Shakespeare's cryptic word-play, with special reference to "compounds" (drugs), "weed" and "invention" (creative writing).

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Abstract

Shakespeare's writing includes many examples of word-play, selected examples of which are examined in the context of word combinations (literary compounds) and drugs (including medicinal compounds). Sonnet 76 is of considerable interest in that it refers to "compounds strange", relating to the use of words combined to form one. In the same sonnet, reference is made to "invention in a noted weed". The word-play relates to clothing and literary style, but a deeper (cryptic) meaning may relate to creative writing ("invention") in the context of a "noted weed", previously associated with Cannabis and a "Tenth Muse" (Sonnet 38) as a source of inspiration for creative writing. The use of resinous Cannabis, in moderation, is known to stimulate creativity and lateral thinking. Shakespeare refers to "hempen homespuns" in a Midsummer Night's Dream, a clear reflection of the fact that in 17th century England clothing was made from hemp, but clothes were referred to as "weeds", identifiable with "hemp" which Gerard (1597) specifically recognized as Cannabis. There is thus a definite association between "weed" and Cannabis. The church condemned Cannabis on account of perceived associations with witchcraft, and on account of the psychoactive properties of its resinous component. Writers such as François Rabelais were deliberately cryptic about Cannabis to avoid action from the church. Shakespeare's Sonnet 76 expresses a preference for a "noted weed", turning away from "compounds strange", interpreted to mean not only literary compounds, but also (more cryptically) "strange drugs", of the kind that have been identified from chemical analysis of 17th century clay pipes from Stratford-upon-Avon and environs. Plants recognised from residues in "tobacco" pipes include cocaine (from South American coca leaves probably identifiable with Gerard's description of a kind of tobacco from Peru which Sir Francis Drake had visited); as well as Nicotiana (North American "tobacco" introduced inter alia by Sir Walter Raleigh); and Cannabis which could be a kind of "Indian tobacco" or "weed" from India, potentially identifiable with Warner's (1606) description of "An Indian weede", and with Alexander Craig's description of a "pype of loame...[and] far-fett Indian smoke". It is hypothesized here that in Sonnet 76, "invention in a noted weed" referred cryptically to Cannabis (the "noted weed") in relation to creative writing ("invention").

Introduction

In a study of "Shakespeare's Words", Crystal and Crystal (2002) have compiled and analysed a richness of Shakespeare's vocabulary. Their published volume includes a glossary of about 14,000 words, though the number of terms used by Shakespeare greatly exceeds 20,000. In a preface to the book, Stanley Wells refers to the "fecundity of Shakespeare's linguistic resources", although this has been down-played by Hugh Craig (2011). Shakespeare's creativity and word-play relates well to the word "invention", a term which Shakespeare himself uses in several senses. It has been defined in terms of inventiveness, imagination, creative faculty, mind, thought, novelty and innovation (Crystal and Crystal, 2002). It can certainly refer to creative writing. A question arising from previous analyses (Thackeray et al, 2001) is whether Shakespeare's writing, including extensive word-play, was related in any way to the use of a stimulant such as Cannabis, and whether Shakespeare and other authors made hidden reference to this plant after the church had associated it with witchcraft.

The creative "genius" of Shakespeare has been discussed by Bate (1998) with special reference to the perceptions of William Empson, a Cambridge scholar who turned from the study of mathematics to English literature and the concept of "ambiguity", especially in the context of Shakespeare and his extensive use of word-play. Empson recognised that ambiguity could be interpreted in ways which permitted an appreciation of hidden meanings, contrasting with previously held views that Shakespeare should be read in terms of one *or other* intended sense (Bate, 1998).

Empson's perceptions developed in Cambridge in the 1920's at a time when scientists and philosophers were exploring Heisenberg's "uncertainty principle" in relation to atoms, the universe, and relativity. Shakespeare's plays were assessed in terms of "Seven Types of Ambiguity" (Empson, 1930). Empson classified easily recognisable double-entendre in terms of "Type 1", but more complex wordplay and hidden meanings were associated with "Type 7 ambiguity" where the reader approaches "the secret places of the Muse".

In this article I explore Shakespearean words and expressions, several of which can be assessed in terms of relatively high levels of ambiguity of the kind described by Empson. The words which I choose to examine relate to "weed", "compound" and "invention", examined in the context of the fact that Cannabis has been and continues to be used by writers as a stimulant for creative writing, but which (to this day) is associated with negative connotations, protectionism and legal prohibition, despite the fact that medical professionals such as Professor Lester Grinspoon of Harvard Medical School have recognised that Cannabis should not necessarily be *despised* (to use a term adopted by Francis Bacon in the context of "weed"), or *forbidden*, a word used by Grinspoon and Bakalar (1993) in the title of their book *Marihuana: The Forbidden Medicine*, and by Shakespeare in Sonnet 6 in the context of a vial:

"that use is not forbidden usury which happies those that pay the willing loan"

which can be compared to concepts in Sonnet 125:

"paying too much rent for *compound* sweet forgoing *simple* favour".

It would seem highly probable that, through this word-play, Shakespeare was referring indirectly to drugs, which were known by the terms "simples" and "compounds" (Thackeray, 2005). A "simple" was a medicinal herb (Crystal and Crystal, 2002), whereas compounds could refer to drugs (Cymbeline, 1.5.4 and 1.5.8). Before Shakespeare's birth, Garcia de Orta (a Portuguese botanist) travelled to India and subsequently published a book on "The Simples and Compounds of India", including descriptions of Cannabis which originated in Asia.

"Weed", Cannabis and censure

In Sonnet 76, "invention in a noted weed" relates metaphorically to a style of writing, likened to a style of clothing (Duncan-Jones, 1997). "Weeds" in Shakespeare's time referred to garments, and "invention" referred to creative writing, including poetry, but of special interest is the fact that clothing in Shakespeare's time was made from the fibre of Cannabis. With a clear illustration, Gerard (1597) specifically refers to Cannabis as the fibrous plant that was otherwise known as hemp, yielding material of the kind that Joseph Hall indicates in a poem about a poet "clad in English weed". Apart from its use for clothing, Cannabis fibre served importantly for canvas (notably for ship's sails), rope and paper. The fact that *Cannabis* was accessible in England in Shakespeare's time is unquestionable, as indicated by Shakespeare's "what hempen homespuns have we swaggering here?" (*Midsummer Night's Dream*).

Thus the term "weed" in Shakespeare's time certainly related to Cannabis, at least in the context of clothing. Did "weed" refer also to Cannabis as a kind of "tobacco"? The Oxford English Dictionary gives several examples in which "weed" referred to tobacco in the time of Shakespeare. Notably, Warner (1606) refers to "An Indian weede, that feum'd away more wealth than would many a thousands feed", and it may not be coincidental that Cannabis was known from India (as reported for example by Garcia da Orta). Alexander Craig refers to a "pype of lome" in the context of "far-fett Indian smoke". In Guls Horne-Book, Dekker (1609) refers to India in the context of tobacco smoke in nostrils, and writes "If you cannot reade, exercise your smoake, and enquire who has write against this divine weede". The Church had certainly "writ against" Cannabis, and writers needed to be careful about the content of their texts especially at a time when Cannabis was associated with witchcraft. Indeed, one such example was Garcia da Orta, who described the stimulating properties of Cannabis and other substances known as "simples and compounds" from India in the 16th century. On his return to Europe from India, Garcia's books were burnt, after Pope Innocent VIII had associated Cannabis with witchcraft. In France, Francois Rabelias subsequently satirised the church in his book Gargantua and Pantagruel, which refers to Cannabis under the cryptic name pantagruelion. Rabelais created this name deliberately as a cover when referring to Cannabis, in order to protect his satirical book from being burnt. Shakespeare evidently knew of Rabelais' work since there is reference to Gargantua in As You Like It.

In England the literary censor in Shakespeare's time was Dr John Whitgift, Archbishop of Canterbury, formerly tutor of Sir Francis Bacon. Whitgift was responsible for the burning of satirical writings of John Marston, and "stayed" the circulation of work by another satirist, John

Hall. Jane Beckett (1977) has suggested that these two satirists were criticising Bacon, thought to have been writing under a pseudonym to protect his own interests. The possibility that the satires were directed at Shakespeare (rather than at Bacon) is suggested by the fact that they include lines similar if not identical to those found in *The Rape of Lucrece* and *Venus and Adonis*, generally attributed to Shakespeare.

An example of the use of a pseudonym to criticise the church in England in the late 16th century is given by the so-called "Marprelate Controversy", in which writers supported or criticised views of "Martin Marprelate", a name given as a pseudonym for one or more authors who deliberately hid their identity to protect themselves from action by the church or state. One who did not escape was John Penry, who was accused of instigating the controversy under a pseudonym. His books were burnt and he was hanged in 1593.

Bacon himself wrote "I have, though in a *despised weed* procured the good of all men" (quoted by T.D. Bokenham in the introduction to Beckett's (1977) book on Bacon (p. xix)). Bokenham interprets this statement in the context of the suggestion that Bacon was writing under a "cloak" (cf. weed, item of clothing) of a *nom-de-plume*, to disguise his identity. Elsewhere, in the context of an authorship issue, Bacon himself wrote "Though it grew from me, [it] went about *in other's names*" (Apology, p. 218). It is interesting that certain phrases used by Shakespeare can be found in a collection of expressions compiled by Bacon in a book called "*Promus*", a Latin word referring to store room or larder (Beckett, 1977).

Why should Bacon have used the word "despised" to refer to "weed"? Does this relate at least in part to the fact that *Cannabis*, as a "weed", was despised and condemned by the church, even though the fibres of this plant were widely used for clothing?

In France, Rabelais was certainly referring to *Cannabis* when he described "pantagruelion" as the five or seven-leafed plant, the fibres of which were used for the manufacture of clothing, at a time when *Cannabis* was associated with witchcraft.

In England, John Lily must have been referring to *Cannabis* when he referred to "beewitching tobacco", noting that the "head-strong fury" of other plants (including henbane and hemlock) had a "bewitching" effect (Thackeray, 2003). In *Measure for Measure*, (Act 1, Scene 4, lines 20-21) Shakespeare refers to "headstrong weeds" in the context of "strict statutes".

Chemical analyses, Cannabis, clothing and writing

Word-play in Sonnet 76 may be associated not only with metaphor in which a style of writing is related to clothing, but also (more cryptically) to Cannabis and other substances. In Sonnet 76, reference is made to "compounds strange" which can be related to literary compounds (word combinations) and a style of writing (analogous to style of clothing), but which may be related, at least potentially, to "compounds" in the sense of drugs (Thackeray 2015, in press). Chemical analysis of 17th century clay pipes from Stratford-upon-Avon indicates that Cannabis was smoked (Thackeray et al, 2001; Thackeray 2015a), and may have been associated with creative writing. Shakespeare as a sonneteer appears to be expressing a preference for "the noted weed" (Sonnet 76), turning away from "compounds strange". Among

"strange drugs" identified in two out of 24 pipes analysed from the area of Stratford-upon-Avon was cocaine, a compound (drug) which almost certainly corresponds to "henbane of Peru" mentioned under the category of "tobacco" in Gerard's (1597) *Herbal*. Shakespeare was probably aware of the deleterious effects of cocaine (a "compound strange"), and perhaps he preferred Cannabis as a stimulant which had mind-stimulating properties.

The chemical analysis of early 17th century clay "tobacco" pipes from the environs of Stratford-upon-Avon demonstrates that a diversity of plants was smoked, including North American tobacco (Nicotiana), as well as Cannabis (Thackeray et al, 2001). The term "tobacco" or "weed" need not necessarily have been restricted to one kind of "tobacco". It is recognized that "Indian tobacco" could refer to Cannabis as a kind of "tobacco" (cf "weed") from India.

An association between "weed" and writing, particularly sonnets of the kind associated with Petrarch and Phillip Sidney, is reflected not only in Shakespeare's Sonnet 76 ("invention in a noted weed"), but also in a satirical poem by Joseph Hall, criticising a poet's "filching" from the work of others:

"He can implore the heathen deities to guide his bold and busy enterprise; or filch whole pages at a clap for need From honest Petrarch, clad in English weed"

Perhaps this satirical poem, with reference to "weed", was directed at Shakespeare who "lifted" ideas from elsewhere, and who may have been known in closed literary circles to have used Cannabis as a "source of inspiration".

Hall's satirical verse was "stayed" from circulation by the Archbishop of Canterbury, John Whitgift, as literary censor in Shakespeare's time, but for what reason? Sonnets based on Petrarch in "Petrarchian form" were common in 16th and 17th Europe, and "Petrarch was the model of all courtly poets" (Begley, 1903). Reference to poetry "clad in English weed" may have been considered offensive on account of its potential association with *Cannabis*, as a stimulant and "source of inspiration" for poetry.

In the very same satirical poem, Joseph Hall criticises the new style of writing of the kind introduced from France by Phillip Sidney in which word-combinations ("compounds") were used. Even the name of Philip Sidney is "compounded" to form "Philsides":

"He knows the grace of that new elegance which sweet Philsides fetch'd of late from France, That well beseem'd his high-styl'd Arcady [Arcadia] Tho' others mar it with much liberty In epithets to join two words in one".

"Joining" two words in one refers to the formation of literary *compounds*. It may not be coincidental that *Cannabis* is said to stimulate creativity and lateral thinking. Lester Grinspoon (Harvard Medical School) goes so far as to say that the use of Cannabis can "promote fluidity of association and enhance insight and creativity".

Shakespeare probably knew that certain drugs were deleterious. Thackeray (1999) has previously suggested that "weed this wormwood from your fruitful brain" (Loves Labours Lost, V, ii) was an appeal to keep a brain "fruitful", i.e. fecund and healthy, by not taking certain drugs.

Sonnet 76 includes the line "all my best is dressing old words new", which clearly relates to poetry in the context of clothing (cf. "weed"). In a poem entitled *Byting Satire*, referring to "Hundreth Riddles", John Marston criticises poetry which is "shak't to sleeveless rhymes", another example of imagery in which poetry is associated with clothing (weed), and it is remarkable that "shake" has been recorded as a word for *Cannabis* (Conrad, 1997). It would seem possible that Marston was criticising riddle-like cryptic sonnets of the kind attributed to Shakespeare. This possibility deserves attention since "shak't" in this poem may have been a cryptic jibe at Shakespeare.

Cannabis, appetite and "compounds"

In Sonnet 118 there is a potential cryptic link between "compounds" and Cannabis which is known to be an appetite-stimulant (Conrad, 1997):

"Like as to make our appetites more keen

With eager compounds we our palate urge".

In this poem, "compounds" could at least potentially relate to chemical compounds. This is supported by the fact that the word "drugs" occurs at the end of the same sonnet, in the context of homeopathic principles. Cannabis is known to have been used in homeopathic medicine, and in Sonnet 118 the line "a healthful state, which rank of goodness, would by ill be cured" brings in use of the word "rank" which can be related to "weed".

The "Tenth Muse", Herbs, Pallas Athene and Shake-speare

In Shakespeare's Sonnet 38 we find reference to "The Tenth Muse" which has been linked to Cannabis as a cryptic reference to a source of inspiration for writing, as an addition to the nine Classical Muses (Thackeray, 1999).

In a play called "Country Controversy", attributed by Mark Griffiths to Shakespeare (*Country Life*, May 27, 2015), there is reference to nine flowers associated with the nine Muses, in a garden in which there is a maze (Shakespeare plays on the words maze and amaze). One of the plants in this garden is a herb. It is not one such as thyme, but is instead one that makes "time wither in wonder". It may not be coincidental that Cannabis is known to have the effect of making the sense of time "go slow" (cf. "wither in wonder") as noted in *Time* magazine (June 2015). Perhaps the herb in the "Country Controversy" garden is itself Cannabis (as the hypothesized "Tenth Muse" identified by Thackeray in 1999), in addition to nine other plants in the garden, associated with the nine classical muses or sources of inspiration.

In the context of plants in early 17th century gardens in Europe, it should be mentioned that there is evidence for the smoking of roses, as indicated from chemical analyses of early 17th century clay pipes from Amsterdam (Thackeray & Young, 2015b). This is of special interest in

relation to the fact that there are references to roses in Shakespeare's sonnets and plays. For example, in Sonnet 54, Shakespeare writes

"The rose looks fair, but fairer we it deem For that sweet odour which doth in it live".

The sonnet continues with reference to a "youth", in relation to "death" of roses with sweet odours:

"Of their sweet deaths are sweetest odours made: And so of you, beauteous and lovely youth, When that shall fade, my verse distills your truth".

Questions which I would like to raise are firstly, whether the "youth" in Sonnet 54 is an entheogen associated with a plant cf. the so-called "Dark Lady" and an appeal for a "Tenth Muse" in Sonnet 38, as discussed by Thackeray (1999); and whether the "rose" in Sonnet 54 (and elsewhere) is a hidden reference to Cannabis (cf "O be some other name! What's in a name? That which we call a rose by any other name would smell as sweet", Romeo and Juliet, Act 2, Scene 2).

After his death, Francis Bacon was anonymously linked to "The Tenth Muse" (Manes Verulamiani, Eulogy #20). Beckett (1977, 79) associates Bacon's "Tenth Muse" with Pallas Athene (Greek goddess of poetry and drama), recognising that a poem by a French poet, Jean de la Jesse, apparently sent to Francis Bacon in 1595 or 1596, refers to *vostre Pallas* in the context of "your [Muse] Pallas" and a "good name" (*beau Nom*). Pallas is associated with the word "shake", and in terms of a Greek lexicon, Pallas Athene was described as "the brandisher of the spear", identical in concept to "shake-spear" (Beckett, 1977, 80).

It may be suggested that Pallas Athene, "Shake-spear", and a Muse for poetry were conceptually associated, cryptically. This possibility is of interest in the context of the "Tenth Muse" and Shakespeare's "invention in a noted weed, that every word *almost doth tell [fel] my name*" (Sonnet 76). In the 1609 Quarto edition of Shakespeare's *Sonnets*, the line which relates to "invention" (creative writing) is given as "that every word almost doth *fel* my name". Duncan-Jones (1997) regards "fel" as a printer's error, and offers "tell" as the intended sense. Bate (1997) suggests also "spell". However, it would seem possible that "fel" was intended as a verb, associated with the English word (also rendered fell) defined in the Oxford English Dictionary as a hide (*cf* "vel", referring to skin). Shakespeare uses the word "fell" as a noun in the context of a sheepskin hide (fleece) in *As You Like It* (III, iii, 50). Transformed as a verb, it could be given the sense "to hide, conceal, cloak", in which case, the line in Sonnet 76 might be interpreted in terms of "That every word almost doth *hide* my name".

Conclusion

Many attempts have been made to interpret Shakespeare's sonnets which are extraordinary in that they include curious statements and contradictions that seem impossible to

understand, reminiscent of what Empson says about Type-7 ambiguity. For example, in Sonnet 43:

"When I sleep, in dreams [my eyes] look on thee, And darkly bright, are bright in dark directed. Then thou whose shadow shadows doth make bright, How would thy shadow's form form happy show..."

Perhaps answers to questions regarding this sonnet and others like it will be found by turning to the study of "entoptics" (images perceived in altered states of consciousness), recognising that *Cannabis* as a stimulant may inspire creativity and facilitate insight into complex phenomena, relevant perhaps to Empson's statement that the most complex "type" of ambiguity in his classification relates to "the secret places of the Muse", and relevant also perhaps to the inspiration of complex literary compounds. Images described as "darkly bright" (Sonnet 43) could be associated with perceptions at an early stage of altered consciousness, related to the use of mind-altering substances (Lewis-Williams and Dowson, 1988, Thackeray, 2005).

Cannabis is said to stimulate "inner dialogue" (Conrad, 1997), and it would seem that the conversational verse in some of Shakespeare's sonnets could be related to this. Perhaps the so-called "Dark Lady" and the "youth" of the sonnets can be associated with an entheogen, related to the use of Cannabis. This interpretation would serve to cast new light on the nature of this "lady" and the "youth" who may be perceptions in the mind of the poet, rather than actual persons, perceived at a stage of altered consciousness.

In Sonnet 6 Shakespeare refers to a distillation and a vial associated with "sweetness" and a "willing loan", the latter being comparable to "rent for *compound* sweet, forgoing *simple* favours" in the context of "dwellers of form" (cf. style) (Sonnet 125). Such expressions deserve to be explored in terms of an Empsonian approach whereby complex hidden meanings may be exposed, recognising that "simples" and "compounds" related to drugs, and recognising also that the word "compounds" related to writing and literary style.

Attention deserves to be given to the possibility that Shakespeare's "noted weed", as well as Bacon's "despised weed", were related to *Cannabis* in the context of creative and cryptic writing. "Weed" was certainly used to refer to "tobacco" in the early 17th century in England, but chemical analyses of clay "tobacco" pipes indicate that more than one kind of plant was smoked. These include (as expected) Nicotiana (tobacco introduced by Sir Walter Raleigh and others from North America; cocaine (probably smoked in the form of coca leaves from Peru which had been visited by Sir Francis Drake); and Cannabis which is hypothesised to have been a kind of tobacco also known by the term "weed", applying to substances smoked in pipes that are generally described as "tobacco pipes".

Although the Oxford English Dictionary (2015) suggests that "weed" was used to refer to Cannabis only after 1929, it is suggested here that even in the early 17th century "weed" could have referred to a kind of tobacco that included Cannabis, recognizing that "tobacco" and "weed" may have been terms for a diversity of plants that were smoked in pipes. Here it is hypothesized that in Sonnet 76, "invention in a noted weed" referred cryptically to Cannabis (the

"noted weed") in relation to creative writing ("invention"). It may not be coincidental that the use of resinous Cannabis, in moderation, is known to stimulate creativity and lateral thinking.

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