn’t actually pay much attention to it, (instead) gazing intently at this bunch of bees³⁴⁵ flying past.’ (TR, FS 026-27)

(1339) *óg mǎ....tatí g manǎmǎm...ǎmbǎ zǎab*

ogò bì tatík mǎ-nam = ǎǎm ǎmbǎ = zǎa = bǎ
 TMP/EPIS.SEQ 3.SG frog search.for-NZR:RLS=ACC ANAP.PADV=REAL=AVZR
mǎǎǎǎ kumǎ gǎrǎmǎ íp-pumpǎǎm naí?
 mǎǎ-jǎa-kú-mǎa-gǎrǎ = ǎǎm = ǎǎ iló-pumpǎa = ǎǎm na = (ǎ)ì = _
 think-COMP-CMPL-NEG-ACNS=TSUB=TOP bee-beehive=ACC DECL=ETAG=NF1
ǎrgǎa jaabǎ mǎǎkǎ.

ǎrgǎa-jǎa = bǎ mǎǎ-kǎa = _
 interesting-COM=AVZR think-PF=FI
 ‘So then he...in fact didn’t pay much attention to the frog-searching, you know the bees, right? He was more interested in them.’ (TR, FS 028)

(1340) *okkó bupǎnǎ mallǎe lǎ...*

okkóǎ bupǎ = ǎǎ mǎ-lǎe-lǎ(a) = _
 SCNJ 3.DL=TOP search.for-SSEQ-NF=NF1
 ‘And so they two went on searching, and...’ (TR, FS 029)

(1341) *mm...malǎǎ innǎmǎ...ílǎ-pumpǎ ápp ǎmcín*

mm mǎ-lǎǎ ín-nam = ǎǎ iló-pumpǎa apǎ = ǎǎm = cín
 HEST search.for-CONT go-NZR:RLS=TOP bee-beehive globe=ACC=ADD
kaapǎa tokù...mootùm lǎ.
 kǎa-pǎa-tó-kú mootùm = lo
 look-ATTN-PFV-CMPL jungle=LOC
 ‘Umm...and while they were searching...they found a beehive in the jungle.’ (TR, FS 030)

³⁴⁵ Speaker TR uses *iló-pumpǎa* ‘beehive’ here and elsewhere to refer to the bees themselves rather than to the hive, to which he refers separately using the term *apǎ* ‘globe’, and also uses a high tone for the term *pumpǎa* rather than the usual low. Most of my consultants have viewed both usages as non-standard, which my sense of the etymology of *pumpǎa* (< *pum*- ‘insect’ + *pǎa*- ‘stack; pile’) would tend to support.

(1342) *ogò, iló-pumpá...lérî gó...pó/*

ogò iló-pumpàa nərî = gə

TMP/EPIS.RLS bee-beehive lower.plant.stem=GEN

dəŋnə hîŋ gə lərî lõ...

dàk-nà hîŋnə = gə nərî = lo = ʔ

LOC.EXIS.INAN.CONTAINED-NZR:SUB plant=GEN lower.plant.stem=LOC=NF1

dakkô hîŋ gə lərî lõ...

dàk-kò hîŋnə = gə nərî = lo = ʔ

LOC.EXIS.INAN.ATTACHED-NZR: LOC plant=GEN lower.plant.stem=LOC=NF1

arúu godá dootò.

arúu go = da dóo-tó = ʔ

hole IND=CNTR LOC.EXIS.INAN-PFV=FI

‘Then, at the base of the beehive...ummm, at the base of the tree which attached...at the base of the tree on which it (the beehive) was attached...there now was a hole.’ (TR, FS 031-33)

(1343) *omêə əm arúəm combú là....dóot/...*

omêə = əə əm arúu = əəm cóm-búu-là(a) dóo-tó

kid=TOP ANAP.ACC hole=ACC peek-INTO-NF lie.down-PFV

combú doolà goktò.

cóm-búu-dó(o)-là(a) gók-tó = ʔ

peek-INTO-STAT-NF call-PFV=FI

‘The boy peered and called into the hole.’ (TR, FS 034)

(1344) *bîk tatîk əm.*

bîk-kə tatîk = əəm

3.SG-GEN frog=ACC

‘To his frog.’ (TR, FS 035)

(1345) *okkə...îki ə...təm, iló-pumpá tokə...*

okkəə ikî = əə tē-m iló-pumpàa tokə

SCNJ dog=TOP DST.UP-ACC bee-beehive DST.ABL.UP

nennâm-aanəməm kaatə là...

nèn-nam áa-nam = əəm káa-tó-là(a)

exit-NZR:RLS enter-NZR:RLS=ACC see-PFV-NF

‘And the dog...watching the coming and going (of the bees) from the beehive up there...’ (TR, FS 036)

(1346) *m̃h zobdũ zobdũ là tẽm...*

b̃h zòp-dúu zòp-dúu-là(a) tẽ-m
 3.SG jump-UP/NORTH jump-UP/NORTH-NF DST.UP-ACC
pũlpə əmlà...rĩtò.
 pũ-lapè óm-là(a) rĩ-tó
 tug-CTZR:PURP/INTN say-NF do-PFV
 ‘he jumped and jumped up to try to pluck off the beehive.’ (TR, FS 037)

(1347) *əm rĩr̃ ogò...rĩdàk homoi ogõ...*

əm rĩ-r̃ ogò rĩ-dàk homoi ogò = ̃
 ANAP.ACC do-IRR TMP/EPIS.RLS do-COS time(<Asm) TMP/EPIS.RLS=NF1
 ‘While he was doing that...right at the time he was starting to do that...’ (TR, FS 038)

(1348) *arúu bokè kobũu.gò naadóm/...nendá lă...omê əgè*

arúu bokè kobũu = go nẽn-dó(o)-là(a) = ̃ omê = əgè
 hole DST.ABL.DOWN rodent=IND exit-STAT-NF=NF1 kid=ANAP.IND
ɲepũməm gamkà.
 ɲepũm = əm gãm-káa
 nose=ACC bite-PF
 ‘...a rodent came out of the hole down there and bit the boy on his nose.’ (TR, FS 039)

(1349) *okkə...ik̃i bí...h̃ĩn tolò gac̃aa lapè*

okkə ik̃i = b̃h h̃ĩnè tolò gá-c̃aa-lapè
 SCN dog=DEM.3.SG plant DST.LOC.UP scale-AT/TO.UP-CTZR:PURP/INTN
tẽm/, appè, iló-pumpá apè tẽm l̃aaləp̃
 tẽ-m/ apè = ə ə iló-pumpáa apè tẽ-m l̃aa-lapè
 DST.UP-ACC/ globe=TOP bee-beehive globe DST.UP-ACC take-CTZR:PURP/INTN
əmlà...
 óm-l̃aa
 say-NF
 ‘And so...the dog now...to climb up to the beehive up there, the hive, in order to get the beehive up there...’ (TR, FS 040)

(1350) *riñəm̃...iló-pumpá...h̃ĩnəm əgñ*

ri-nam = ə = ̃ iló-pumpáa h̃ĩnè = əm ók-ñ
 do-NZR:RLS=TOP=NF1 bee-beehive plant=ACC shake.sth-MOVE.S/O.1
əgb kolò...olôo ká,
 ók-bó-kò = lo ò-lôo-káa
 shake.sth-MOVE.S/O.2-NZR:PROC=LOC fall-AT/TO.DOWN.S/O-PF

olôo tokù.

ò-lòo-tó-kú=̣

fall-AT/TO.DOWN.S/O-PFV-CMPL=FI

‘...doing all that...due to (his) shaking the tree, the beehive has fallen, it fell on down.’ (TR, FS 041)

(1351) *olôo lèe^p oták kunémă...*

ò-lòo-lèe-là(a)

ò-ták-kú-nam = əə =̣

fall-AT/TO.DOWN.S/O-SSEQ-NF fall-CRACK-CMPL-NZR:RLS=TOP=NF11

iló-pumpá narûə...dəbgâm nendù.

iló-pumpàa narûu = əə dèp-ɣám-nèn-dùu

bee-beehive everything=TOP cruise-EXH-OUT-IPFV

‘(The hive) having fallen and smashed...all of the bees flew out.’ (TR, FS 042)

(1352) *əgém...kaatá là, əə...bêəm...əmbə rirém paalà*

əgè-m

káa-tó-là(a)

əə

bê-əəm

əmbə

rì-rəməpaalàa

ANAP.IND-ACC see-PFV-NF AFF 3.SG-ACC ANAP.PADV do-CCUR.SSUB.NF

omé ă...hîn taajá lò gacâa tǒ...

omèe = əə =̣ hînə taajòo = lo gá-càa-tó =̣

kid=TOP=NF11 plant top=LOC scale-AT/TO.UP-PFV=NF11

‘Having...seen that...umm...he...when he (the dog) was busy with the bees, the boy...climbed atop a tree.’ (TR, FS 043)

(1353) *hîn nətè rûu nagò kaatǒ, óg hîn*

hînə nè-tè-rûu-nà = go

káa-tó =̣

ogò

hînə

plant CLF:STEM-big-CERT-NZR:SUB=IND have/exist-PFV=NF11 ANAP.LOC plant

ogò arúu gó daktò.

ogò arúu = go dàk-tó

ANAP.LOC hole=IND LOC.EXIS.INAN.ATTACHED-PFV

‘There was a very big tree, and on that tree was a hole.’ (TR, FS 045)

(1354) *ôg arú ogǒ...bì...ərí nè...tatíg nè*

ogò

arúu

ogò =̣

bì

əri = nè

tatík = nè

ANAP.LOC hole ANAP.LOC=NF11 3.SG hesit(<Asm)=NAGT frog=NAGT

madûuku dadà.

má-dùu-kú

dada

search.for-IPFV-CMPL RCUR

‘In that hole, he...is again searching for, you know, the frog.’ (TR, FS 046)

(1355) *gogdúku dadà. ôg gogró ogǒ...pûpu gó*

gók-dùu-kú dada ogò gók-ró ogò = ʔ pupà = go
call-IPFV-CMPL RCUR TMP/EPIS.RLS call-IRR TMP/EPIS.RLS=NF1 owl=IND
dəblên tò.

dəp-lèn-tó = ʔ

cruise-OUT-PFV=FI

‘He’s calling him again. Just then (after calling), an owl³⁴⁶ flew out.’ (TR, FS 047)

(1356) *puppə ók arúu òk dəblên nammá, oméə,*

pupə = əə okə arúu = okə dəp-lèn-nam = əə oméə = əə
owl=TOP ANAP.ABL hole=ANAP.ABL cruise-OUT-NZR:RLS=TOP kid=TOP
lomléə kulá...

lòm-lèe-kú-là(a)

be.shocked-SSEQ-CMPL-NF

‘After the owl flew out of the hole, the boy was frightened and...’ (TR, FS 048)

(1357) *...olô kaakú, hîin lokkə.*

ò-lòo-káa-kú hîinə lokə = əə
fall-AT/TO.DOWN.S/O-PF-CMPL plant ABL=TOP
‘...fell, from the tree.’ (TR, FS 049)

(1358) *okkə...iló-pumpá əəkudá...ikîi nè mimbəə duukù.*

okkəə iló-pumpàa əə = kú = da ikîi = nè mín-bəə-dùu-kú
SCNJ bee-beehive TOP=CMPL=CNTR dog=NAGT chase-CONT-IPFV-CMPL
‘And so...the bees, now...were still chasing the dog.’ (TR, FS 050)

(1359) *əmbə mimbəə nammá...mimbə kopəəmə...*

əmbə mín-bəə-nam = əə mín-bəə-kopə = əəmə = əə
ANAP.PADV chase-CONT-NZR:RLS=TOP chase-CONT-CCUR=TSUB=TOP
‘Having chased (him) like this...while in the process of chasing him...’ (TR, FS 051)

(1360) *iló-pumpáa né/...iló-pumpá ikîi nè mĩngə dù...*

iló-pumpàa = nè iló-pumpàa ikîi = nè mín-gə-dùu = ʔ
bee-beehive=NAGT bee-beehive dog=NAGT chase-APPL:CARRY-IPFV-NF12
okkə...puppə oméene mĩngə dù.

okkəə pupə = əə oméə = nè mín-gə-dùu

SCNJ owl=TOP kid=NAGT chase-APPL:CARRY-IPFV

‘...the bees get...the bees are chasing the dog...and...the owl is chasing the boy.’
(TR, FS 052)

³⁴⁶ Speaker TR here uses the etymologically prior form *pupù* for ‘owl’ (< *pV-* ‘bird prefix’ + *pù-* ‘owl (generic)’), which also persists in Taipodia and Zirdóo Galo. The innovative Lare form *pupə* is preferred by most of my consultants; TR himself switches to *pupə* in line (1366).

(1361) *əm rɪr̥mə, omêə...ɪf̥ taajá ló*

əm rɪ-nam = əə omêə = əə ɪf̥ taajòo³⁴⁷ = lo
 ANAP.ACC do-NZR:RLS=TOP kid=TOP stone top=LOC
gacâa tǒ...
 gá-câa-tó = ̲
 scale-AT/TO.UP-PFV=NFII
 ‘So then, the boy...climbed atop a rock, and...’ (TR, FS 053)

(1362) *gacâ doomá...hɪn-hɪbú gó əmlà...*

gá-câa-dóo = əəm = əə hɪnə-hɪbò = go = əm-làa
 scale-AT/TO.UP-STAT=TSUB=TOP plant-plant(arch.)=IND=say-NF
hərii gó... hɪn akcáə gó gagbéə dōona
 hərii = go hɪnə akcáə = go gák-béə-dó(o)-nà = əə
 HEST(<Asm)=IND plant branch=IND catch.hold-CONT-STAT-NZR:SUB=COP.IPFV
əm̩ gâglə daktò.
 əm-là(a) gák-là(a) dàk-tó
 say-NF catch.hold-NF stand-PFV
 ‘...after climbing up, thinking that³⁴⁸ it was a tree...umm...he stood holding a branch.’ (TR, FS 054)

(1363) *əgə...hɪn gakcáə əgə...hɪn gokú*

əgə hɪnə gakcáə əgə hɪnə go = kú
 ANAP.IND plant graspable.protrusion ANAP.IND plant IND=CMPL
moé nì.
 moo = ee nì = ̲
 COP.NEG=COP.PFV DISC=FI
 ‘That...there tree branch...wasn’t actually a tree.’ (TR, FS 055)

(1364) *ərí logá...hocár gá...rəəbú əəkú eepì.*

hərii-lo = gə hocár = gə rəəbú əə = kú ee = nì = ̲
 hesit(<Asm)-LOC=GEN deer=GEN horn TOP=CMPL COP.PFV=DISC=FI
 ‘It umm...actually, it was the antler of a stag,’ (TR, FS 056)

(1365) *oká...iki əcín, oká...omêe miikə dakkò ɪf̥*

okkáə ikìi əə = cìn okkáə omêe bɪi-kə dàk-kò ɪf̥
 SCNJ dog TOP=ADD SCNJ kid 3.SG-GEN stand-NZR:LOC stone
compíg bə kâhila doodù.
 compík = bá kahì-là(a) dóo-dùu
 underside=DAT hide-NF lie.down-IPFV
 ‘And so...the dog also, and...was lying there hiding beneath the stone where the boy was standing.’ (TR, FS 057)

³⁴⁷ *taajàa* has been observed as an occasional alternant of *taajòo*, although the basis for alternation is not yet known. The etymology of *taajòo* is unknown.

³⁴⁸ The sense of ‘thinking that’ here derives from *əm-làa* ‘say-NF’, in a cliticized, complementizer-like use (§16.7).

(1366) *ogò...puppə...puppə, omée nè...njá/...aríi nè*

ogò pupə = əə pupə = əə omée = nè hərii = nè
TMP/EPIS.SEQ owl=TOP owl=TOP kid=NAGT HEST(<Asm)=NAGT
dəəbûk kurr'mə...
dəə-bûk-kú-nam = əə
soar-FRIGHTEN-CMPL-NZR:RLS=TOP
'Then, the owl...the owl, having...umm...fly-frightened the boy...' (TR, FS 058)

(1367) *mm...hocár né dəəbûk ká rir'mə, hocár əəkudá*

mm hocár = nè dəə-bûk-káa rí-nam = əə hocár əə = kú = da
right deer=NAGT soar-FRIGHTEN-PF do-NZR:RLS=TOP deer TOP=CMPL=CNTR
lomrəp nammə...
lòm-rəp-nam = əə
be.shocked-ICEP-NZR:RLS=TOP
'(He then) fly-frightened the stag, so that was that, and now the stag, having been startled...' (TR, FS 059)

(1368) *omée nè...rəəbúú ló gəllé kuəmă...iŋká.*

omée = nè rəəbú = lo gə-lèe-kú = əəm = əə = ́ ín-káa
kid=NAGT horn=LOC carry/wear-SSEQ-CMPL=TSUB=TOP=NFI1 go-PF
'...carrying the boy on his horns...left.' (TR, FS 060)

(1369) *oká...omêə...ôk bîkə...gacâa kò,*

okkáə omée = əə okà bîi-kə gá-câa-kò
SCNJ kid=TOP ANAP.ABL 3.SG-GEN scale-ASCEND-NZR:LOC/OBL
əttám okkáəkú,
əttám okà = əə = ku
cliff.sloping DST.ABL=TOP=CMPL
'So then, the boy...from the place where he had climbed up...' (TR, FS 061)

(1370) *olôo kakú, bolò nəmî...alûm bolò,*

ò-lôo-káa-kú bolo nəmî alûm bolò
fall-AT/TO.DOWN.S/O-PF-CMPL DST.LOC.DOWN grass cluster DST.LOC.DOWN
ok' íkî əəcìn òk omîŋ gəkà.
okkáə ikîi əə = cìn okà ò-mín-gá-káa = ́
SCNJ dog TOP=ADD ANAP.ABL fall-JOIN-APPL:CARRY-PF=FI
'...fell down, down amidst the grass down there, and the dog also fell from there with him.' (TR, FS 062)

(1371) *ók kookhí bǎ, buphà...odúu kuǎǎ mǎ...*

ókǎ kookhí = bǎ buphí = ǎǎ ò-dúu-kú = ǎǎm = ǎǎ
 ANAP.ABL back.side=DAT 3.DL=TOP fall-IPFV-CMPL=TSUB=TOP
ǎmb olóo ná...

ǎmbǎ ò-lòo-nà = ǎǎ

ANAP.PADV fall-AT/TO.DOWN.S/O-NZR:SUB=TOP

‘After that, after they two...fell down...they having fallen like this...’ (TR, FS 063)

(1372) *ǎttám robǎǎ lokkǎ, olǎ/...ollé kulǎ.*

ǎttám robǎǎ lokkǎ ò-lèe-kú-là(a)
 cliff.sloping edge.cliff ABL.SOURCE fall-SSEQ-CMPL-NF
ís-hibú goló olík tokù.

isí-hibúu go = lo ò-lík-tó-kú = ǎ

water-river IND=LOC fall-APPL:INTO-PFV-CMPL=FI

‘...they fell down....from the edge of the cliff and...fell into a river.’ (TR, FS 064)

(1373) *hibú goló olíg nammǎ, ikí ǎǎcín*

hibúu go = lo ò-lík-nam = ǎǎ ikí ǎǎ = cín
 river IND=LOC fall-APPL:INTO-NZR:RLS=TOP dog TOP=ADD
olík.kǎ...okkǎ omé ǎǎcín o/..olík.kǎ.

ò-lík-káa = ǎ okkǎ omé ǎǎ = cín ò-lík-káa = ǎ

fall-APPL:INTO-PF=NF1 SCNJ kid TOP=ADD fall-APPL:INTO-PF=FI

‘Having fallen into a river, the dog fell in, and the boy also fell in.’ (TR, FS 065)

(1374) *buphà hitǎ duukǎ; rǎgdoolǎ...zené-tené bǎ...*

buphí = ǎǎ hí-tà-dúu-kú = ǎ rǎ-gǎ-dó(o)-là(a) zene-tenee = bǎ
 3.DL=TOP die-INCP-IPFV-CMPL=NF1 do-ACNC1-STAT-NF effortful(<Asm)=AVZR
gǎrǎp kunǎmǎ...ikiǎ...bǎk dumpó ló

gǎ-rǎp-kú-nam = ǎǎ ikí = ǎǎ bǎ-kǎ dumpóo = lo
 be.disposed-UPRIGHT-CMPL-NZR:RLS=TOP dog=TOP 3.SG-GEN head=LOC

gǎllé kulǎ, nenlǎ,

gǎ-lèe-kú-là(a) nèn-là(a)

carry/wear-SSEQ-CMPL-NF exit-NF

‘They were about to die, however, when they...somehow managed to struggle up, with the dog being carried on his head, and get out, and...’ (TR, FS 066)

(1375) *kaarǎ mǎ...hǎpò gò doonǎa jǎ.*

káa-nam = ǎǎ hǎpòo = go dóo-nà = ǎǎ jǎ

look-NZR:RLS=TOP log=IND LOC.EXIS.INAN-NZR:SUB=TOP DISC

‘(When) they looked...it turned out that there was a log there.’ (TR, FS 067)

(1376) *əəm h̥ip̥əəm...kaatə là, buɲɲə...combôo là,*

əəm h̥ip̥əəm = əəm káa-tó-là(a) buɲɲə = əə cóm-bòo-là(a)
ANAP.ACC log=ACC look-PFV-NF 3.DL=TOP peek-OVER/PAST-NF
‘Having seen that log, they peeked over, and...’ (TR, FS 068)

(1377) *“ál joojóo doomá b̥ərə,” combôo là*

aló joojóo dóo-máa b̥ərəe cóm-bòo-là(a)
DST.LOC.SLEV what.sort LOC.EXIS.INAN-NEG CJEC peek-OVER/PAST-NF
kaaká nammə...
káa-káa-nam = əə
look-TENT-NZR:RLS=TOP
“‘‘‘Might there not be something there,’’ (they thought and) when they peeked over and looked...’ (TR, FS 069)

(1378) *ik̥i buɲɲi, om̥e buɲɲi, combôo là kaar̥mə...*

ik̥i buɲɲi om̥e buɲɲi cóm-bòo-là(a) káa-nam = əə
dog 3.DL kid 3.DL peek-OVER/PAST-NF look-NZR:RLS=TOP
‘...when the boy and the dog peeked over and looked...’ (TR, FS 070)

(1379) *tat̥k̥ ək̥ə, aɲi gò...kaap̥aa tokù.*

tat̥k̥ ək̥ə aɲi = go káa-pàa-tó-kú = ̀
frog IND.PL two=IND look-ATTN-PFV-CMPL=FI
‘...they saw these two frogs.’ (TR, FS 071)

(1380) *əg̥ə, m̥h̥k̥ tat̥k̥ əg̥ə...keddù kuóm̥ə...*

əg̥ə b̥h̥-k̥ə tat̥k̥ əg̥ə kéK-dùu-kú = əəm = əə = ̀
ANAP.EPIS 3.SG-GEN frog ANAP.IND flee-IPFV-CMPL=TSUB=TOP=NF1
jib̥ə aap̥ə kunóm̥ eɲi.
jib̥ə áa-pà-kú-nam = ee ɲi = ̀
person.non-kin come-ATTN-CMPL-NZR:RLS=COP.IPFV DISC=FI
‘That one, his frog, after escaping from them...had taken a husband.’³⁴⁹ (TR, FS 072)

(1381) *jib̥ə aal̥aa kú...aad̥ə kul̥à...áo ək̥ə...*

jib̥ə áa-là(a)-kú áa-dó(o)-kú-là(a) ào ək̥ə
person.non-kin come-NF-CMPL come-STAT-CMPL-NF child IND.PL
akk̥ə-k̥an̥ə.gò b̥əət̥u.kù.
akk̥ə-k̥an̥ə = go b̥əə-tùu-kú
six-seven=IND bear-CONT-CMPL
‘She got married, and...having married...she had these six or seven kids.’ (TR, FS 073)

³⁴⁹ *jib̥ə-aanám* ‘non.kin.person-come.NZR:RLS’, lit. ‘go to the place of a non-kin person’, has the conventional sense ‘get married, of a woman’ in Galo; the counterpart expression for males is *jim̥ə-laanám* ‘wife-take.NZR:RLS’ ‘take (in) a wife’. Galo society being strongly patrilineal and patrilocal, it stands to reason that, in the context of the story, inasmuch as one frog left home to go live with another frog, the first frog must have been female.

(1382) *əm...tatík atí əmnè, bupnè, kaapâa tokú əmó...*

əm tatík atí əm = nè bupnè = əə káa-pâa-tó-kú = əm = əə
ANAP.ACC frog group ACC=NAGT 3.DL=TOP look-ATTN-PFV-CMPL=TSUB=TOP
kaapâa gəró kuóm m̃h̃kə...nibó

káa-pâa-gəró-kú = əm b̃h̃-kə nibó
look-ATTN-ACNS-CMPL=TSUB 3.SG-GEN person.non-kin
aarôo kunè tatík netù...b̃ə̀l/

áa-ròo-kú-nà tatík nè = tu b̃ə̀l-là(a)/
come-FINISH-CMPL-NZR:SUB frog NAGT=RFOC(<Asm) hold/carry-NF
b̃ə̀kûr k̃eŋkù m̃ă.

b̃ə̀l-kûr-kèn-kú-máa = ̃

hold/carry-RETURN-GOOD/EASY-CMPL-NEG=NF11

‘When they.2 saw the group of frogs, just then when they saw the frogs, his...frog who had gone off and gotten married...it wouldn’t do to take her back home anymore.’ (TR, FS 074)

(1383) *əm r̃iŋ m̃ə, m̃h̃k âo gò*

əm r̃i-nam = əə b̃h̃-kə aò = go
ANAP.ACC happen-NZR:RLS=TOP 3.SG-GEN child=IND
b̃ə̀l̃eə kulă, iŋkûr tokù.

b̃ə̀l̃-e-kú-là(a) = ̃ ín-kûr-tó-kú = ̃

hold/carry-SSEQ-CMPL-NF=NF11 go-RETURN-PFV-CMPL=FI

‘Therefore, they took one of her kids, and went back home.’ (TR, FS 075)

(1384) *ogò...âo nè...tatík ə, b̃ə̀əm tokú là...*

ogò aò = nè tatík = əə b̃ə̀-mò-tó-kú-là(a)
TMP/EPIS.SEQ child=NAGT frog=TOP hold/carry-APPL:SSUB-PFV-CMPL-NF
bull̃ cìn, kaal̃g lakù, bull̃əm ñě...

bulù = əə = cìn káa-l̃ik-là(a)-kú bulù = əəm = nè = ̃

3.PL=TOP=ADD look-APPL:INTO-NF-CMPL 3.PL=ACC=NAGT=NF11

bupñəm ñě...all̃ b̃ə̀ imm̃ə tokù.

bupñ = əəm = nè = ̃ all̃ = b̃ə̀ ín-mò-tó-kú = ̃

3.DL=ACC=NAGT=NF11 well=AVZR go-APPL:CAUS-PFV-CMPL=FI

‘Then, the frog had them take a baby, and they (the frog family) saw them...saw those two off happily.’ (TR, FS 076)

(1385) *dooj̃ ə əgə nà tatík gə manám dooj̃.*

dooj̃ = əə əgə = na tatík gə má-nam dooj̃
story=TOP ANAP.IND=DECL frog GEN search.for-NZR:RLS story
‘There it is, the story of looking for the frog.’ (TR, FS 079)

Appendix H: References

- Abraham, P. T. (1985). *Apatani Grammar*. Mysore, Central Institute of Indian Languages.
- (1987). *Apatani-English-Hindi Dictionary*. Mysore, Central Institute of Indian Languages.
- Adams, K. L. and N. F. Conklin (1973). "Towards a theory of natural classification." *Papers from the Annual Regional Meeting of the Chicago Linguistic Society, April 13-15, 1973*. University of Chicago.
- Aikhenvald, A. Y. (2000). *Classifiers: A Typology of Noun Categorization Devices*. Oxford, Oxford University Press.
- (2002). "Typological parameters for the study of clitics, with special reference to Tariana." In R. M. W. Dixon and A. Y. Aikhenvald, Eds. *Word: A Cross-Linguistic Typology*. Cambridge, Cambridge University Press: 42-78.
- (2004). *Evidentiality*. Oxford, Oxford University Press.
- (2006). "Serial verb constructions in typological perspective." In A. Y. Aikhenvald and R. M. W. Dixon, Eds. *Serial Verb Constructions: A Cross-Linguistic Typology*. Oxford, Oxford University Press: 1-68.
- Andrews, A. (1985). "The major functions of the noun phrase." In T. Shopen, Ed. *Language Typology and Syntactic Description, Vol. 1: Clause Structure*. Cambridge, Cambridge University Press: 62-154.
- Badu, T. (1994). *Pailibo Language Guide*. Itanagar, Directorate of Research, Government of Arunachal Pradesh.
- Barbora, M. and M. Post (forthcoming 2008). "Quest for a script." In S. Morey and M. Post, Eds. *North East Indian Linguistics*. New Delhi, Foundation/Cambridge University Press India.
- Benedict, P. K. (1972). *Sino-Tibetan: A Conspectus*. New York, Cambridge University Press.
- Bickel, B. (1999). "Nominalization and focus constructions in some Kiranti languages." In Y. P. Yadava and W. G. Glover, Eds. *Topics in Nepalese Linguistics*. Kathmandu, Royal Nepal Academy: 271-296.
- Blackburn, S. (2003/2004). "Memories of migration: Notes on legends and beads in Arunachal Pradesh, India." *European Bulletin of Himalayan Research* 25/26: 15-60.
- (2007). "Oral stories and culture areas: from Northeast India to Southwest China." *South Asia: Journal of South Asian Studies* 30(3): 419-437.
- Boro, A. (1978). *Miju Dictionary*. Shillong, Research Department, Arunachal Pradesh Administration.
- Broselow, E. (1995). "Skeletal positions and moras." In J. Goldsmith, Ed. *Handbook of Phonological Theory*. Cambridge, MA, Blackwell: 175-205.
- Burling, R. (1965). *Hill Farms and Padi Fields: Life in Mainland Southeast Asia*. Englewood Cliffs, NJ, Prentice-Hall.
- Bybee, J. L. (2001). *Phonology and language use*. Cambridge, Cambridge University Press.
- Bybee, J. L. and O. Dahl (1989). "The Creation of Tense and Aspect Systems in the Languages of the World." *Studies in Language* 13(1): 51-103.
- Chao, Y. R. (1968). *A grammar of spoken Chinese*. Berkeley, University of California Press.
- Chelliah, S. L. (1997). *Meithei*. Berlin, Mouton de Gruyter.
- Chhange, T. (1990). "Nishi grammar sampler." *Paper presented at the 23rd International Conference on Sino-Tibetan Languages and Linguistics*. University of Texas, Arlington.
- Chomsky, N. (1965). *Aspects of the Theory of Syntax*. Cambridge, MA, MIT Press.

- (1971 [1957]). *Syntactic Structures*. The Hague/Paris, Mouton.
- Comrie, B. (1976). *Aspect*. Cambridge, Cambridge University Press.
- (1985). *Tense*. Cambridge, Cambridge University Press.
- Coupe, A. (2007). *A Grammar of Mongsen Ao*. Berlin, Mouton de Gruyter.
- Croft, W. (1991). *Syntactic Categories and Grammatical Relations*. Chicago, University of Chicago Press.
- (2001). *Radical Construction Grammar*. Oxford, Oxford University Press.
- Das Gupta, S. K. (1963). *An Introduction to the Gallong Language*. Shillong, Northeast Frontier Agency.
- (1983). *An Outline on Tagin Language*. Shillong, Directorate of Research, Government of Arunachal Pradesh.
- de Bruin, J. and R. Scha (1988). "The interpretation of relational nouns." *Proceedings of the 26th annual meeting of the Association for Computational Linguistics*. Buffalo, NY.
- de Vries, L. J. (2005). "Towards a typology of tail-head linkage in Papuan languages." *Studies in Language* 29(2): 363-384.
- (2006). "Areal pragmatics of New Guinea: Thematization, distribution and recapitulative linkage in Papuan languages." *Journal of Pragmatics*(38): 811-828.
- DeLancey, S. (1984). "Transitivity and ergative case in Lhasa Tibetan." In C. Brugman, M. Maccaulay, A. Dahlstrom et al, Eds. *Proceedings of the Tenth Annual Meeting of the Berkeley Linguistics Society, February 17-20, 1984*. Berkeley, Berkeley Linguistics Society: 131-140.
- (1992). "The historical origin of the conjunct-disjunct pattern in Tibeto-Burman." *Acta Linguistica Hafniensia* 25: 289-321.
- (1997). "Grammaticalization and the gradience of categories: Relator nouns and postpositions in Tibetan and Burmese." In J. Bybee, J. Haiman and S. A. Thompson, Eds. *Essays on Language Function and Language Type Dedicated to T. Givon*. Amsterdam/Philadelphia, John Benjamins: 51-69.
- (2002). "Relativization and nominalization in Bodic." *Proceedings of the 28th Annual Meeting of the Berkeley Linguistics Society, February 15-18, 2002: Special Session on Tibeto-Burman and Southeast Asian Linguistics in Honor of Prof. James A. Matisoff*. Berkeley, CA, Berkeley Linguistics Society.
- Dench, A. and N. Evans (1988). "Multiple case-marking in Australian languages." *Australian Journal of Linguistics* 1: 244-361.
- Diller, A. (2001). "Grammaticalization and Tai syntactic change." In K. Tingsabadh and A. S. Abramson, Eds. *Essays in Tai linguistics*. Bangkok, Chulalongkorn University Press: 139-175.
- Dixon, R. M. W. (1977). "Where have all the adjectives gone?" *Studies in Language* 1(1): 19-80.
- (1979). "Ergativity." *Language*(55): 59-138.
- (1994). *Ergativity*. Cambridge, Cambridge University Press.
- (1997). *The Rise and Fall of Languages*. Cambridge, Cambridge University Press.
- (2000). "A typology of causatives: form, syntax and meaning." In R. M. W. Dixon and A. Y. Aikhenvald, Eds. *Changing Valency: Case Studies in Transitivity*. Cambridge, Cambridge University Press: 30-83.
- (2004). "Adjective classes in typological perspective." In R. M. W. Dixon and A. Y. Aikhenvald, Eds. *Adjective Classes: A Cross-Linguistic Typology*. Oxford, Oxford University Press: 1-49.
- (2006). "Complement clauses and complementation strategies in typological perspective." In R. M. W. Dixon and A. Y. Aikhenvald, Eds. *Complementation*. Oxford, Oxford University Press: 1-48.
- (in preparation). *Basic Linguistic Theory*. Melbourne, Research Centre for Linguistic Typology, La Trobe University.

- (under review). "The semantics of clause-linking in typological perspective." In R. M. W. Dixon and A. Y. Aikhenvald, Eds. *The Semantics of Clause Linking, A Cross-Linguistic Typology*.
- Dixon, R. M. W. and A. Y. Aikhenvald (2000). "Introduction." In R. M. W. Dixon and A. Y. Aikhenvald, Eds. *Changing Valency: Case Studies in Transitivity*. Cambridge, Cambridge University Press: 1-29.
- (2002). "Word: A typological framework." In R. M. W. Dixon and A. Y. Aikhenvald, Eds. *Word: A Cross-Linguistic Typology*. Cambridge, Cambridge University Press: 1-41.
- Donahue, M. (2003). "The tonal system of Skou, New Guinea." *Proceedings of the symposium Cross-linguistic Studies of Tonal Phenomena: historical development, phonetics of Tone, and descriptive studies*, Tokyo University of Foreign Studies: Research Institute for Languages and Cultures of Asia and Africa.
- Dondrup, R. (1988). *A Handbook on Sherdukpen Language*. Itanagar, Arunachal Pradesh, India, Directorate of Research, Government of Arunachal Pradesh.
- (1990). *Bugun Language Guide*. Itanagar, Directorate of Research, Government of Arunachal Pradesh.
- Donegan, P. J. and D. Stampe (1983). "Rhythm and the holistic organization of linguistic structure." *Chicago Linguistic Society* 19(2: Papers from the Parasession on the Interplay of Phonology, Morphology and Syntax): 337-353.
- (2004). "Rhythm and the synthetic drift of Munda." In R. Singh, Ed. *The Yearbook of South Asian Languages and Linguistics*. Berlin/New York, Mouton de Gruyter: 3-36.
- Dryer, M. S. (1986). "Primary objects, secondary objects, and antitativity." *Language* 62(4): 808-845.
- (1996). "Focus, pragmatic presupposition and activated propositions." *Journal of Pragmatics* 26: 475-523.
- Ebert, K. (1997). *A Grammar of Athpare*. Munich, Lincom Europa.
- (1999). "The UP-DOWN dimension in Rai grammar and mythology." In B. Bickel and M. Gaenszle, Eds. *Himalayan Space: Cultural Horizons and Practices*. Zürich, Völkerkunde Museum: 107-134.
- Enfield, N. J. (2005). "Areal linguistics and Mainland Southeast Asia." *Annual Review of Anthropology* 34: 181-206.
- Gait, S. E. (1997 [1926]). *A History of Assam*. Guwahati, Assam, India, Lawyer's Book Stall.
- Genetti, C. (1988). "Notes on the structure of the Sunwari transitive verb." *Linguistics of the Tibeto-Burman Area* 11(2): 62-92.
- (1992). "Semantic and grammatical categories of relative clause morphology in the languages of Nepal." *Studies in Language* 16: 405-427.
- (2007). *A Grammar of Dolokha Newar*. Berlin, Mouton de Gruyter.
- Givón, T. (1979). *On Understanding Grammar*. New York, Academic Press.
- (1995). *Functionalism and Grammar*. Amsterdam/Philadelphia, John Benjamins.
- (2001 [1984]). *Syntax: An Introduction. Vol. 1*. Amsterdam/Philadelphia, John Benjamins.
- Gohain, B. K. (1999). *Origin of the Tai and Chao Lung Hsukapha: A Historical Perspective*. New Delhi, Omsons.
- Gordon, R. G., Jr., Ed. (2005). *Ethnologue: Languages of the World, 15th Edition*. Dallas, Texas, SIL International.
- Goswami, G. and J. Tamuli (2003). "Assamese." In G. Cardona and D. Jain, Eds. *The Indo-Aryan Languages*. London/New York, Routledge: 391-443.
- Grinevald, C. (2006). "The expression of static location in a typological perspective." In M. Hickmann and S. Robert, Eds. *Space in languages: Linguistic systems and cognitive categories*. Amsterdam/Philadelphia, John Benjamins: 29-58.

- Haas, M. (1964). *Thai-English Student's Dictionary*. Stanford, Stanford University Press.
- Haegeman, L. (1991). *Introduction to Government and Binding Theory*. Cambridge, MA, Blackwell.
- Hale, A. and T. L. Manandhar (1980). "Case and role in Newari." In R. L. Trail, Ed. *Papers in South-East Asian Linguistics* 7. Canberra, Pacific Linguistics. Series A, No. 53: 79-93.
- Hargreaves, D. (2005). "Agency and intentional action in Kathmandu Newar." *Himalayan Linguistics Journal* 5: 1-48.
- Hayes, B. (1980). *A metrical theory of stress rules*. PhD Dissertation. Department of Linguistics and Philosophy. Cambridge, MA, MIT.
- Heine, B. (1993). *Auxiliaries: Cognitive Forces and Grammaticalization*. New York, Oxford University Press.
- Heine, B. and T. Kuteva (2002). *World Lexicon of Grammaticalization*. Cambridge, Cambridge University Press.
- Henderson, E. J. A. (1951). "The phonology of loanwords in some South-East Asian languages." *Transactions of the Philological Society* 1951: 131-158.
- Hundius, H. and U. Kölver (1983). "Syntax and semantics of numeral classifiers in Thai." *Studies in Language* 7: 165-214.
- Hussain, Z. (1995). "Adi: Gallong." In K. S. Singh, Ed. *Arunachal Pradesh*. Calcutta, Anthropological Survey of India/Seagull Books. 14: 73-82.
- Itô, J. and R. A. Mester (1995). "Japanese phonology." In J. Goldsmith, Ed. *The Handbook of Phonological Theory*. New York, Blackwell: 817-38.
- Iwasaki, S. and P. Ingkaphirom (2005). *A Reference Grammar of Thai*. Cambridge, Cambridge University Press.
- Jacquesson, F. (1996). "Langues Tibeto-Birmanes du Nord-Est de L'Inde: Investigations typologiques en Assam et au Nagaland." *Journal Asiatique* 284(1): 159-212.
- (2001). "Person-marking in TB languages of North-Eastern India." *Linguistics of the Tibeto-Burman Area* 24(1): 113-144.
- Kager, R. (1995). "The metrical theory of word stress." In J. Goldsmith, Ed. *The Handbook of Phonological Theory*. Cambridge, MA, Blackwell: 367-402.
- Ladefoged, G. and I. Maddieson (1996). *The Sounds of the World's Languages*. Oxford UK and Cambridge, MA USA, Blackwell.
- Lambrecht, K. (1994). *Information Structure and Sentence Form: Topic, Focus and the Mental Representations of Discourse Referents*. Cambridge, Cambridge University Press.
- Langacker, R. W. (1987). "Nouns and verbs." *Language* 63(1): 53-94.
- LaPolla, R. J. (1992). "'Anti-ergative' marking in Tibeto-Burman." *Linguistics of the Tibeto-Burman Area* 15(1): 1-9.
- (1994). "Parallel grammaticalizations in Tibeto-Burman languages: Evidence of Sapir's 'drift'." *Linguistics of the Tibeto-Burman Area* 17: 61-80.
- (2003). "Overview of Sino-Tibetan Morphosyntax." In G. Thurgood and R. J. LaPolla, Eds. *The Sino-Tibetan Languages*. London/New York, Routledge: 22-42.
- (2005). "The inclusive-exclusive distinction in Tibeto-Burman languages." In E. Filimonova, Ed. *Inclusivity: Typology and Case Studies of the Inclusive-Exclusive Distinction (Typological Studies in Language 63)*. Amsterdam/Philadelphia, John Benjamins: 291-311.
- Lehman, F. K. (1975). "Wolfenden's non-pronominal a-prefix in Tibeto-Burman: Two arguments from Southern Chin and some proposed semantic correlates." *Linguistics of the Tibeto-Burman Area* 2(1): 19-44.
- Li, C. N. and S. A. Thompson (1973). "Serial verb construction in Mandarin Chinese: Subordination or coordination?" *Chicago Linguistic Society* 9(You take the high node and I'll take the low node): 96-103.

- (1981). *Mandarin Chinese: A Functional Grammar*. Berkeley, University of California Press.
- Lichtenberk, F. (2000). "Inclusory pronominals." *Oceanic Linguistics* 39(1): 1-32.
- Light, T. (1978). "Tonogenesis: Analysis and Implications." *Lingua* 46(2-3): 115-131.
- Lisker, L. and A. S. Abramson (1964). "A cross-language study of voicing in initial stops: acoustical measurements." *Word* 20: 384-422.
- Lorrain, J. H. (1995 [1910]). *A Dictionary of the Abor-Miri Language, with Illustrative Sentences and Notes*. New Delhi, Mittal.
- Lyons, J. (1977). *Semantics*. Cambridge, Cambridge University Press.
- Marrison, G. E. (1988). "The Adi-Dafla group of languages of North-East India: a sketch." In D. Bradley, E. J. A. Henderson and M. Mazaudon, Eds. *Prosodic Analysis and Asian Linguistics: To Honor R. K. Sprigg (Pacific Linguistics C-104)*. Canberra, Australian National University Press: 205-22.
- Matisoff, J. A. (1972). "Lahu nominalization, relativization and genitivization." In J. Kimball, Ed. *Syntax and Semantics, Vol. 1*. New York, Seminar Press: 237-257.
- (1973). *The Grammar of Lahu*. Berkeley, University of California Press.
- (1988). *The Dictionary of Lahu*. Berkeley, University of California Press.
- (1992). "The mother of all morphemes: Augmentatives and diminutives in areal and universal perspective." In M. Ratliff and E. Schiller, Eds. *Papers from the First Annual Meeting of the Southeast Asian Linguistics Society, 1991*. Tempe, Arizona State University Program for Southeast Asian Studies: 293-349.
- (2003). *Handbook of Proto-Tibeto-Burman: System and Philosophy of Sino-Tibetan Reconstruction*. Berkeley, University of California Press.
- Matras, Y. (2002). "Fusion and the cognitive basis for bilingual discourse markers." *International Journal of Bilingualism* 4(4): 505-528.
- Matthews, P. (1981). *Syntax*. Cambridge, Cambridge University Press.
- Mayer, M. (1969). *Frog, Where Are You?* New York, Puffin.
- Mazaudon, M. (1977). "Tibeto-Burman Tonogenetics." *Linguistics of the Tibeto-Burman Area* 3(2): 1-123.
- (1978). "La formation des propositions relatives en Tibétain." *Bulletin de la Société de Linguistique de Paris* 73: 401-414.
- (2003). "From discourse to grammar in Tamang: Topic, focus, intensifiers and subordination." In D. Bradley, R. J. LaPolla, B. Michailovsky and G. Thurgood, Eds. *Language Variation: Papers on Variation and Change in the Sinosphere and in the Indosphere in Honour of James A. Matisoff*. Canberra, Pacific Linguistics: 145-157.
- (forthcoming). "Number-building in Tibeto-Burman languages." In S. Morey and M. Post, Eds. *North East Indian Linguistics II*. New Delhi, Foundation/Cambridge University Press India.
- (forthcoming 2008). "Number-building in Tibeto-Burman languages." In S. Morey and M. Post, Eds. *North East Indian Linguistics II: Papers from the Second International Conference of the North East Indian Linguistics Society*. New Delhi, Cambridge University Press India.
- McCarthy, J. and A. Prince (1986). *Prosodic Morphology*. University of Massachusetts and Brandeis.
- (1995). "Prosodic Morphology." In J. Goldsmith, Ed. *The Handbook of Phonological Theory*. Cambridge, MA, Blackwell: 318-366.
- Megu, A. (1990). *Bokar Language Guide*. Itanagar, Directorate of Research, Government of Arunachal Pradesh.
- Merlan, F., S. P. Roberts, et al. (1997). "New Guinea "classificatory verbs" and Australian noun classification: A typological comparison." In M. Harvey and N. Reid, Eds. *Nominal Classification in Aboriginal Australia*. Amsterdam/Philadelphia, John Benjamins: 63-103.

- Michaud, A. and M. Mazaudon (2006). "Pitch and voice quality characteristics of the lexical word-tones of Tamang, as compared with level tones (Naxi) and pitch-plus-voice-quality tones (Vietnamese data)." *Proceedings of Speech Prosody 2006*. Dresden, Technische Universität Darmstadt Press.
- Mithun, M. (1984). "The evolution of noun-incorporation." *Language*(64): 847-894.
- (2001). "Understanding and explaining applicatives." *Chicago Linguistic Society*(37): 73-97.
- Modi, Y. (2005). *Emergence and impact of Hindi as a lingua franca in Arunachal Pradesh*. M. Phil Thesis. Department of Linguistics. New Delhi, Jawaharlal Nehru University.
- Morey, S. (2005). *The Tai Languages of Assam: A Grammar and Texts*. Canberra, Pacific Linguistics.
- (forthcoming). *Turung: A Grammar of a Variety of Singpho Spoken in Assam*.
- Noonan, M. (1997). "Versatile Nominalizations." In J. Bybee, J. Haiman and S. A. Thompson, Eds. *Essays on Language Function and Language Type Dedicated to T. Givón*. Amsterdam, Netherlands, Benjamins: 373-94.
- (2006). "Direct speech as a rhetorical style in Chantyal." *Himalayan Linguistics Journal*(6): 1-32.
- Norman, J. (1988). *Chinese*. Cambridge/New York, Cambridge University Press.
- Noss, R. (1964). *Thai Reference Grammar*. Washington, DC, Foreign Service Institute.
- Nyodu, M., M. Post, et al. (in preparation). *A Dictionary of Galo*.
- Peterson, D. A. (1998). "The morphosyntax of transitivization in Lai (Haka Chin)." *Linguistics of the Tibeto-Burman Area* 21(1): 87-154.
- (2007). *Applicative Constructions*. Oxford, Oxford University Press.
- Phukan, S. K. (2001). *Toponymy of Assam*. New Delhi, Omsons.
- Plank, F., Ed. (1995). *Double Case*. New York, Oxford University Press.
- Post, M. (2005). "Synchronic and diachronic dimensions of the tone system of Galo." *Paper presented at the 36th Annual Meeting of the Australian Linguistics Society*. Melbourne, Monash University.
- (2006). "Compounding and the Structure of the Tani Lexicon." *Linguistics of the Tibeto-Burman Area* 29(1): 41-60.
- (2007). "Grammaticalization and compounding in Thai and Chinese: A text-frequency approach." *Studies in Language* 31(1): 117-76.
- (2008). "Topographical deixis in Tani and beyond." *Paper presented at the 3rd International Conference of the North East Indian Linguistics Society*. Gauhati University, Guwahati, Assam, India.
- (forthcoming). "Grammaticalization and the discourse distribution of serial verbs in Assamese." *Proceedings of the 14th Annual Meeting of the Southeast Asian Linguistics Society, Thammasat University, May 19-24 2004*. Canberra, Pacific Linguistics.
- (forthcoming 2008). "Verbs of posture, existence, location and possession and their grammaticalization pathways in the Tani languages." In S. Morey and M. Post, Eds. *North East Indian Linguistics*. New Delhi, Foundation/Cambridge University Press India.
- (in preparation-a). *Classification in the Tani languages and beyond*. Melbourne, Research Centre for Linguistic Typology, La Trobe University.
- (in preparation-b). *Nominalizations and nominalization-based constructions in Galo*. Melbourne, Research Centre for Linguistic Typology, La Trobe University.
- (in preparation-c). *The tone system of Proto-Tani*. Melbourne, Research Centre for Linguistic Typology, La Trobe University.
- (under review). "The semantics of clause linking in Galo." In R. M. W. Dixon and A. Y. Aikhenvald, Eds. *The Semantics of Clause Linking, A Cross-Linguistic Typology*: Ch. 10.

- Rosch, E. H. (1973). "On the internal structure of perceptual and semantic categories." In T. E. Moore, Ed. *Cognitive Development and the Acquisition of Language*. New York, Academic Press: 111-144.
- Rutgers, R. (1998). *Yamphu: Grammar, Texts and Lexicon (Leiden University Languages of the Greater Himalayan Region v.2)*. PhD Dissertation. Research School CNWS. Leiden, Leiden University.
- Saxena, A. (1988). "On syntactic convergence: The case of the verb 'say' in Tibeto-Burman." *Proceedings of the 14th Annual Meeting of the Berkeley Linguistics Society*. Berkeley, CA, Berkeley Linguistics Society.
- Simon, I. M. (1972). *An Introduction to Apatani*. Gangtok, Sikkim, Government of India Press.
- Singer, R. (2001). *The Inclusory Construction in Australian Languages*. Honours Thesis. Department of Linguistics and Applied Linguistics. Melbourne, University of Melbourne.
- Sprigg, R. K. (1955). "The tonal system of Tibetan (Lhasa dialect) and the nominal phrase." *Bulletin of the School of Oriental and African Studies* 17(1): 133-153.
- Starosta, S. (1985). "Relator nouns as a source of case inflection." In V. Acson and R. Leed, Eds. *For Gordon Fairbanks*. Honolulu, University of Hawai'i Press: 111-133.
- Sun, H., J. Ouyang, et al. (1980). *Menba, Luoba, Dengren de Yuyan (Languages of the Menba, Luoba and Dengren) (in Chinese)*. Beijing, Zhongguo Shehui Kexue Chubanshe (China Social Sciences Press).
- Sun, J.-S. and F.-X. Liu (1992). *Luoba Zu de Shehui he Wenhua (The Society and Culture of the Luoba Nationality) (in Chinese)*. Chengdu, Sichuan Minzu Chubanshe (Sichuan Nationalities Press).
- Sun, T.-S. J. (1993a). "Evidentials in Ando Tibetan." *Bulletin of the Institute of History and Philology, Academia Sinica*(63-4): 945-1001.
- (1993b). *A Historical-Comparative Study of the Tani Branch of Tibeto-Burman*. PhD Dissertation. Department of Linguistics. Berkeley, University of California.
- (2003). "Tani languages." In G. Thurgood and R. J. LaPolla, Eds. *The Sino-Tibetan Languages*. London/New York, Routledge: 456-466.
- Svantesson, J.-O. (1986). "Acoustic analysis of Chinese fricatives and affricates." *Journal of Chinese Linguistics* 14(1): 53-70.
- Tayeng, A. (1976). *Milang Phrasebook*. Shillong, The Director of Information and Public Relations of Arunachal Pradesh.
- (1990a). *Nishi Phrase Book*. Itanagar, Director of Research, Government of Arunachal Pradesh.
- (1990b). *Sulung Language Guide*. Itanagar, Directorate of Research, Government of Arunachal Pradesh.
- Temsunungsang, T. (forthcoming 2008). "Tonality and the analysis of sub-minimal words in Ao." In S. Morey and M. Post, Eds. *North East Indian Linguistics*. New Delhi, Foundation/Cambridge University Press India.
- van Breugel, S. (in preparation). *A Grammar of Atong*. PhD Dissertation. Research Centre for Linguistic Typology. Melbourne, La Trobe University.
- Watters, D. E. (1985). "Emergent word tone in Kham: A Tibeto-Burman halfway house." *Linguistics of the Tibeto-Burman Area* 5(1): 49-127.
- (2002). *A Grammar of Kham*. Cambridge, Cambridge University Press.
- Wayland, R. P. and S. G. Guion (2005). "Sound changes following the loss of /r/ in Khmer: A new tonogenetic mechanism?" *Mon-Khmer Studies: A Journal of Southeast Asian Languages* 35: 55-82.
- Weidert, A. (1987). *Tibeto-Burman Tonology*. Amsterdam/Philadelphia, John Benjamins.

- West Siang District Economics and Statistics Department (2004). *West Siang District at a Glance*. Along, West Siang, Arunachal Pradesh, India, Office of the Deputy Commissioner/Eastern Horizon Printer and Publishers.
- Yap, F. H. and S. Matthews (in press). "The development of nominalizers in East Asian languages." In M. J. López-Couso, E. Seoane and T. Fanego, Eds. *Rethinking grammaticalization: New perspectives for the twenty-first century (Typological Studies in Language)*. Amsterdam/Philadelphia, John Benjamins.