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The last two years before I left my hometown marked the first time I began to have a genuine curiosity about any of the subjects I was learning at school. *About damn time*, I had thought. I hadn't spent much energy thinking through my future; I was well equipped to be in a classroom, and the willingness toward academia made a STEM subject an obvious choice and the jobs of characters like Dr. Gregory House¹ seem like a good *Plan A*. The expectations to pursue college reinforced the pressure to prove myself capable of meaningful work. For once, I felt accountable for listening to the dull buzz of the teacher's voice during a lesson. In a whirlwind of harshened guidelines and sheer desperation to express some well-documented passion for my college applications, I threw myself into several of my classes.

I had never felt emotionally attached to a textbook before, but at seventeen I found myself enamored by the shiny bundle of 1464 pages I was lent in good faith for the year. The textbook for my biology class – IB, not AP – held all the stories of everyday magic I had been waiting to hear my whole life.² I loved learning how and why things happened, and periodic visits to Cold Spring Harbor Laboratory (where my teacher had done her research assistantship) made a career in science seem very realistic. I was very familiar with James Watson's impact on the many sciences that are based on genetics,³ and, through the stories told by my teacher, even more familiar with his impacts on women in science, including the alleged sexism against Rosalind Franklin⁴ and his supposed continued belief that women should not be in science.⁵ And I wanted to make an impact too.

¹ Blake, P., Kaplow, L., *et al.* (Writer), Shore, D. (Creator), & Yaitanes, G. *et al.* (Director). (2004-2012). Bryan Singer (Executive producer), *House, M.D.* Los Angeles, CA: Fox Broadcasting.

² Reese, J., Urry, L., Cain, M., Minorsky, P., Jackson, R., & Wasserman, S. (Sept. 2010). *Campbell biology* (9th ed.). Boston, MA: Benjamin-Cummings.

³ Watson, J. D., & Crick, F. H. (1953). Molecular structure of nucleic acids. *Nature*, 171(4356), 737-738; Rhodes, J. (2009-2011). IB Biology [Lectures].

⁴ Rosalind Franklin. (July 2015). Wikipedia, The Free Encyclopedia. [Web](#). 16 Sept. 2015; Harding, Sandra (2006). *Sexist criticism of Watson's memoir. Science and Social Inequality: Feminist and Postcolonial Issues*. Urbana: University of Illinois Press. p. 71. [Web](#). 16 Sept. 2015.

⁵ Rhodes, J. (2009-2011). IB Biology [Lectures].

That year was also the first I began to keep a portfolio of work that was meaningful, and I poured effort into it enthusiastically. I was *good* at biology, but my favorite class was always (**always**) art. My teacher, Mr. Gamache, was energetic, zany and relatable. The artwork to be produced over the course of the two year class would be carefully documented in a sketchbook, from inspiration to research to project planning and evaluation. The art department had decided to regulate the inspiration part, so all of the students went home once in a while to complete a set of notes on a *Radiolab* podcast.⁶

Oliver Sacks, a self-described “naturalist and a physician”⁷ and regular feature in *Radiolab* guest appearances, grabbed the world’s attention with his case studies on peculiar mental illness.⁸ Sacks’ many publications of rare disorders made commonplace a practice of discussing the mind that had not existed before.⁹ This man narrated the world’s wonders to me while I scribbled small nothings into my sketchbook. His casual tone in describing the foundational elements of behavioral neuroscience made hearing about biological phenomena a reflective experience.

Later in the year, I was reading a book of medical illustrations¹⁰ in class when Mr. Gamache spied over my shoulder and told me to consider the artist Alex Grey for my next research endeavor. Trustingly, I did.

A Google Image search and a healthy skim of Wikipedia¹¹ revealed that this artist created exclusively biology-based artwork. His surreal paintings consistently express a unity of “body,

⁶ Krulwich, R. (Host). (2009). Yellow fluff and other curious encounters [season 5 ep. 5]. Radiolab. New York, NY. WNYC; Krulwich, R. (Host). (2008). Pop music [season 4 ep. 5]. Radiolab. New York, NY. WNYC; Krulwich, R. (Host). (2007). Memory and forgetting [season 3 ep. 4]. Radiolab. New York, NY. WNYC.

⁷ Sacks, O. (1986). The man who mistook his wife for a hat. Simon and Schuster. Preface.

⁸ Encyclopedia Britannica. (2015). Oliver Sacks. [Web](#). 15 Sept. 2015.

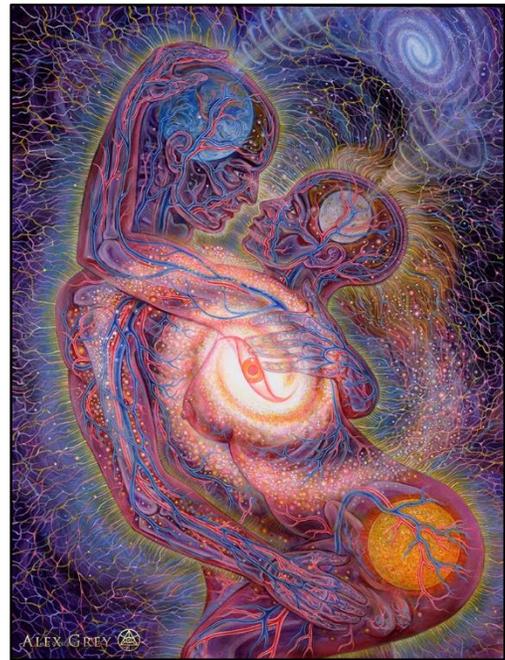
⁹ Rosenbaum, R. (Dec. 2012). Why Oliver Sacks is one of the great modern adventurers. Smithsonian Magazine. 15 Sept. 2015; Sacks, O. (1995). An anthropologist on mars. Knopf Doubleday Publishing Group; Sacks, O. (1986). The man who mistook his wife for a hat. Simon and Schuster;

¹⁰ Rifkin, B.A., Ackerman, M.J. (2006). Human anatomy: from the renaissance to the digital age. Harry N. Abrams. [print]

¹¹ Alex Grey. (July 2015). Wikipedia, The Free Encyclopedia. [Web](#). 16 Sept. 2015.

mind, and spirit”¹² and establish a consideration of spirituality. The emphasis this artist placed in the cyclical nature of existence evidenced his belief in “being, [...] wisdom and [...] love [...] being co-present in the vast expanse”¹³ of life. These sentiments of connectedness likely attracted Mr. Gamache to Grey’s ideologies just as Mr. Gamache’s enthusiastic suggestion to explore Grey’s work engaged me.

I was pleased with the harmony of science and art immediately, and was perpetually intrigued to find that this artist was thoroughly trained in the science he flaunts. Grey was continuously exposed to the human body by his years of work in research and preparing cadavers for medical students, and this is extremely apparent in the lavish anatomical detail of his paintings.¹⁴ In a sweeping majority of these, intricate networks of blood vessels, nerves, and bones provide striking depth to the subjects. Themes of transcendence, rites of passage, connectedness, and environmentalism make regular appearances in his work.¹⁵



“Love is a Cosmic Force”
Progress of the Soul
Alex Grey

After doing the research for the sketchbook, Mr. Gamache asked if I had ever considered an education in medical illustration. As it so happened, I had not, and I began a determination to combine disciplines.

¹² Grey, A. (1990). Sacred mirrors: The visionary art of Alex Grey. Inner Traditions/Bear & Co.

¹³ Grey, A. (22 Aug. 1994). The vast expanse. Wikiquote. [Web](#). 16 Sept. 2015.

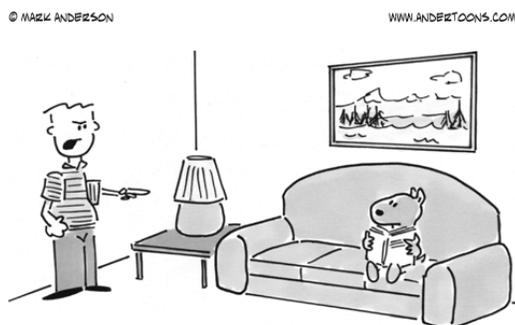
¹⁴ Alex Grey CoSM. Biography. (n.d.). [Web](#). 13 Sept. 2015; Hass-Cohen, N. & Clyde Findlay, J. (2015). Art Therapy and the Neuroscience of Relationships, Creativity, and Resiliency: Skills and Practices. W.W. Norton & Company.

¹⁵ Alex Grey CoSM. Art. (n.d.). [Web](#). 13 Sept. 2015; Mitchell, J.E. (Oct. 2010). Alex Grey. IB Art Sketchbook. [PAGE NO.]

The following year, I was taking my final set of courses to earn a diploma. Among these was a less traditional class called “Theory of Knowledge,” which aimed to inspire discussion about assigned philosophical questions. In contrast with the process of reflecting inward as I had practiced with my art and biology classes, this class enforced a process of reflecting outward.

In the 19th century, Søren Kierkegaard as a dutiful Christian turned heads with his reinterpretations of the faith.¹⁶ Kierkegaard believed that normality is extremely subjective, and despite his beliefs that supernatural law triumphs over all alternatives, he dismissed social norms as ethics that do not objectively matter or have any universal significance to those who do not obey them.¹⁷ Kirkegaard’s *Fear and Trembling* paved the way for other scholars including Nietzsche, Sartre, and Camus to express that the very basis of existence is the individual’s perception of it,¹⁸ and for Bruce Hecker to mention their theories to me. In thoughtful consideration of my interest in philosophy and general teenage sassiness, Bruce encouraged me to further explore such ideas as anthropomorphism, psychology, and existentialism.

As I learned to put my beliefs into words, my answers to the philosophical questions proposed to me increasingly emphasized the distinction between the objective and the subjective. I



“Anthropomorphic or not, stay off the couch!”

“Dog Cartoon #0202”
Mark Anderson

often built these answers on the foundation that a person’s evolutionary roots would lead them to make a given decision.¹⁹ I quickly solidified a belief founded on the fact that any experience by a living being is framed entirely by their biology; after all, one cannot see without eyes or taste without a tongue.

¹⁶ Crowell, S. (Oct. 2010). Existentialism. Stanford Encyclopedia of Philosophy.

¹⁷ Ibid.

¹⁸ Kierkegaard, S. (1843). *Fear and trembling*. [Web](#). 16 Sept. 2015; Burnham, D. & Papandreopoulos G. Existentialism. Internet Encyclopedia of Philosophy. [Web](#). 16 Sept. 2015.

¹⁹ Darwin, C.R. (1859). On the origin of species by means of natural selection, or the preservation of favoured races in the struggle for life. *Nature*, 5 (121). 502.

Answering philosophical questions – and in turn, considering multiple philosophical perspectives – continuously reinforced that everybody's experiences are based on sound physical realities. In the years following, I would grow to be very curious about the link between biology and behavior, ultimately leading to a choice to pursue an education in behavioral neuroscience.