

# 3808

a journal of critical writing

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### From the Editors

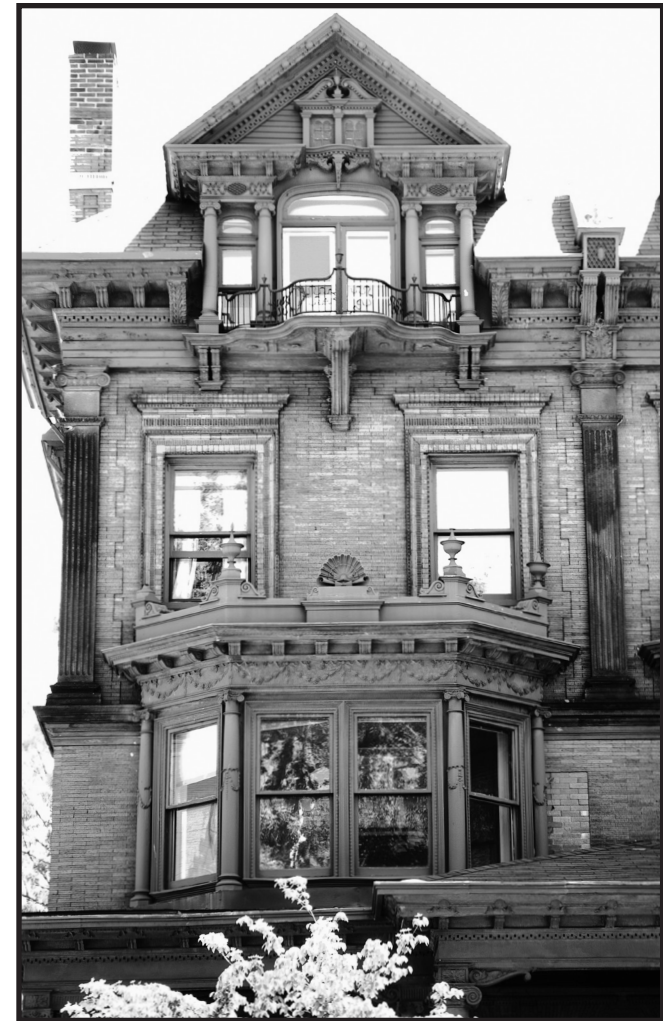
This sixth volume of *3808: A Journal of Critical Writing* offers another collection of writing by Penn students enrolled in Critical Writing Seminars. Each essay demonstrates the power of brevity—the discipline and intelligence that critical writing demands.

Penn has a longstanding commitment to undergraduate writing. Thanks to Benjamin Franklin, Penn was the first Ivy to require courses in writing. That history, the presence of that pastness, is with us here, in this volume, and remains central to the Penn education.

It's not easy to make it into this annual collection. From the pool of about 2,400 students enrolled each year in our writing seminars, writing faculty and sometimes peers in the seminars nominate students' work for consideration. If the nominee chooses to pursue publication, he or she immediately transforms into an author, and what was once a "paper" instantly becomes a manuscript that is reviewed first by a faculty editorial board and then by a student editorial board, drawn from across the disciplines. Sometimes authors are advised that publication is contingent on successful revision of the manuscript; in most cases, the authors work with peer editors—members of our Writing Center tutorial staff—for final polish.

The 37 exemplary essays in this volume were authored by students representing the four undergraduate schools and a diversity of backgrounds, interests, and topics. Each is, as Franklin might say, worth the reading.

We hope that you will enjoy the work of these promising young writers as much as we do. And we suspect that this is not the last time you will be seeing them in print.



### About Our Title:

Penn created the Critical Writing Program in 2003 and, as part of the Center for Programs in Contemporary Writing, gave us splendid residence in an old Victorian at 3808 Walnut Street—from which this journal takes its name.

## Jacob Himeles

### Subliminal Messaging: A Historical Analysis of Paranoia

The advertising industry would never be the same following the summer of 1957. Over the course of six weeks, nearly 46,000 moviegoers filed into a Fort Lee, New Jersey, movie theater to enjoy a screening of William Inge's play, *Picnic* (Lindstrom, 2008, p. 68). What these moviegoers did not know was that they were being used as guinea pigs. James Vicary, a market researcher from Detroit, had an agenda of his own. During this screening of *Picnic*, Vicary flashed hidden messages "Eat Popcorn" and "Drink Coke" onto the screen for 1/3000<sup>th</sup> second at a time. Vicary claimed that as a result of his experiment, Coca-Cola sales increased 18.1 percent and popcorn sales increased 57.8 percent (Lindstrom, 2008, pp. 68-69). Those who had received the hidden message, insisted Vicary, subconsciously proceeded to purchase greater quantities of both Coca-Cola and popcorn. He referred to this phenomenon as subliminal messaging, a notion that produced public anxiety. Once challenged to repeat the same experiment five years later, Vicary failed to find similar results (Lindstrom, 2008, p. 69). In a 1962 interview with *Advertising Age*, Vicary admitted that the initial experiment was, in fact, based on a false report. He further admitted that he conducted only the minimal research necessary to file a patent, acknowledging that the limited amount of data was "too small to be meaningful" (cited in Bond, 2009, p. 8). Regardless, the damage was done, and the American public maintained a strong belief in the power of subliminal messaging. Public paranoia associated with subliminal messaging has persisted for decades.

The American public became consumed by the idea of subliminal messaging immediately following Vicary's false report. This new

obsession based on little scientific evidence eventually evolved into persistent paranoia. As one study demonstrated, "Between 75% and 80% of the American public believes in the existence and efficacy of subliminal advertising" (Kolb, 2008). The American public did not forgive Vicary, and his reputation was completely shattered following his reports. He left the country, but "upon his return, he had an unlisted phone number out of fear caused by hostile letters to the editors of publications covering the controversy that left him afraid for his life" (Bond, 2009, p. 8). Vicary certainly suffered the consequences of his decisions, and the fear that he instilled in the public, quite literally, came back full-circle.

The year 1957 also witnessed the publishing of Vance Packard's *The Hidden Persuaders*, a highly influential book on manipulative marketing. Packard used alarmist language, which stirred the public's concern about subliminal messaging. "Typically these efforts take place beneath our level of awareness; so that the appeals which move us are often, in a sense, 'hidden,'" he wrote. "The result is that many of us are being influenced and manipulated, far more than we realize, in the patterns of our everyday lives" (Packard, 1957). Packard also introduced several new methods of experimentation such as measuring changes in pupil dilation, eye-blink rate, voice pitch, and brain wave activity. While these physiological responses were not new to science, their relationship to marketing and consumer stimuli had not previously been explored. The American people arrived at a simple conclusion from Packard's eye-opening book: "We are being monitored, managed, and manipulated outside our conscious awareness by advertisers and marketers" (O'Barr, 2005). Like a one-two punch, Packard's publication amplified Vicary's report and the American public's paranoia around the idea of subliminal messaging.

In the years following Vicary's and Packard's influential discoveries, a vulnerable American public disturbed by threats of nuclear war kept this persistent paranoia alive. The Cold War, which did not officially end until 1991, revolved around a power struggle between the United States and the Soviet Union. The United States nervously sought to destroy any threats of totalitarian and authoritative regimes. Furthermore, the United States faced the threat of direct nuclear warfare with the Soviet Union. President John F. Kennedy announced the need for bomb shelters in the

event of nuclear war, instilling a sense of urgency when he said, “The time to start is now” (cited in Schaff, 2009, p. 1). As American citizens across the country began purchasing prefabricated bomb shelters and equipping them with food and water, paranoia escalated. In 1961, just 4 years following the James Vicary experiment, President Kennedy insisted on a fallout shelter for everyone (Schaff, 2009, p. 1). The rise of subliminal messaging took place against this backdrop in American history, a time characterized by a nervous American public already troubled by threats of nuclear war.

Even later into the Cold War and after it ended, the sensitivity to the idea of subliminal messaging continued to have lasting effects on the American public. In 1990, Pepsi was forced to withdraw one of its “Cool Can” designs because it was alleged that when two cans were placed on top of each other, they spelled the word “sex” (O’Barr, 2005). Even now, regulators take tough measures to address subliminal messaging. The issue manifested itself on the national level as recently as the 2000 presidential campaign, when the Republican National Committee aired an advertisement against candidate Al Gore’s suggested prescription drug policy. The advertisement closed by flashing the word “RATS” across the screen for a fraction of a second before showing the entire word “Bureaucrats.” The Republican National Committee dismissed the sequence as a mere coincidence, but the advertisement triggered from the American public extreme opposition and accusations of manipulation (O’Barr, 2005).

A fabrication of data in 1957 has evolved into a prevalent topic in the advertising world. Until his death in 1977, Vicary maintained that the experiment in Fort Lee, New Jersey, did in fact take place. Since the 1962 interview with *Advertising Age*, investigators speculate that Vicary may have held an experiment of some type, but he exaggerated the numbers for publicity-related reasons (Bond, 2009, p. 7). Only one movie theater in Fort Lee existed in 1957, and it holds no such records of Vicary’s experiment. Regardless of the credibility of the findings, Vicary admitted that the experiment was based on little scientific evidence, confessing, “What we had shouldn’t have been used promotionally” (cited in Bond, 2009, p. 8). Vicary planted a mental explosive in the mind of the American public. To this day, science has not confirmed the effectiveness of subliminal messaging. The paranoia

surrounding it, however, remains strong. The controversy of subliminal messaging manifests itself every so often, and will likely continue to do so as technology advances. Over fifty years, or 1.6 billion seconds later, James Vicary’s 1/3000<sup>th</sup> second mistake continues to affect the public. That’s powerful advertising.

#### References

- Bond, G. (2009). 1/3,000<sup>th</sup> of a Second in Fort Lee. *Garden State Legacy* #3.
- Kolb, R. W. (2008). *Encyclopedia of Business Ethics and Society, Volume 2*.
- Lindstrom, M. (2008). *Buyology: Truth and Lies About Why We Buy*. New York: Broadway Books.
- O’Barr, W. (2005). Subliminal Advertising. *Advertising & Society Review*. Retrieved from <http://muse.jhu.edu/journals/asr/v006/6.4unit03.html>.
- Packard, V. (1957). *The Hidden Persuaders*. New York: Van Rees Press.
- Schaff, M. (2009). Bomb Shelters & Fear of Nuclear War. 1-2.
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## Elissa Wolf

### Lester Burnham: Every Man's Hero

Most people are quite familiar with the concept of madness and have heard the term used lightly throughout their everyday lives. Despite its prevalence, it is difficult to define madness explicitly and concretely. The film *American Beauty*, directed by Sam Mendes, presents a case where madness is ambiguous and indefinable. The protagonist, Lester Burnham (Kevin Spacey), leads a dull life until one night he is “awakened” by a passionate desire for his daughter’s young friend, Angela Hayes (Mena Suvari). Angela becomes the focus of an obsession that changes his entire life outlook. Both critics and casual viewers debate Lester’s controversial obsession, and their reactions range from condemnation to celebration. Popular reviews of the film show multiple attitudes: some critics find Lester’s actions heroic, while others denounce him as depraved. Although Lester’s actions are controversial, his mind is still intact, and his thinking remains reasonable. Ultimately, Lester demonstrates that obsessive behavior does not constitute madness.

Obsession is described as “a form of madness that can exist with little trouble in the everyday world” (Fuery 50) in *Madness and Cinema*. Of the three forms of madness Fuery examines—neurosis, hysteria, and psychosis—neurotic obsession is the most indistinct. More specifically, it is unclear when a relatively harmless obsession crosses the line into madness. This quality makes all people capable of madness, even—or especially—the average, everyday man.

It is true that many aspects of Lester’s obsession can be construed as madness. The degree of Lester’s focus can reasonably be described as obsessive madness because his thoughts go beyond simple fantasizing and come to fuel his every action. In addition, the type of relationship that he pursues with Angela contributes to the sense of lunacy. A potential relationship between Angela and Lester defies

social norms on multiple levels. For one, Lester is already married, and society typically condemns extramarital affairs, even if the marriage is unhappy. Lester consciously disregards societal norms. It also cannot be denied that pedophilia characterizes his obsession: Angela is still in high school, is not of legal age, and is the same age as Lester’s daughter. Pedophilia is technically defined as a psychiatric disorder; it thus follows logically that Lester suffers from clinically defined madness. Taken further down the path of psychosis, the relationship could even be considered incestuous. It is plausible that Lester actually has feelings towards his daughter, Jane Burnham (Thora Birch), and is projecting them onto Angela (Karlyn 10). The pursuit of a relationship that is so clearly taboo, due to marital status, age, and underlying incest, points to an error in his mental reasoning.

Despite all of this evidence, many viewers avoid labeling Lester’s obsession as pedophilia. User-submitted reviews to the Internet Movie Database (IMDb) reveal this aspect of public opinion. Out of 492 IMDb critics of *American Beauty*, only two actually use the word “pedophilia” in their reviews; the majority leave the relationship undefined. This tendency can be explained by viewer identification with Lester (McKittrick 5). Lester becomes relatable by embodying a normal “everyman”; he lives a fairly average life in suburbia, and the Burnham family represents a typical suburban family (Deneen 7). Viewers can relate to him because he “typifies thousands of frustrated American men” (Lewin 1). In fact, all members of this “suburban nuclear family” (Deneen 7) seem to suffer from some form of neurosis: Carolyn is cold and controlling, and Jane talks of killing her father. Ironically, “the only well adjusted and traditionally ‘normal’ family that appears during the course of the film is the gay couple” (7). *American Beauty* shows that Lester is not alone in his unconventionality, and all people have some sort of quirk. Evidently, society accepts this point of view, and realizes that no human is truly “normal.”

Much of society would not condemn an older male for simply feeling sexually attracted to a younger female. These feelings are quite common; consequently, society has set a historical precedent of defending the behavior of the man in a pedophilic relationship and diverting blame to both the older and younger women (Karlyn 2). In real-life cases of pedophilia and incest, a female’s traumatic account is often

ignored or minimized to maintain the man's innocence (6). Prevalence of incest in real life is reflected in media; incest is a common motif in many forms of fiction, including novels, myths, and visual media. Within the motif, characters involved tend to adopt specific, stereotypical roles (2). The wife, or whatever older woman the man is committed to, is portrayed as emotionally unavailable. The daughter is typified as a "nymphet": a slinky seductress to whom the father falls victim (4). The characters in *American Beauty* accurately embody these classic roles:

Lester becomes a sympathetic victim, innocent of serious wrongdoing and ultimately redeemed by his martyrdom. If Angela is the "seductive daughter," Carolyn (Annette Bening) becomes coded as the "collusive mother" who is ultimately responsible for her husband's incestuous desires because of her various inadequacies. (Karlyn 10)

Angela's physical appearance and self-portrayal reinforce this image. She is physically developed and womanly, and she openly claims extensive sexual experience (Karlyn 12). The line between girlhood and womanhood is blurred, and Lester's feelings towards Angela become more understandable. Like all imperfect men, Lester "can disapprove of [his] thoughts, but cannot stop [himself] from having them" (Ebert 2).

Lester's obsession is not true pedophilia because his real aim is self-renewal and regained vitality. He is unsatisfied with all aspects of his life—his career, his family, and the town he lives in—and he appears to be utterly passionless. Seeing Angela ignites a passion within him, and allows him to feel alive again (7). Although Angela may have triggered overwhelming desire, she is not the prize he is working towards—she simply catalyzes his latent yearning for youth. His desperate desire is evident in the behavioral changes that result from his "awakening": Lester buys a car he has always wanted, takes up smoking marijuana, and begins working out. These are all attempts to recapture both the physicality and mentality of youth; "he seeks to relive the freedom of his youth" (Deneen 7). Imprisoned in suburbia, Lester actually intends to escape through these pursuits, not through the seduction of a young girl. When he finally has the chance to sleep with her, he chooses not to, proving that his true goal was not her physical self but the feelings he associates with her (Karlyn 12).

Lester's seemingly mad actions are actually inspirational. It is common and often accepted to behave in extreme ways as a result of unhappiness. Much of Lester's unhappiness is due to societal constraints. By unabashedly defying these social rules, Lester makes a statement against society. Even if the defiant actions themselves are taboo, they are inspired by a nobler goal: to rebel against society and regain happiness. Angela makes him aware of his own unhappiness, and instead of complacency, he takes active steps towards alleviating it. Angela spawns new ideas, and "his thoughts, and the discontent they engender, blast him free from years of emotional paralysis" (Ebert 2). He simultaneously rejects unsatisfying aspects of society and regains meaning in his life, and this transformation is "terribly uplifting and somehow freeing" (McKittrick 7) for viewers. Viewers are inspired because his afflictions are common issues that the average viewer can relate to: sterility, failing relationships, and an overall lack of satisfaction. These viewers identify with Lester and may experience similar neurotic or taboo obsessions, but they do not consider them madness. This is evident in some IMDb reviews in which critics encourage Lester, and even "critique the film for not taking a stronger and more positive stand on intergenerational erotic love" (McKittrick 7). Lester carries out the fantasies that thousands of complacent Americans secretly desire for themselves (1). In this way, Lester becomes a hero for the "everyman" (Karlyn 11).

The average person exhibits traits of madness at some point or another. The ambiguity lies in defining madness: how many pathological behaviors are necessary to make someone abnormal? While Lester displays actions that are necessary to pedophilia, this does not characterize him as a pedophile. Throughout his controversial acts, Lester's thinking remains sound, and his motivations are both relatable and inspirational. If madness requires abnormal thinking, Lester cannot be mad; he deals reasonably with problems with which nearly everyone can identify. Contrarily, Lester's mind becomes clearer than ever as he is impassioned to reform his life. Countless Americans can aspire to reach a similar rejuvenation. Lester is a hero, not a madman.

## References

Deneen, Patrick J. "Awakening from the American Dream: The End of Escape in American Cinema?" *Perspectives on Political Science* 31.2 (2002): 96-104.



EBSCO MegaFILE. Web. 28 Oct. 2010.

<<http://web.ebscohost.com/ehost/detail?vid=3&hid=15&sid=2e9e10fe-bf73-4449-b1dd4c0856f16350%40sessionmgr13&bdata=JnNpdGU9ZWZWhvc3QtbGl2ZQ%3d%3d#db=keh&AN=6836294>>.

Ebert, Roger. "American Beauty." Rev. of American Beauty. Roger Ebert. 24 Sept. 1999. Web. 29 Nov. 2010. <<http://rogerebert.suntimes.com/apps/pbcs.dll/article?AID=/19990924/REVIEWS/909240301/1023>>.

Fuery, Patrick. *Madness and Cinema: Psychoanalysis, Spectatorship and Culture*. Basingstoke: Palgrave Macmillan, 2004. Print.

Karlyn, Kathleen R. "'Too Close for Comfort': American Beauty and the Incest Motif." *Cinema Journal* 44.1 (2004): 69-93. EBSCO MegaFILE. Web. 28 Oct. 2010. <<http://web.ebscohost.com/ehost/detail?vid=4&hid=15&sid=4df9f1d6-4d15-4f43-8ea7-e774415ac508%40sessionmgr13&bdata=JnNpdGU9ZWZWhvc3QtbGl2ZQ%3d%3d#db=keh&AN=15824856#db=keh&AN=15824856>>.

Lewin, Kevin. "American Beauty." Rev. of American Beauty. BBC Movies. BBC, 11 Dec. 2000. Web. 29 Nov. 2010. <[http://www.bbc.co.uk/films/2000/12/11/american\\_beauty\\_2000\\_review.shtml](http://www.bbc.co.uk/films/2000/12/11/american_beauty_2000_review.shtml)>.

McKittrick, Casey. "'I Laughed and Cringed at the Same Time': Shaping Pedophilic Discourse around 'American Beauty' and 'Happiness.'" *Velvet Light Trap: A Critical Journal of Film & Television* 47 (2001): 3-15. EBSCO MegaFILE. Web. 28 Oct. 2010. <<http://web.ebscohost.com/ehost/detail?vid=8&hid=15&sid=64f267cd-53c4-472c-9915-c22ee6e02397%40sessionmgr10&bdata=JnNpdGU9ZWZWhvc3QtbGl2ZQ%3d%3d#db=keh&AN=7437477>>.

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## Brigid Byrnes

### Actively Sleeping

Attending college is, by definition, an activity steeped in and premised upon learning. In a supreme irony, however, the college environment itself may actually be undermining students' ability to learn. While enrolled in college, many Americans are simultaneously engaged in countless other activities, including spending time with their friends, participating in sports or clubs, and working part-time. Such variety of activities is encouraged by peers and mentors alike, in order to have a "well-rounded" college experience. As a result, many students make the choice to cut back on sleep in order to fit in everything that is demanded of them. Students are well aware that, though they may not know the science behind it, going to class tired from not sleeping well makes it harder to learn. Yet, new advances in the study of the brain indicate that humans also need to sleep *after* absorbing information, or else the information will not be retrievable for use on a test or later in life. Booming research on the neuroplasticity of sleep has begun to explain why and how sleep affects learning. Those who are actively learning require sufficient sleep.

People need sleep to learn because it is a time of "cellular upheaval," to use Jonah Lehrer's words.<sup>1</sup> The upheaval he refers to is technically called neuroplasticity, the various ways in which the brain modifies itself. Lehrer and other writers are able to talk freely of neuroplasticity in today's world, but not long ago it had been deemed impossible. Until recently, the brain was believed to be static from birth or from very soon after. A few key scientists have since overturned this view, most notably Joseph Altman. Altman was a routinely ignored revolutionary who studied neurogenesis, the growth of new neurons, in

<sup>1</sup> Lehrer, Jonah. *Proust Was a Neuroscientist*. Boston: Houghton Mifflin Company, first Mariner Books edition: 2008. p. 41

adult organisms. In modern discussions of the field, he has begun to receive the credit he deserves. Starting in 1962, Altman used tritiated thymidine (a radioactive RNA molecule) to label neural cells, induced lesions in adult rats, and observed various brain sections after varying amounts of time. His results from the autoradiographic exploration revealed labeled neuroblasts (precursors to neurons and glia), nuclei of glia (neural support cells), and neurons in various regions both associated and unassociated with the lesions<sup>2</sup>. Based on these results, he asserted that “new neurons may come into existence in the brain of adult mammals.”<sup>3</sup> Altman even predicted that new neurons were “crucial to learning and memory”<sup>4</sup>

Elizabeth Gould’s research strongly supports Altman’s hypothesis that learning is related to neurogenesis. Jonah Lehrer refers to Elizabeth Gould as a pioneer in the field, and states that her “data shifted the paradigm.”<sup>5</sup> She read the work of Altman as well as Michael Kaplan, who used electron microscopy to achieve similar results to Altman’s. Then, she set out to draw attention to their conclusions, and thus legitimize the theory of neurogenesis. She too used tritiated thymidine for cell labeling, and conducted experiments on adult rats in which she provided evidence that neurons can be adult-generated<sup>6</sup>. Later, she took her experimentation a step further, studying neurogenesis in the hippocampus, a region in the medial temporal lobe of mammalian brains. She reported that “the number of adult-generated neurons doubles in the rat dentate gyrus [part of the hippocampus] in response to training on associative learning tasks.”<sup>7</sup> This finding further supports the idea

that new neurons in the hippocampus are involved in the formation of memories.

Brain activity during sleep is not limited to the growth of new neurons; it involves many other processes. Researchers have different foci, but agree on most of the basic mechanisms of neuroplasticity. According to Benedetta Leuner and her colleagues, plasticity in the hippocampus also involves dendrites, which are neural transmission branches, and synapses, which are junctions between neurons<sup>8</sup>. In the prefrontal cortex, as Leuner et al. explain, structural reorganization can include changes in dendrite structure and spine density. Jonathan Wolpaw highlights even more ways that the nervous system is plastic, including long-term potentiation and depression of signal transmission between neurons, gene modification, and even glial and vascular plasticity. He expands the focus of plasticity from the hippocampus and the prefrontal cortex to include many other areas, including the spinal cord.<sup>9</sup> Through extensive research and advanced technology, scientists have been able to identify several ways in which the nervous system exhibits plasticity.

Neuroplasticity increases dramatically during sleep because it is a time of no external input. Without interference, the brain is able to undergo neural re-modification, which includes dendrite and synapse modification. Forming stronger connections between associated neurons solidifies information more permanently. Such remodeling leads to “memory encoding, working memory and long-term memory consolidation.”<sup>10</sup> Robert Stickgold, a leading sleep scientist, clarifies that sleep-dependent memory consolidation is when a memory stabilizes against interference. This means that the memory can withstand other input over time and will still be available for accurate retrieval. He also defines “declarative memory, the formation of which is dependent on the hippocampus and medial temporal lobe” as “memories for events and

<sup>2</sup> Altman, Joseph. “Are New Neurons Formed in the Brains of Adult Mammals?” *Science* 135 (1962): 1127-1128

<sup>3</sup> Altman, 1128

<sup>4</sup> Gross, C. G. “Neurogenesis in the Adult Brain: Death of a Dogma.” *Nature Reviews Neuroscience* 1 (2000): 67-72. (p. 68)

<sup>5</sup> Lehrer, 41

<sup>6</sup> Gould, E. and Patima Tanapat. “Stress and Hippocampal Neurogenesis.” *Biological Psychiatry*. 46 (1999) 1472-1479.

<sup>7</sup> Gould, Elizabeth, et al. “Learning Enhances Adult Neurogenesis in the Hippocampal Formation.” *Nature Neuroscience* 2 (1999): 260-265.

<sup>8</sup> Leuner, Benedetta, Erica R. Glasper, and Elizabeth Gould. “Parenting and Plasticity.” *Trends in Neurosciences* 33.10 (2010): 465-473.

<sup>9</sup> Wolpaw, Jonathan R. “What Can the Spinal Cord Teach Us about Learning and Memory?” *The Neuroscientist* 16.5 (2010): 532-549.

<sup>10</sup> Kopasz, Marta, et al. “Sleep and Memory in Healthy Children and Adolescents.” *Sleep Medicine Reviews* 14.3 (2010): 167-177. (p. 176)

facts.”<sup>11</sup> Note that a substantial part of the learning that takes place in college classrooms is based precisely on this type of memory.

Researchers have observed that neuroplasticity during sleep is associated with learning and memory. However, a look into sleep deprivation suggests that the association is one of causation, not just correlation. Sleep deprivation impairs the brain's ability to form memories. Reto Huber discusses a study by Yoo et al. focusing on episodic memory. Half of the subjects went one night without sleep and the other half slept normally. The same slides were presented to both groups, who all subsequently slept normally. The next evening they were presented with all the same slides, plus several more, and asked to identify which ones they had seen before. Even after “catching up on sleep” the originally sleep-deprived subjects performed far worse.<sup>12</sup> This shows that the effects of exhaustion when the slides were shown were not canceled out by sleeping later on. College professors often use slide shows as a tool. Since sleep-deprived people cannot even recall whether or not they have seen a slide before, the disadvantage only multiplies when sleep-deprived students must remember the actual information on a series of slides. Catherine Hill explains that “neural networks associated with new learning [the hippocampus and the pre-frontal cortex] are reactivated in sleep.”<sup>13</sup> In other words, sleep after learning is just as important as it is before learning. The brain goes over what a person has learned over the course of the day, organizing information for use when he or she wakes up and, depending on the information, for the rest of his or her life.

Sleep research has a long way to go before scientists can say they fully understand the exact functions of sleep and their implications. For example, researchers have found that different types of memory are consolidated during different stages of sleep, but what determines

these associations is still unknown. Moreover, no one knows for certain the roles of other elements of sleep stages, such as sleep spindles. Countless other current studies will certainly continue to contribute to our understanding of sleep's impact on learning, memory, and many other aspects of the human experience. As new results emerge, college administrators should keep abreast of the findings in order to provide a learning-conducive environment. In the meantime, perhaps the best gift that parents can give to a new college student is an inviting pillow. Students should keep in mind that sleeping does not make them lazy, but rather is crucial to getting the most out of their education.

#### References

- Altman, Joseph. “Are New Neurons Formed in the Brains of Adult Mammals?” *Science* 135 (1962): 1127-1128.
- Frank, Marcos G., and Joel H. Benington. “The Role of Sleep in Memory Consolidation and Brain Plasticity: Dream or Reality.” *Neuroscientist* 12.6 (2006): 477-488.
- Gould, Elizabeth, et al. “Learning Enhances Adult Neurogenesis in the Hippocampal Formation.” *Nature Neuroscience* 2 (1999): 260-265.
- Gould, E., and Patima Tanapat. “Stress and Hippocampal Neurogenesis.” *Biological Psychiatry* 46 (1999): 1472-1479.
- Gross, C. G. “Neurogenesis in the Adult Brain: Death of a Dogma.” *Nature Reviews Neuroscience* 1 (2000): 67-72.
- Hill, Catherine M., Alexandra M. Hogan, and Annette Karmiloff-Smith. “To Sleep, Perchance to Enrich Learning?” *Archives of Disease in Childhood* 92.7 (2007): 637-643.
- Huber, Reto. “Memory Formation: Sleep Enough before Learning.” *Current Biology* 17.10 (2007): R367-R368.
- Kaplan, M. S., and J. W. Hinds. “Neurogenesis in the Adult Rat: Electron Microscopic Analysis of Light Radioautographs.” *Science* 197 (1977): 1092-1094.
- Kaplan, M. S. “Neurogenesis in the Three-Month-Old Rat Visual Cortex.” *Journal of Comparative Neurology* 195 (1981): 323-338.
- Kopasz, Marta, et al. “Sleep and Memory in Healthy Children and Adolescents.” *Sleep Medicine Reviews* 14.3 (2010): 167-177.
- Lehrer, Jonah. *Proust Was a Neuroscientist*. Boston: Houghton Mifflin Company, first Mariner Books edition: 2008.
- Leuner, Benedetta, Erica R. Glasper, and Elizabeth Gould. “Parenting and Plasticity.” *Trends in Neurosciences* 33.10 (2010): 465-473.
- Stickgold, Robert. “Sleep-dependent Memory Consolidation.” *Nature* 437 (2005): 1272-

<sup>11</sup> Stickgold, Robert. “Sleep-dependent Memory Consolidation” *Nature* 437 (2005): 1272-1278.

<sup>12</sup> Huber, Reto. “Memory Formation: Sleep Enough before Learning.” *Current Biology* 17.10 (2007): R367-R368.

<sup>13</sup> Hill, Catherine M., Alexandra M. Hogan, and Annette Karmiloff-Smith. “To Sleep, Perchance to Enrich Learning?” *Archives of Disease in Childhood* 92.7 (2007): 637-643. (p. 641)

1278.

Wolpaw, Jonathan R. "What Can the Spinal Cord Teach Us about Learning and Memory?" *The Neuroscientist* 16.5 (2010): 532-549.

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## Anthony Murphy

### Humanism and the Development of Republicanism

The development of humanism in the fifteenth century sparked a political transformation of the Italian state. What once was a hierarchy defined by God transformed into a dynamic republic that encouraged liberty, equality, and participation. Or so it seems. Historians today question humanism's role in the propagation of republicanism. While many humanists espoused republican ideals in their writings, historians find that in practice they worked alongside the oligarchy to reduce the political power of the people. As a result, there exist two seemingly incompatible interpretations of humanism: one that praises humanism for its democratic values, and the other that degrades it as a tool of the elite. Which interpretation is accurate? The answer is both. Humanism initially strengthened the power of the ruling class but ultimately prompted its downfall by propagating the ideals of republicanism.

Humanism began as an intellectual and cultural revolution that rejected the tenets of scholasticism. From its ideas arose a new assessment of reality that reshaped how individuals viewed themselves and society. In the centuries prior to the Renaissance, Christian scholasticism dominated medieval thought. At its core was the belief that reality reflected a divine order, one in which social hierarchies and power relations were reflections of God's will. The individual, in turn, had to obey God and thus stood powerless to the social and political order.<sup>1</sup> Humanism challenged this notion with a radically different perception of reality. No longer was reality a divine order but rather a

<sup>1</sup> Hans Baron, *The Crisis of the Early Modern Italian Renaissance* (Princeton: Princeton University Press, 1966), 273-353.

product of human actions. This notion placed new emphasis on the role of the individual, and the humanists argued that the *vita activa*, the active life of man as a public servant, was essential to the realization of his *humanitas*.<sup>2</sup> Thus, humans—intellectually and politically active humans—became agents of change. Humanism redefined history as a chronicle of human actions, not a past subordinated to God. With this conception of man humanism rejected scholasticism and its objective view of reality.

With reality no longer defined by a static order, the humanists set forth to employ pragmatic and historical arguments to legitimize the political hierarchy. The main source of their political theory became the writings of Ancient Greece and Rome.<sup>3</sup> These writings described a multitude of power structures, which allowed the humanists to accommodate many different political theories. As a result, no one theory defined humanism. So while some humanists proclaimed the benefits of the republic, other humanists could proclaim the benefits of monarchy without contradicting the humanist ideology. Today, this inconsistency is a major cause of the confusion surrounding humanist political theory. Because historians cannot pinpoint the exact role of humanism in Renaissance politics, they divide along two fronts. Some argue that humanism fostered the modern idea of republicanism; others say that it did not.

The first side of this debate, espoused by the historian Hans Baron, argues that humanism laid the foundation for modern political thought. He views humanism's contribution to politics as positive because it propagated the ideals of liberty and equality. Baron's main protagonist is the humanist Leonardo Bruni, whose work *The Oration for the Funeral of Nanni Strozzi* forcefully and succinctly presented the modern conception of republicanism to the Renaissance world.<sup>4</sup> At the heart of Bruni's republican theory was the concept of *libertas*: the liberty of the political body from external domination and the liberty of the citizen. Bruni conceptualized each citizen's liberty as the liberty to participate in the

political life of the community, which he affirmed when he wrote, "The constitution we use for the government of the republic is designed for the liberty and equality of indeed all the citizens."<sup>5</sup> Thus, Baron sees in humanism the origin of modern republican values and the affirmation of political participation.

More recent historians turn Baron's interpretation on its head. Rather than defenders of liberty and equality, they believe the humanists were the ideologues of the narrow Italian oligarchy, opposing and defeating the popular spirit on its behalf. And they were effective ideologues. Lauro Martines argues that the republicanism of the humanists served to unify the ruling elite. By creating the appearance of a wide participatory government, it attracted the loyalty of the populace.<sup>6</sup> John Najemy's analysis of Florence leads to a similar conclusion: humanism's republicanism was instrumental in consolidating the rule of the Florentine oligarchy.<sup>7</sup> It did this by projecting a false image of Florence as a unified political body characterized by wide participation. It stressed that public offices were open to every citizen, while obscuring the fact that these offices were devoid of real political power. Taking a slightly different approach, Anthony Grafton and Lisa Jardine examine humanism from an educational perspective, but their conclusion is the same. They argue that humanism permitted the ruling classes to confer on their students an aura of culture that mystified the masses and confirmed their subjection.<sup>8</sup>

There are, therefore, two opposing interpretations of humanism. One accepts humanism's self-presentation as a movement of cultural renewal and underscores the innovative solutions offered by the humanists for social and political problems. This interpretation emphasizes the progressive elements of humanism. The second interpretation, however,

<sup>5</sup> Ibid., 423.

<sup>6</sup> Lauro Martines, *The Social World of the Florentine Humanists 1390–1460* (London, 1963), 271–286.

<sup>7</sup> John Najemy, "Civic Humanism and Florentine Politics," in *Renaissance Civic Humanism*, ed. James Hankins (Cambridge: Cambridge University Press, 2000), 75–104.

<sup>8</sup> Anthony Grafton and Lisa Jardine, *From Humanism to the Humanities* (Cambridge: Harvard University Press, 1986), xii.

<sup>2</sup> Ibid., 132–145.

<sup>3</sup> Ibid., 273–353.

<sup>4</sup> Ibid., 412–432.

is suspicious of the humanists' self-image and rhetoric. It views the republicanism of the humanists as the ideology of the Italian oligarchy, an instrument for reproducing the established political order.

Both interpretations accurately describe humanism. Humanist political language was not necessarily democratic or egalitarian, but its undermining of the objective political order created the possibility for an entirely new perception of political and social relations. It opened the way to perceive power relations and inequality as arbitrary and therefore unjustified. Having lost their objective status, power relations could now be effectively challenged. Moreover, with the social and political order perceived as a changeable product of human actions, notions of political equality and liberty became plausible. An examination of Italian politics in the fifteenth and sixteenth centuries shows that these theoretical options were fully realized.<sup>9</sup> Humanism was certainly the official ideology of the ruling elite during the first decades of the quattrocento. But during this period, republicanism's political meaning and function were also well known. Humanist writings brought republicanism to the forefront of Italian political thought and, by doing so, created a populace mindful of liberty and equality. The subsequent adoption of this language by the oligarchy inevitably limited their exercise of power. It propagated a civic ethos and sentiment that obliged the elite to allow some degree of political voice to the people. This became clear following the rise of the Medici. The Medici found it advisable not to change the form of government in Florence because of the vigor of the republican ethos. Twice, in 1494 and in 1527, revolts informed by republican political thought ousted the Medici in favor of regimes based on wide participation.<sup>10</sup> Italian history thus demonstrates that republicanism was not just the ideology of the ruling oligarchy. It equally served those opposed to power.

Humanism propagated the modern notions of liberty and equality, as Baron argues. At the same time, as Martines, Najemy, Grafton, and

Jardine demonstrate, it also produced a legitimizing discourse that disguised the control of the elite. But what truly marks the modernity of humanism's political language is its anti-metaphysical nature. Humanist discourse rejected the premise of scholastic philosophy that behind reality there lies an intelligible and unchangeable order. It was the rejection of this assumption, and the consequent substitution of theological and metaphysical categories by historical and concrete ones, that provided the theoretical basis for the success of republicanism.

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<sup>9</sup> Janet Coleman, *A History of Political Thought: From the Middle Ages to the Renaissance* (Oxford: Blackwell Publishers, 2000), 239-260.

<sup>10</sup> Ibid., 254.



## Alex Rosner

### When Great Minds Meet Great Dreams

“A shaft of sunlight shines down on him, as if in recognition” (Miller, 266). This is the last sentence of Arthur I. Miller’s book *Einstein, Picasso*. This concluding remark has given rise to an interest in the fame and glory of brilliant individuals. The questions of the nature of genius and the mystery of the genius mind conceptualize themselves to the readers upon reading this book. The author has devised his theory on the nature of genius by building on fascinating, reliable and dogmatic sources. *Creating Minds* by Harvard psychologist Howard Gardner and *Productive Thinking* by neurobiologist Max Wertheimer are commonly referred to as they share a common interest in the fundamentals of the frame of mind of geniuses. The comparison that Arthur I. Miller establishes between Picasso and Einstein serves as a wonderful backdrop to the investigation of the common intellectual links of great thinkers. Together a common childlike rationale and a stimulating intellectual avenue of creativity are the outcome of great minds meeting great dreams.

In order to better understand “Genius” and with the intent of deepening our understanding of the intellectual frame of mind that surrounds individuals such as Picasso, Einstein or even Mozart and Stravinsky, one is reminded of the quote pronounced by Helen Keller: “The only thing worse than being blind is having sight but no vision.” (Davidson, p.57) The ability to see beyond reality, to question and to devise is one of the crucial aspects of genius. The unique cognitive quality of understanding a problem and theorizing a solution is at the core of genius and is arguably inherent to all great thinkers. Gardner argues in his study “Creating Minds” that this talent and aptitude to grasp, imagine, speculate, conceptualize and devise is the key that gives rise to genius concepts and products. Thus, the nature of genius depends on the ability and quality of visualization. Whether it be in science or in

art, visual imagery and conceptualization foster a creative mindset and allow for an intellectual framework.

Einstein took advantage of his capacity to visualize his ideas in order to better work on the inception of his oeuvres. Miller explains that “Einstein’s power of visual thinking was to frame a problem as thought experiment in which he could ‘see’ its ‘deep structure’” (250). Einstein’s imagination allowed him in 1905 to fathom the concept of relativity. His famous Theory of Relativity came as a result of years of scientific inquiries that all originated from the remarkable ability he had to apply his minimalistic visual approach to science. Poincaré, one of Einstein’s greatest rivals and a brilliant mathematician, once explained that the mathematician must have responsiveness to aesthetics and therefore “looks for solutions to problems because they usually turn out to be at once useful and beautiful” (Poincaré, 59). While artistic grace and mathematical beauty do not instigate the same charm and emotions, they do share a similar intellectual elegance. The genius that is concealed behind the scientist is therefore on par with that of the creative artist. While Einstein’s frame of mind was one of cognitive conceptualization, Picasso sought to illustrate his intricate visions of geometry, as we can see in such paintings as *Les Femmes d’Alger* or *Three Musicians*. Both Einstein and Picasso therefore shared the ability to “see” what they imagined, in other words “to visualize.” This idea carries us back to the quote by Helen Keller: great geniuses have vision; they all share

*Les Femmes d’Alger*



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*Three Musicians*



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the ability to envisage, which is a crucial instrument in their creative process. Seeing is not crucial; Beethoven and other wonderful minds have been venerated for their remarkable talent and prodigious works despite their not being able to appreciate the real visual world. Their minds replace the latter by employing powerful imagination. Genius is therefore an inherent quality that goes beyond physical capabilities; it is the cognitive understanding and realization of imagination.

But one may question imagination: where or why is this skill for elusive thoughts developed? The answer is that a genius is a child. Psychologist Svante Bohman explains in his complicated analysis *What Is Intelligence?* that imagination is not magical; it is instead an approach to reality. Thus both Howard Gardner and Wertheimer explain this by focusing on the luminaries' ability to think simply and to focus on essentials. This unpretentious approach is very similar to a childlike naiveté. The authors mutually argue that this allows for a more unconcerned approach. "The childhood wishes, fantasies, dreams underscore the extent to which the consciousness of the child remains crucial to the genius thinking" (Gardner, *Creating Minds* p. 365). The core creation, inventiveness and inquisitiveness are what allowed him to establish himself as a leading figure. We can therefore extend this idea and infer that what genius needs most is "child curiosity." "Einstein prided himself on the preservation of childlike features, such as curiosity and defiance of convention" (Gardner, p. 365). Similarly an infantile behavior is crucial to the establishment of genius. Picasso once said: "It took me 12 years to paint like Raphael, but a lifetime to paint like a child." Picasso cultivated certain childlike personality features: his enormous quest for possession and his desire to control all aspects of his life are perfect examples. Thus, this childlike approach promotes curiosity and questioning, which leads the individual to not only ask a better question than most people, but in fact to ask the best question. This ability to think in a simple fashion is at the forefront of the genius mind and allows for revolutionary imagination and conceptualization.

From this childlike understanding of the world has evolved a creative and inventive mindset. This is unquestionably the single most important facet of the genius mind. The ability to conceptualize, visualize, dream and generate is argued by Gardner and Wertheimer to be highly important, but the pure creativity that underscores all findings

is the single most important element to fathom the genius mind. The scientists conceptualize and theorize: "Whatever their original missions, Einstein and Freud are most remembered for the broad schemes they developed—relativity theory by Einstein and psychoanalytic theory of unconscious processes by Freud" (Gardner, p. 374). Artists on the other hand seek to create a product: "Artists create small-scale products, such as preliminary sketches or brief poems, or larger-scale ones, such as murals, operas, or novels. These works embody ideas, emotions, and concepts, but they are not well described, overall, as efforts to solve problems or to create conceptual themes" (Gardner, p. 374). Miller argued that in order to be a genius one must be revolutionary. Gardner and Wertheimer support this idea, and we can extend this understanding by defining a pattern of creativity. This complicated "creative" scheme consists of the analysis and assimilation of particular symbols or systems, the creative intellectual work, the dream, and the ultimate invention and execution of the work. Einstein once said: "Problems cannot be solved by the same level of thinking that created them."

The nature of genius finally emanates from the ability for the remarkable individual's findings to change the common thought, to foster a new approach, to be revolutionary and ground breaking. Howard Gardner explains (Gardner, 373 to end) that Mozart was able to transmute the nature of music by bringing about the Romantic Period after putting an end to the traditional Baroque Era. His ability to create a generally accepted change is in fact on a broader scale at the very core of genius capacities. Picasso and Einstein were also able to radically change the common thought that surrounded their respective fields of interests. Picasso pioneered the Cubist movement that dramatically altered the traditional artistic credos that had been numbing the creative minds of artists at the time. Similarly, Einstein's ability to devise the Theory of Relativity allowed for some ground-breaking discoveries and paved the way to modern science. Thus, genius is defined by breakthroughs. These breakthroughs, in the case of Einstein and Picasso, gave birth to the Modern Era.

By researching and studying the nature of genius we have come to find four crucial facets of the brilliant mind. First, luminaries visualize and conceptualize; the ability to picture, to see ahead is a rare yet pivotal skill. Second, genius requires in many ways a childlike way of looking

at things, one in which simple, naïve, and unspoiled questions are asked and contemplated. The third quality is the inventiveness or creative lucidity, and finally, genius is progressive and seeks to revolutionize common social patterns or understandings by continuously redefining what is considered modern. Ultimately, geniuses do not simply master new ideas; they make them by instigating new outlooks on reality. Whether it is by creating new literary, musical or artistic movements or by pioneering cutting-edge theories, geniuses create the modern world. The genius mind is constantly seeking new trends and breakthroughs. Seeing beyond existing reality and having a vision of a deeper and more abstract truth is thus the inherent instrument that leads to their prominence. So therefore to the overriding question “what happens when great minds meet great dreams” the answer is simply...brilliance.

#### References

- Davidson, Margaret. *Helen Keller*. Scholastic Biography. 1989
- Gardner, Howard. *Extraordinary Minds: Portraits of Exceptional Individuals and an Examination of Our Extraordinariness*. London: Weidenfeld & Nicholson. 1997
- Gardner, Howard. *Creating Minds*. Basic Books & Harper Collins. 1993
- Miller, Arthur I. *Einstein, Picasso: Space, Time and the Beauty that Causes Havoc*. Basic Books Edition. 2001
- Poincaré, Henri. *Dernières Pensées*. Paris: Flammarion. 1913
- Wertheimer, Max. *Productive Thinking*. Harper Books. Original: U. of Michigan. 2008
- Artworks
- Picasso, Pablo. *Three Musicians*. Fontainebleau, summer 1921. Oil on canvas, 6' 7" x 7' 3" (200.7 x 222.9 cm). Mrs. Simon Guggenheim Fund.
- Picasso, Pablo. *Les Femmes d'Alger (O. J. R. M.)*. Paris, June-July 1907. Oil on canvas, 8' x 7' 8" (243.9 x 233.7 cm). Acquired through the Lillie P. Bliss Bequest.
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## Jay Yang

### Four Shades of Yellow: An Early History of East Asian Stereotypes in Film

“*Small things sometime tell large stories.*” —*The honorable detective Charlie Chan*<sup>1</sup>

Opium dens in old Chinatown. The fair maiden faithfully waiting for her suitor to return for her years after the war. The “whiz kid” crunching long strings of numbers in his head. The exotic dominatrix dressed in a tight-fitting, silk gown. Early film history presented four key, archetypical stereotypes of East Asians and Asian Americans<sup>2</sup>. Asians<sup>3</sup> were presented on two ends of the spectrum as both evil, conniving masterminds and docile, upstanding citizens. The Yellow Peril and the Model Minority stereotypes depicted Asian characters as ostensibly “bad” or “good.” The second pair of stereotypes is similarly diametric, but with a focal point placed on gender and sexuality. Whereas the Dragon Lady is a “sexually alluring and sophisticated” seductress, the Lotus Blossom stereotype painted Asian women as docile and submissive to the white man<sup>4</sup>. When studying stereotypes, we examine how they are based upon “style, figures of speech, setting, narrative devices, historical and social circumstances, *not* the correctness of the representation.”<sup>5</sup>

<sup>1</sup> H. Bruce Humberstone, *Charlie Chan at the Opera*.

<sup>2</sup> Hemant Shah, “‘Asian Culture’ and Asian American Identities in the Television and Film Industries of the United States,” 2.

<sup>3</sup> From this point on, the singular term “Asian” will be used to describe any peoples of East Asian descent, including Asian Americans.

<sup>4</sup> Ibid., 3-4.

<sup>5</sup> Edward W. Said, *Orientalism*.

In his work *Orientalism*, Edward W. Said notably asserts that a more useful approach in any critique of these fabricated stereotypes lies in their deconstruction rather than their denunciation<sup>6</sup>. By examining the nature of American films from the early twentieth century, we can begin to shape conclusions about the formation of stereotypes. Early cinema generated key Asian stereotypes.

Stereotypes can be created by the media and often have powerful implications. By definition, stereotypes are “beliefs held to be applicable to at least the majority of the members of a racial or ethnic group.”<sup>7</sup> These beliefs are formed through contact experiences that condition an audience to perceive a group in a certain way, whether positive or negative. Yet when there are few opportunities for direct contact with racial group members, according to Dalisay and Tan, the media “serve as important agents in the formation and reinforcement of racial stereotypes.”<sup>8</sup> Research on priming has shown the media to be particularly significant in that images containing racial cues can influence subsequent judgments regarding race-based issues<sup>9</sup>. Stereotypes are a form of re-presentation—and often grow to define a specific group. As Xing asserts: “Cultural critics have long argued that identities are formed through representations rather than ethnic heritage.”<sup>10</sup>

These identities are blurred by the media’s grouping of Asians and Asian Americans. In particular, early American popular cinema served to reinforce stereotypes by focusing on Asian characters, rather than Asian American characters.<sup>11</sup> Images on the big screen portray Asians as Orientals; Jeanette Roan’s concept of *orientalism* describes the construction of the foreignness of Asians in America by conceiving a

difference between the “US identity and the Asian difference.”<sup>12</sup> Asians are veritably foreign characters. Asian Americans, on the other hand, often identify more closely with America than with any overseas nation. By focusing the lens on Asians, early film created stereotypes that were transposed upon Asian Americans—what the scholar Eugene Franklin Wong termed “racist cosmetology,” wherein common physical features such as slanted eyes distinguished race more so than any personal characteristics or identity.<sup>13</sup> As a result, the Asian and Asian American were unified in the minds of the American viewing public.

One of the earliest ways in which films created Asian American stereotypes was in building hysteria around the Yellow Peril, a reaction to increasing Asian immigration in the late nineteenth century. With the end of slavery and the influx of Chinese immigration to the United States, Gina Marchetti notes, the Yellow Peril was reconceived as “a flood of cheap labor threatening to diminish the earning power of white European immigrants.”<sup>14</sup> Asian immigrants who were willing to work in poor working conditions for lower wages embittered many white Americans. On the silver screen, the Yellow Peril was characterized by tropes of “exoticism, mystery, and danger.”<sup>15</sup> The archetypal character of the Yellow Peril was a man known as Dr. Fu Manchu.<sup>16</sup> In movies such as *The Mask of Fu Manchu* (1932), he was a gangly man with slanted eyes, long black hair, and an infamous pointed moustache. Described as “heartlessly evil and preternaturally cunning, a brilliant but diabolical force set on taking over the world,” his hyper-Asian appearance presented an image of an alien threat to Americans.<sup>17</sup> Another aspect of the Yellow Peril was, as Marchetti put it, rooted in the “racist terror

<sup>6</sup> Ibid.

<sup>7</sup> Eugene Franklin Wong, *On Visual Media Racism: Asians in the American Motion Pictures*, 19.

<sup>8</sup> Francis Dalisay and Alexis Tan, “Assimilation and Contrast Effects in the Priming of Asian American and African American Stereotypes through TV Exposure,” 8.

<sup>9</sup> Ibid., 9.

<sup>10</sup> Jun Xing, *Asian America Through the Lens: History, Representations, and Identity*, 37.

<sup>11</sup> Gish Jen, “Challenging the Asian Illusion,” 1.

<sup>12</sup> Jeanette Roan, *Envisioning Asia: On Location, Travel, and the Cinematic Geography of U.S. Orientalism*, 8.

<sup>13</sup> Wong, *On Visual Media Racism: Asians in the American Motion Pictures*, 40.

<sup>14</sup> Homay King, *Lost in Translation: Orientalism, Cinema, and the Enigmatic Signifier*, 7.

<sup>15</sup> Roan, *Envisioning Asia: On Location, Travel, and the Cinematic Geography of U.S. Orientalism*, 7.

<sup>16</sup> Robert G. Lee, *Orientalism: Asian Americans in Popular Culture*, 113.

<sup>17</sup> Jen, “Challenging the Asian Illusion,” 2.

of alien cultures, sexual anxieties, and the belief that the West will be overpowered and enveloped by the irresistible, dark, occult forces of the East.”<sup>18</sup> Films such as Cecil B. DeMille’s *The Cheat* (1915), in which the famous Asian actor Sessue Hayakawa was portrayed as preying upon a Caucasian girl, also reflected the Yellow Peril. *The Cheat*’s eroticization of the East and threat of miscegenation tapped into primal fears and anxieties of invasion.<sup>19</sup>

On the other hand, the creation of the Model Minority painted a glorified image of Asian Americans. After the xenophobia that surrounded the Yellow Peril and the last of the anti-immigration laws passed over, a new, “benign” figure emerged.<sup>20</sup> But even benign stereotypes could be unrealistic; as Jen Gish writes, “vilification is merely replaced by glorification.”<sup>21</sup> This character, Charlie Chan, was a portly old “Chinaman” who remained an American sensation for almost two decades, the title character of forty-four films. He is often considered the original Model Minority, solving crimes with his super-human deductive abilities. In *Charlie Chan at the Opera* (1936), Charlie Chan’s personal characteristics reflect stereotypes that portray Asian Americans as weak and subservient. Throughout the movie, Charlie is exceedingly apologetic. Multiple times throughout the film, he utters the words: “so sorry the trouble [sic].”<sup>22</sup> Charlie’s excessive apologies portray him as submissive, obedient, and inferior. Likewise, Charlie is spineless when bullied by the other macho, Caucasian police officers. This stereotypical image of a subservient Asian American populace was burned into the minds of the American public; Asian domestic servants were commonly called Charlie—as in “Good boy, Charlie”—by their employers.<sup>23</sup> Although Charlie was beloved by a primarily white American audience, the Model Minority stereotype he portrayed had poor implications for Asian Americans.

Historically, films have portrayed Asian females as either blatantly domineering or demure. The Dragon Lady stereotype of Asian characters is “deeply ingrained in the American cultural imagination.”<sup>24</sup> In movies such as *The Thief of Bagdad* (1924), Asian women are depicted as devious and overtly sexual. Anna May Wong, one of the most notable early actors, plays a scantily clad Mongol slave. She is depicted as conniving and immoral, scheming to aid the villainous Mongol prince by poisoning the princess. In another movie, *The Bitter Tea of General Yen* (1933), Toshia Mori plays Mah-Li. Mah-Li is General Yen’s concubine, yet she manipulates him and Megan Davis, the Caucasian woman he loves, to win what she desires. She manages to win the trust of Davis, who convinces General Yen to spare Mah-Li’s life when he discovers that Mah-Li had been spying for his enemies. In the end, though, she betrays Megan and General Yen by destroying his empire and stealing all of his riches. The Dragon Lady was commonly portrayed as manipulative and self-interested, using her exotic sexuality and seduction to achieve her deadly ends. This stereotype essentially hypersexualized images of Asian women, establishing a “sexual bondage to their racial stardom.”<sup>25</sup> According to Celine Shimizu in *The Hypersexuality of Race: Performing Asian/American Women on Screen and Scene*, the sexuality of the Dragon Lady is at once “enslaving and empowering.”<sup>26</sup> Ultimately, the Dragon Lady stereotype directly bound Asian women to a racist sexuality.

If the Dragon Lady stereotype symbolizes the eroticization of Asian body, the invention of the Lotus Blossom stereotype by popular media represents the feminization of the Asian woman. The Lotus Blossom presented Asian women as loyal and submissive to their male significant others, or as Shimizu put it, “self-sacrificing, servile, and suicidal.”<sup>27</sup> The Puccini opera *Madama Butterfly*, adapted into Olcott’s

<sup>18</sup> King, *Lost in Translation: Orientalism, Cinema, and the Enigmatic Signifier*, 7.

<sup>19</sup> Ibid. 20 Jen, “Challenging the Asian Illusion,” 2.

<sup>21</sup> Ibid.

<sup>22</sup> Humberstone, *Charlie Chan at the Opera*.

<sup>23</sup> Xing, *Asian America Through the Lens: History, Representations, and Identity*, 62.

<sup>24</sup> Shah, “‘Asian Culture’ and Asian American Identities in the Television and Film Industries of the United States,” 3.

<sup>25</sup> Celine Parreñas Shimizu, *The Hypersexuality of Race: Performing Asian/American Women on Screen and Scene*, 62.

<sup>26</sup> Ibid., 61.

<sup>27</sup> Ibid., 59.



film *Madame Butterfly* (1915), is the most noteworthy example of the Lotus Blossom.<sup>28</sup> In the film, US Navy Lieutenant Pinkerton has an affair with Cho-Cho-San, a Japanese geisha. After he departs for home abroad, she gives birth to their son. Cho-Cho-San waits faithfully for Pinkerton, and many years later he returns with his new wife to claim his son. The movie ends as she hands over the child and commits suicide out of despair. Early cinematic portrayals of Lotus Blossom Asian females relegated them to a naïve position of “total submission to men and complete faith in their superiority.”<sup>29</sup> By committing suicide, Cho-Cho-San becomes a martyr to the white patriarchal figure.<sup>30</sup> Early films burned an image in the American cultural imagination of Asian females as docile and dependent. As with the Yellow Peril and Model Minority myths, this Lotus Blossom stereotype placed all Asian females on one of two poles: either hyperfeminized or hypersexualized.

The stereotypes created by Yellow Peril, Dragon Lady, Model Minority, and Lotus Blossom still persist today, often reflected in contemporary cinema. According to Ono and Pham, “historical representations of Asians and Asian Americans have residual effects that continue to this day. While the field of representation has changed, historical representations of Asians and Asian Americans have set the parameters.”<sup>31</sup> For decades afterwards, Asians have been typecast in films to fit one or several of these stereotypes. For instance, in *Harold and Kumar Go to White Castle*, Cindy Kim is a combination of the Lotus Blossom and Model Minority stereotypes, a Princeton student who remains loyal to Harold despite being slighted on numerous occasions. The emergence of the kung fu genre in the 1960s and 1970s also harkens back to the stereotype of Yellow Peril, as many of the evil

characters were Asians who had seemingly mystical killing abilities. The Yellow Peril has also been shown to reappear, such as during the Vietnam War era in films such as *Full Metal Jacket* (1987), which depicted the Vietcong as merciless, cold, and calculating. In more recent times, the Model Minority stereotype has evolved to inextricably link Asian characters to technology. Characters such as Data, in *The Goonies* (1985), are unassuming “computer nerds” who “provide bumbling comic relief,” much like their ancestor Charlie Chan.<sup>32</sup> Furthermore, the “techno imagery” in films such as *The Matrix* (1999), starring Keanu Reeves, a mixed-race actor, supports the perception of the East as a technologically futuristic land.<sup>33</sup> Stereotypical remnants of the past are burned into the public imagination, rather than erased with time.

Ultimately, stereotypical delimitations are only a fraction of the racist properties of early cinematic history. As Wong argues in his seminal work on Asians in film, “role segregation, major/minor role stratification, death themes, and double standardized miscegenation” are all aspects of the American motion picture industry.<sup>34</sup> Early portrayals of Asians fit very defined and one-dimensional stereotypes. But as Gish explains, the power of image is such that “we would not have to insist that images reflect life, except that all too often we ask life to reflect images.”<sup>35</sup> Studying these images and stereotypes helps us combat the cycle of racism perpetuated by the motion picture industry. Tom Gunning said it best when he said:

Stereotypes, when understood as false images, stand opposed to something we can claim as the truth. Perhaps the most important lesson that studying ethnic identity in the movies can teach us is in the constructed nature of all representation. Movies deal in images and rarely reflect directly an unproblematic truth.<sup>36</sup>

<sup>28</sup> *Madame Butterfly* is the number one most-performed opera in the United States, according to Opera America’s “Top 20” list of most-performed operas (<http://classicweb.archive.org/web/20080822055658/http://www.operaamerica.org/Content/Audiences/Programs/Cornerstones/index.shtml>).

<sup>29</sup> Gina Marchetti, *Romance and the “Yellow Peril”: Race, Sex, and Discursive Strategies in Hollywood Fiction*, 79.

<sup>30</sup> *Ibid.*

<sup>31</sup> Kent A. Ono and Vincent N. Pham, *Asian Americans and the Media*, 3.

<sup>32</sup> *Ibid.*, 71.

<sup>33</sup> Jane Chi Hyun Park, *Yellow Future: Oriental Style in Hollywood Cinema*, 5. 34 Wong, *On Visual Media Racism: Asians in the American Motion Pictures*, 322.

<sup>35</sup> Jen, “Challenging the Asian Illusion,” 6.

<sup>36</sup> Karla Rae Fuller, *Hollywood Goes Oriental: CaucAsian Performance in American Film*, x.



By breaking down stereotypes, rather than rejecting them outright, we better understand their consequences and origins. By elucidating our racist traditions, we empower ourselves to recognize the institutional forces that shape identity and representation in America.

#### References

- Dalisay, Francis and Tan, Alexis. 2009. "Assimilation and Contrast Effects in the Priming of Asian American and African American Stereotypes through TV Exposure." *Journalism & Mass Communication Quarterly* 86 (1).
- DeMille, Cecil B. 1915. *The Cheat*. Paramount Pictures.
- Fuller, Karla Rae. 2010. *Hollywood Goes Oriental: CaucAsian Performance in American Film*. Wayne State University Press.
- Humberstone, H. Bruce. 1936. *Charlie Chan at the Opera*, ed. John Stone. 20th Century Fox.
- Jen, Gish. 1991. "Challenging the Asian Illusion." *New York Times*, August 11, 1991, sec Arts.
- King, Homa. 2010. *Lost in Translation: Orientalism, Cinema, and the Enigmatic Signifier*. Duke University Press.
- Lee, Robert G. 1999. *Orientalism: Asian Americans in Popular Culture*. Temple University Press.
- Marchetti, Gina. 1993. *Romance and the "Yellow Peril": Race, Sex, and Discursive Strategies in Hollywood Fiction*. University of California Press.
- Olcott, Sidney. 1915. *Madame Butterfly*. Paramount Pictures.
- Ono, Kent A. and Pham, Vincent N. 2009. *Asian Americans and the Media*. Polity.
- Park, Jane Chi Hyun. 2010. *Yellow Future: Oriental Style in Hollywood Cinema*. University of Minnesota Press.
- Roan, Jeanette. 2010. *Envisioning Asia: On Location, Travel, and the Cinematic Geography of U.S. Orientalism*. University of Michigan Press.
- Said, Edward W. 1978. *Orientalism*. Vintage Books.
- Shah, Hemant. 2003. "'Asian Culture' and Asian American Identities in the Television and Film Industries of the United States." *SIMILE: Studies in Media & Information Literacy Education* 3 (3).
- Shimizu, Celine Parreñas. 2007. *The Hypersexuality of Race: Performing Asian/American Women on Screen and Scene*. Duke University Press.

Walsh, Raoul. 1924. *The Thief of Bagdad*. United Artists.

Wong, Eugene Franklin. 1977. *On Visual Media Racism: Asians in the American Motion Pictures*. University of Denver.

Xing, Jun. 1998. *Asian America Through the Lens: History, Representations, and Identity*. Rowman Altamira.

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## Alan Sostek

### The Emotional Power of Music

Everyone knows the feeling. When your favorite song comes on the radio, sometimes you just have to stop and absorb the moment. Whether it is the guitar or the vocals, the violin or the beat of the drum, something about music makes people experience emotion in its most raw form. Sometimes an emotional reaction can be overpowering, even to the point of bringing one to tears. Few stimuli can claim this kind of influence, placing music in a category of its very own. Music is nothing more than sound with a pattern, yet somehow its melodies and frequencies are able to completely change one's emotional state. Thus we come to the pressing question: what gives music this emotional power? Why does music instantly bring us back to memories long since passed, or make us dream about the future? Such effect arises from a capability that only music possesses. Music creates emotions by changing the physical structure of the brain.

Listening to music requires subconscious tracking and analysis. In A. Patel and E. Balaban's groundbreaking article "Temporal Patterns of Human Cortical Activity Reflect Tone Sequence Structure," a unique way to define listening is presented. These scholars prove with highly complex evidence that the brain actually tracks and calculates the pattern of certain sound frequencies. When these frequencies come together mellifluously, our minds subconsciously recognize and memorize the pattern they create. This fascinating ability is known as "temporal synchronization," and is made possible by the workings of specific recording locations in the brain, particularly between sites over the left posterior hemisphere. One of their most valuable discoveries is that tracking and predicting sound sequences is most efficient when frequencies have melody-like properties; therefore, a relationship between the quality of tracking and the statistical structure of pitch sequences must exist. This is an essential basis in order to better

understand the process by which an emotional response is generated. Other researchers have built upon this finding and studied what occurs when this calculated pattern is suddenly interrupted.

Certain neurons in the brain are excited by the presence of new sounds. An essential part of the auditory system of the mammalian brain is to differentiate behaviorally uninteresting sounds, which are often repetitive, from novel sounds that may require attention or action. This task is handled by a series of unique neurons that exist within the inferior colliculus region of the brain. These neurons' sole responsibility is to recognize the presence of a new sound, such as when an unexpected instrument comes in while one is listening to a symphony. What is so important about these "novelty detector neurons" is that when they become excited they release a chemical that is essential to the structure and function of the human brain: dopamine (Perez-Gonzalez 2879). An article by J. R. Hollerman and W. Schultz in the journal *Nature Neuroscience* cites the molecule dopamine for its potent ability to create memory by changing the structure of neurons within the brain. The article proves that there is a direct connection between the presence of dopamine in the brain and the ability to learn a certain process or expect an outcome (Hollerman-Schultz 308). Although the article does not directly address music, it provides a revealing analysis of the effect of dopamine on the brain, and more specifically, memory. When one listens to music and a musical pattern is then violated, dopamine is released. The dopamine then affects neurons in the auditory cortex that process emotions, leaving a long-lasting imprint on these neurons. These long-lasting impressions eventually become the foundation for someone's unique musical taste and preference.

Although individual music preferences are culturally conditioned, our brains have evolved to innately appreciate harmonic and melodic pulsations of sound. A series of tests performed by scientists Jaak Panksepp and Günther Bernatzky have concluded that some specific musical tones and variations can be labeled as "appealing" or "uncomfortable" based on specific arithmetic characteristics (Panksepp-Bernatzky 133). This conclusion is supported by the fact that in multiple tests babies were able to recognize and react to positive, or "appealing," musical melodies very early on in development. Such innate preferences in musical taste seem reasonable, for modern-day

music genres reflect these divisions in sound structure and the emotions they naturally produce. Slow, steady acoustic music produces a somber range of emotions, whereas upbeat salsa music creates an almost entirely opposite sensation. The wide variety of genres and the average emotional responses to each genre are clear evidence of the existence of an effect of music on the emotional state of the brain. The conglomeration of various frequencies, tonal patterns, and unexpected changes in rhythm gives music its emotional pull, but it remains clear that many more factors play a role in the final output.

Once the brain hears, processes, and reacts to music, it sends signals that prompt changes throughout the entire body. In the article “Music, the Food of Neuroscience,” Robert Zatorre proposed that music changes human emotions because it affects the physiological functions of our bodies. For example, loud, fast dance music tends to make an individual feel lively by actually increasing the heart rate and respiration pattern. This in turn leads to the brain releasing various chemicals usually associated with the “flight” response, which awakens and excites an individual. A wide variety of physical responses are possible when listening to music; anyone who has felt a chill down his or her spine when listening to a powerful song will attest to the profound change in one’s physiological state. When people participate in a memorable activity and are listening to a certain song, they will learn to associate that song with that experience. Once they hear the song again in the future, they are instantly reminded of the emotions and feelings they had before. Although this reaction is eerily indescribable, its foundation is strictly biological and is made possible by the direct collaboration of various neurons within the brain.

Musical stimulus becomes human emotion through a multifaceted process. At first glance, research articles pertaining to the relationship between music and neurobiology are describing different phenomena. But when we continue to search for connections and insights, we realize that each scientific discovery details a different part of a process that creates the sensation as a whole. First, the brain begins to track and piece together sound waves in order to make logical sense of the noise. Then specific neurons responsible for recognizing unexpected sounds in the music are excited and release dopamine, which in turn changes the physical structure of neuron pathways and creates emotions. Thus one

begins to realize that all of the apparently individual developments are actually vital subsets of the process that constitutes music’s effect as a whole. If we take these subsets and put them in a logical order, we begin to gain a deeper insight into how music has such a profound impact on the brain and why it affects our emotions. Yet a vital question still remains: how does biology become the human experience?

Music’s effect epitomizes the intricate connection between biological processes in the brain and the ethereal emotions that result from such reactions. No matter how closely scientists can pinpoint individual responses from musical stimuli, science will likely never be able to fully translate the physiological into the emotional. Regardless of this widely supported premise, one iconoclastic author, Jonah Lehrer, has attempted to forge links between biology and experience. In his novel *Proust Was a Neuroscientist*, Lehrer searches for the intrinsic connections between music and science. Many reviewers and critics of the novel highlight the book’s interesting style and desire to revive a “third culture” where both realms are equally appreciated (*Publishers Weekly* 254). After conducting voluminous research in the laboratory of a Nobel Prize-winning scientist, Lehrer has come to believe that specific neurons are responsible for producing some of the most powerful emotions we experience when listening to music, and that when these neurons become excited they actually change the physical structure of the brain. Many of his most prominent statements allude to evidence derived from complex experiments and modern-day research, such as when he says, “the engine of music is conflict, not consonance” (Lehrer 133). This boldly artistic theory is rooted in the discovery that the mind tracks patterns of sound, and only when these patterns are interrupted does an emotional response occur. He even claims that music is “the sound of art changing the brain” (Lehrer 143). Lehrer is truly a forerunner in the search for answers to music’s most complex questions. What has yet to be determined is whether his search is futile.

The reasons why one experiences an emotional reaction when listening to music are fundamentally grounded in a physical change in brain structure. But what vast research begins to show is that the process as a whole is replete with astonishing complexity. Variety exists in every step of the way; every note produces a different reaction. Thus it will be the role of future neuroscience pioneers to discover the connection

Jonah Lehrer so vividly yearns to establish: the relationship between the indescribable emotion and the empirical science. As experimental methods continue to improve and technological advances allow us to see deeper into ourselves than ever before, we will begin to develop an even stronger sense of how biology becomes life. Yet there will always be a gap that cannot be explained within the bounds of science, for music will never become a barren mathematical equation. The value of the arts lies within this truth. Music is a means by which an artist can produce such a powerful response that music *must* be more than just frequencies and sound waves. Music is language, culture, and experience, all things that cannot be classified by the experimental method alone. Hence we must wait and see what the future holds. Is music purely arbitrary sound contorted into a mellifluous statistical current that stimulates the auditory cortex, or is it truly something more?

#### References

- Bao, S., V. Chan, and M. Merzenich, "Cortical Remodeling Induced by Activity of Ventral Tegmental Dopamine Neurons," *Nature* 412 (2001): 79-84.
- Bendor, D., and Q. Wang, "The Neuronal Representation of Pitch in the Primate Auditory Cortex," *Nature* 436 (2005): 1161-65.
- Chowdury, S. A., and N. Suga, "Reorganization of the Frequency Map of the Auditory Cortex Evoked by Cortical Electrical Stimulation in the Big Brown Bat," *Journal of Neurophysiology* 83.4 (2000):1856-63.
- Hollerman, J. R., and W. Schultz, "Dopamine Neurons Report an Error in the Temporal Prediction of Reward During Learning," *Nature Neuroscience* 1 (1998): 304-09.
- Lehrer, Jonah. *Proust Was a Neuroscientist*. Boston: Houghton Mifflin, 2007. Print.
- Panksepp, Jaak. "The Power of the Word May Reside in the Power of Affect." *Integrative Psychological & Behavioral Science* 42.1 (2008): 47-55. Academic Search Premier. EBSCO. Web.
- Panksepp, Jaak, and Günther Bernatzky. "Emotional Sounds and the Brain: The Neuro-affective Foundations of Musical Appreciation." *Behavioural Processes* 60.2 (2002): 133. Academic Search Premier. EBSCO. Web.
- Patel, A., and E. Balaban. "Temporal Patterns of Human Cortical Activity Reflect Tone Sequence Structure," *Nature* 404 (2002).
- Perez-Gonzalez, D., et al. "Novelty Detector Neurons in the Mammalian Auditory Midbrain." *European Journal of Neuroscience* 11 (2005): 2879-85.
- "Proust Was a Neuroscientist." *Publishers Weekly* 254.24 (2007): 46. Academic Search Premier. EBSCO. Web.

Zatorre, Robert, and James McGill. "Music, the Food of Neuroscience?" *Nature* 434.7031 (2005): 312-315. Academic Search Premier. EBSCO. Web.

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## Zaina Naeem

### Platonic Education as a Pathway to Paternal Totalitarianism

The term *totalitarianism* normally evokes images of Hitler and Stalin, and the destruction of the lives of so many people. However, is totalitarianism always synonymous with cruelty and dictatorship? C. C. W. Taylor states that totalitarianism can be understood as a system with two crucial components—authoritarianism and ideology.<sup>1</sup> By authoritarianism, he means a state in which the ordinary citizen does not have a say in political matters. When combined with ideology, or a set of values aiming towards the general goal of controlling public and private matters, authoritarianism is converted into totalitarianism. Totalitarianism is usually contrasted with the democracy, in which politicians are elected by and for the citizen body.<sup>2</sup> While these two systems are polar opposites, many philosophers and politicians have grappled with deviations of these government systems to find some sort of middle ground. Plato is included in this group of philosophers, for he has contemplated the benefits and downsides of totalitarianism for education in his discussion of a utopian society in his work *The Republic*. Plato aims to use a rigid educational system to create a paternally totalitarian state.

The ideal state of the *Republic* has been widely received as a totalitarian state. In the work, Plato states that all the political decisions in this state are centered in the hands of “Guardians,” who have no

responsibility to represent the political will of the masses.<sup>3</sup> Their power is, in essence, absolute. Plato, however, does mention that one factor controlling the actions of the Guardians is the moral obligation to abide by a set system of education.<sup>4</sup> This system of education requires that every citizen of the ideal state be well-versed in the arts and be physically trained, as well.<sup>5</sup> Many readers of the *Republic*, however, are perplexed to find this paradox of instructions—after all, how can Plato instruct the Guardians to disregard the masses while also morally obligating them to ensure that the masses are educated? Taylor states that this paradox exists because the definitions of totalitarianism are vast, and we must consider that Plato is endorsing *paternal* totalitarianism. Paternal totalitarianism says that the aim of the state is to promote the welfare of its citizens; the welfare constitutes happiness, knowledge, health and economic satisfaction.<sup>6</sup> The paternal state is therefore considered a “good” state if it is doing everything it possibly can to improve the lives of the citizens. But how can a state that exists for the benefit of its citizens be totalitarian? Plato elaborates on this contradiction by showing that citizens of the paternally totalitarian society are subject to complete state control. Plato believes that this is for the best because ordinary individuals are unable to understand their intellectual and personal capabilities, whether this inability arise from ignorance or lack of character and political understanding.<sup>7</sup> It is this ineptitude which mandates that the Guardians help the citizens realize their full potential and live their lives accordingly. The Guardians are expected to accomplish this task by abiding by the system of education laid out by Plato in the *Republic* and in the *Laws*.

<sup>3</sup> Ibid., 281.

<sup>4</sup> Ibid., 281.

<sup>5</sup> Werner Jaeger, “Plato’s Phaedrus: Philosophy and Rhetoric” in vol. 3 of *Paideia: The Ideals of Greek Culture*, trans. by Gilbert Highet (New York: Oxford University Press, 1944), 184.

<sup>6</sup> Taylor, “Plato’s Totalitarianism,” 283.

<sup>7</sup> Ibid., 285.

<sup>1</sup> C. C. W. Taylor, “Plato’s Totalitarianism” in *Plato 2: Ethics, Politics, Religion and the Soul*, ed. by Gail Fine (New York: Oxford University Press, 1999), 280.

<sup>2</sup> Ibid., 282.

Plato proposes that early education will facilitate the moral and intellectual development of the citizens of the paternally totalitarian state. This education begins from birth and continues throughout life. This time period is essential because even though the intellectual capacities of an individual are determined at birth, the soul, or personality, of an individual can still be “molded.”<sup>8</sup> When a person is young, he or she easily absorbs information. In the *Laws*, Plato expands on these views and proposes that this “conditioning” should begin even before birth, by mandating pregnant women to conduct particular exercises.<sup>9</sup> Plato places this emphasis on the young mind because he believes that the young mind is incredibly active and responsive to the environment, especially to artistic stimuli. It is for this reason that he mandates the Guardians to carefully monitor a child’s exposure to art; hence, the focus on early education in the arts. Plato equates the “arts” to “music,” or all arts presided over by the Muses. He, in particular, emphasizes poetry, given the status of poets as “unofficial moral teachers” in Greek society.<sup>10</sup> The stories and tales of poets were used as vehicles by which to pass on common beliefs to children in Greece, a practice that Plato adapts for his ideal state of the *Republic*. Given the obvious importance of poetry in the upbringing of children, Plato advises the Guardians to only expose children to poetry that would help them appreciate and maximally contribute to the structure of the state.<sup>11</sup> For example, Plato urges students to read poetry and watch plays that convey love, harmony, obedience, and sacrifice. He believes that when good deeds are performed and witnessed by children, the children are able to absorb the same patterns of behavior. In this way, the “young minds” will not rebel against their families and the state, and in turn, harm the masses. This advice is the essence of Plato’s paternally totalitarian state. Klosko notes that “Plato’s position is clear. Since the soul assimilates

itself to its environment, the environment must be made as beautiful and as harmonious as possible.”<sup>12</sup> Thus, the goal of the ideal state is to secure the lives of the masses, and the Guardians accomplish this by facilitating the moral and intellectual development of the citizens via early education in the arts.

Early education also helps to secure the lives of the citizens by ensuring that only the most suitable individuals are chosen to be Guardians. As stated previously, all inhabitants of the state are conditioned through an early education in the arts, but only a select few become Guardians. The main distinction between a Guardian and a citizen lies in the Guardian’s development of reason.<sup>13</sup> Every individual is able to form the “proper” morality through education in the arts, but the Guardians are able to use this morality to separate their desires from their sense of reason. The “ability to harmonize” the dual aspects of their personality ensures that the Guardians will act solely to better the lives of the citizens and the state to ensure the stability of both.<sup>14</sup> Plato elaborates on this point by cautioning that all Guardians must be able to balance their aggressive side with their gentle side.<sup>15</sup> This is crucial in terms of stabilizing the paternal totalitarian state. An overly aggressive Guardian would jeopardize the lives of the citizens and the effectiveness of the state by taking decisions too quickly and harshly. Those who are passive, however, have the opposite problem but also end up endangering the state and the citizens by failing to act in the favor of either. Thus, only individuals who possess the moral and intellectual capacity to separate the dual aspects of human nature are capable of becoming the Guardians and ensuring political stability.

Plato specifies that only the philosophers are capable of becoming the Guardians and stabilizing the paternal state. This is because they have demonstrated control over their emotions by separating desire

<sup>8</sup> George Klosko, *The Development of Plato’s Political Theory* (New York: Oxford University Press, 2006), 124.

<sup>9</sup> *Ibid.*, 125.

<sup>10</sup> Jeagar, “Paideia,” 188.

<sup>11</sup> Klosko, “Political Development,” 127-130.

<sup>12</sup> *Ibid.*, 130.

<sup>13</sup> *Ibid.*, 130.

<sup>14</sup> *Ibid.*, 131.

<sup>15</sup> *Ibid.*, 132.



from reason in their intellectual explorations. He explains that this control “can be known only through an application of mental capacities beyond the reach of most people. Only the highest gifted few are able to glimpse the Forms, and only then after years of intensive study.”<sup>16</sup> Plato elaborates that because the philosophers are able to achieve this level of autonomy, they are above other individuals, and are capable of leading the citizen body to ensure political and social stability. Plato even calls the citizen body “douloi” or slaves, thereby making an analogy that the philosophers are the masters and the citizen body, the slaves.<sup>17</sup> This is authoritarian diction, but it is specifically paternalist because he goes on to say that the philosophers are morally obligated to ensure that all citizens and future Guardians, whoever they may be, are conditioned as they themselves were in their youth.<sup>18</sup> This gives everybody the opportunity to develop the balance between desire and reason that is a prerequisite for becoming a Guardian. Of course, Plato feels that the philosophers have the highest chance of becoming the Guardians due to their capacities of self-contemplation. Plato asserts that this conditioning protects and maintains order in the state, which thereby translates over to protection for the ordinary citizen. Thus, the purpose of platonic education is to breed leaders that can in turn condition citizens so that the citizens are able to live fulfilling lives. This is the core of paternal totalitarianism, where the state attempts to benefit individuals in every way, even if that means imposing strict rules on their behavior.

Our studies of platonic education in regards to paternal totalitarianism reveal that our conventional perception of totalitarianism as primarily dictatorial and extremist is not always correct. Many extreme ideologies can be converted into less extreme forces by tweaking certain aspects. Plato, for example, builds the foundation of the Ideal state on education in the arts. He also brings about a discussion of the responsibility of the government in ensuring the education of the citizen body. Thus, the educational system that he proposes in the *Republic*

may have significant implications for the standards that we hold today. Plato seems to be suggesting that only the carefully controlled education of the masses will allow for true happiness. This is quite different from our beliefs of today, but this concept does spur the need for a critical reevaluation of the role of education in politics.

#### References

- Jaeger, Werner. *Paideia: The Ideals of Greek Culture*. Vol. 3. Translated by Gilbert Highet. New York: Oxford University Press, 1944.
- Klosko, George. *The Development of Plato's Political Theory*. New York: Oxford University Press, 2006.
- Taylor, C. C. W. “Plato's Totalitarianism” in *Plato 2: Ethics, Politics, Religion and the Soul*. ed. by Gail Fine. New York: Oxford University Press, 1999.

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<sup>16</sup> Ibid., 135.

<sup>17</sup> Ibid., 136.

<sup>18</sup> Ibid., 134-136.

## Nina Blalock

### Writing and the Absolute

In *The Elements of Style*, Strunk and White emphasized the importance of clarity in prose. Rules concerning concrete language, needless words, and loose sentences help writers to produce prose that readers can absorb with the least amount of difficulty. The final goal is that through clarity in “thinking, observing, and writing” (Garvey 121) one may find truth, and communicate it to readers. However, the postmodern viewpoint emphasizes that there is no absolute truth, and all truth is relative. If this is the case, clarity has no value, and one’s writing is incapable of expressing something real. I am skeptical that postmodern theories hold validity in the world of prose. Writing challenges postmodern beliefs about truth.

Writing is a gateway to discovering absolute truth. According to Alison Brown, author of *Fear, Truth, Writing*, writers discover things about themselves as they attempt to articulate their thoughts on paper (Brown 6). This process of self-discovery can be rewarding and liberating. When one is open to exploring the self, she is likely to seek the truth. As one writes about a topic of interest, she makes connections between research and prior knowledge. This allows her to digest information and apply information to real-life situations (Brown 9). The definitions she shapes cannot be challenged or misinterpreted, because they are personal. For the person that these truths apply to they are absolutely true.

It is natural for writers to convey the truth. Wyndham Lewis, author of *The Writer and the Absolute*, insists that he cannot bring himself to write anything that is untrue. He declares that the truth is as “public and as necessary as the air we breathe” (Lewis 6). He acknowledges the existence of propaganda writers, but reminds readers that many people do propaganda writing involuntarily. For instance, Lewis had a friend living in a totalitarian state that worked as a propaganda writer.

Along with dreading work, this friend experienced physical side effects of his unfulfilling work. “He declared that as a consequence of what he had been forced to do he became [sexually] impotent” (Lewis 3). This supports the naturalness of telling the truth. While the existence of propaganda writing exemplifies the existence of fallacies in writing, it is not sufficient evidence for the absence of truth. While audiences should question the validity of sources, they should not question the notion that the absolute truth exists.

Adhering to rules outlined by Strunk and White gives writers a way to express absolute truths. As Mark Garvey, author of *Stylized: A Slightly Obsessive History of Strunk and White’s The Elements of Style*, eloquently states, “To believe in Strunk and White is to believe that truth exists” (Garvey 123). Given that a writer has carefully thought out ideas, reasons, and evidence presented in a piece, Strunk and White’s *Elements of Style* give writers tools to clearly express their thoughts. As a result, audiences will be left with as few questions as possible, and there will be little room for misinterpretation.

Clarity in style allows a writer to express absolute truths. While clarity in style is difficult to define, following the rules of Strunk and White helps writers to achieve clear styles. Most importantly, writers should take time to understand the key theme of Strunk and White’s *Elements of Style*. This theme emphasizes clear thoughts leading to clear writing. Every rule in Strunk and White addresses how a writer’s work can become ambiguous and confusing for readers. For instance, rule 14 advises writers to “put statements in positive form” (Strunk and White 18). An example is provided to show writers the difference between a sentence using *not*, and a sentence in the positive form. The example reads, “He was not very often on time” (Strunk and White 18). Using *not* adds a feeling of hesitation, insecurity, and fear to the sentence. This sentence may need to be reread for audiences to understand its meaning. The corrected sentence reads, “He usually came late” (Strunk and White 18). This sentence is clear, easy to understand, and doesn’t lend itself to multiple interpretations. It is an example of clear style’s ability to express absolute truth.

Another aspect of style that contributes to a writer’s ability to express absolute truths is diction. Rule 16 stands out in its ability to transform a writer’s work from relatively true to absolutely true. The rule says,

“Use definite, specific, concrete language” (Strunk and White 21). This rule’s examples change phrases that may have several meanings into specific and concrete words. For instance, one example says, “A period of unfavorable weather set in” (Strunk and White 21). Readers of this sentence are left with questions. What type of weather does the speaker consider unfavorable? Is there a heat wave, rain, snow, hail, or wind? The corrected sentence reads, “It rained every day for a week” (Strunk and White 21). The diction in this sentence expresses an absolute truth that doesn’t have room for multiple interpretations. In reading this sentence, postmodernists would have a problem defending their position on the relativity of all truths.

The elimination of euphemisms strengthens the diction of a piece of writing. Euphemisms are used to take a negative connotation out of a statement. This avoids feelings of uneasiness being aroused in readers. However, the covering of a negative connotation may result in ambiguity. Consider the word *issue*. It is common for *issue* to substitute a word with a more negative connotation: *problem* (Garvey 123). When one reports that she had an issue with another person, the meaning of this statement is ambiguous. However, if she states that she had a problem with the individual, listeners and readers can at least add the appropriate connotation to the interaction between two people.

Wyndham Lewis addresses the euphemism’s ability to mislead readers. This comes up when he discusses “dynamite” subjects. Sometimes these subjects are “poisonous,” causing writers to avoid them or write about them using euphemisms (Lewis 7). Lewis suggests that if a writer must water down a topic so much that readers can be misled, the topic should be dropped. This is an example of fear obscuring the absolute truth (Brown 3). While it’s difficult to write about taboo subjects without offending others, it is worse to mislead audiences by sugar coating such subjects. Besides misleading readers, euphemisms contribute to the relativity of truths.

Postmodern beliefs on truth are flawed when applied to prose as well as other disciplines. As they reject the existence of any absolute truth, they take this standpoint as an absolute truth. This is a fundamental flaw. If everything is relative, postmodern theories are not worthy of consideration.

While it is wise for audiences to question the reliability and validity

of sources, to question the existence of any truth is a remarkably bleak outlook on life. Ian Frazier, a writer and humorist for the *New Yorker* and fervent believer in Strunk and White, believes that clear objective journalism can be effective in finding and expressing truth. He admits that readers should carefully choose the sources they trust, but know that journalists are mostly trying to tell you something real, something that happened. While reliability of sources may be questioned, the existence of any truth shouldn’t be questioned.

#### References

- Brown, Alison. *Fear, Truth, Writing*. Albany: State University of New York Press, 1995. Print.
- Garvey, Mark. *Stylized: A Slightly Obsessive History of Strunk and White’s The Elements of Style*. New York: Touchstone, 2009. Print.
- Lewis, Wyndham. *The Writer and the Absolute*. London: Methuen & Co., Ltd., 1952. Print.
- Strunk, William and E. B. White. *The Elements of Style*, Fourth Edition. Needham Heights: Longman Publishers, 2000. Print.

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## Amanda Wolkin

### Say: What?

#### An Examination of Translation in Poetry

In 1767, German philosopher Wilhelm von Humboldt asserted in his essay “On Language” that “it is language which thinks and sees for us” (Benjamin, Translation, 249). Language both allows communication between persons of similar backgrounds and inhibits communication between those of different backgrounds. These powers of language can be seen throughout history, such as in the 1937 Parsley Massacre. Tens of thousands of Haitians living on the border of the Dominican Republic were killed based on whether or not they could roll the /r/ in the Spanish word “perejil” like the Dominican citizens. These “shibboleths,” distinguishing words that are indicative of one’s background, are also prevalent and crucial in literature. From “shibboleth texts,” nationalistic texts, to “cats in the throats,” bilingual authors’ unease when crossing languages, language is a critical and oftentimes defining component of all literature (Mathijsen, 224; Bergvall, 2). However, the uniqueness of each language and its surrounding culture has resulted in issues of translatability in literature. As Azade Seyhan, Professor of Germanic Languages and Cultures at Bryn Mawr, explained at the “Un/Translatables” conference, “Translation sets into motion the combination of two languages and initiates a struggle between the two cultures.” The issues of translation may be seen in its two resulting forms: the semantic translation and the cultural translation. Semantic translation errors are reflected in word choice and translator interpretation, while cultural translation errors can be seen in the historical context and nationalism of the text. The practice of translating literature is inherently flawed.

Every word has its own set of connotations and denotations that is impossible to replicate across cultures. Just as there are differences in the pronunciation of words in language, such as the rolling /r/ of the

Haitians and Dominicans, each individual word is its own semantic shibboleth. Caroline Bergvall, herself a bilingual poet who translates many texts between French and English, states that in exchanging words between languages, one must also “exchange between one’s body, the air, and the world” (Bergvall, 3). There is no one true, correct translation of a text, as shown by Bergvall’s “48 Dante Versions.” In this work, Bergvall combines 48 attempts of various bilingual poets to translate the first three lines of Dante’s *Inferno*. From number 24, “Midway along the span of our natural life’s road, I woke in the dark,” to number 46, “When halfway through the journey, I found myself in a gloomy wood, Lost lost lost,” these versions vary considerably despite coming from the same original text (Mafe, 2-3). Walter Benjamin, a German literary critic and philosopher, asserts in his famous essay “The Task of the Translator” that to “comprehend [translation] one must go back to the original, for that contains the law governing the translation: its translatability.” When reading a translated text, one must not only consider the changed linguistic situation, but also the translator’s interpretation of the original.

Each translation of literature, and therefore each semantic word choice, is entirely dependent upon how the translator reads and interprets the original text. Another example of variations in translation exists when examining the two translators who both won the Nobel Prize in translation for *The Black Book*. According to Seyhan, one translation allowed “the foreignness of the text to come through...the text becomes almost static, but it is much more true to form,” whereas the second was “much more domesticated and became an American text...it earned much more money than the first” (Seyhan). This conflict of domesticating versus maintaining the foreignness of the text presents several ongoing issues in the translation of poetry. “Translation,” as Benjamin explains in his essay “Translation—For and Against,” “should be combined with the technique of the commentary. The successful form of translation, which acknowledges its own role by means of commentary and makes the fact of the different linguistic situation one of its themes, has unfortunately been on the wane in modern times” (Benjamin, Translation, 250). Benjamin likely would have preferred the former translation of *The Black Book*, as he believes that “the task of the translator consists in finding that intended effect...which produces in it the echo of the original” (Benjamin, The Task, 3).

The ideal “task of the translator” is to replicate the historical and cultural context in which the original text is written—something that is nearly impossible to achieve in another language. Benjamin believes that literature is untranslatable because the meaning of the text is purely dependent on the “horizon and the world around the translated text” (Benjamin, Translation, 249). He demonstrates Marjorie Perloff’s assertion that “it is the anatomy of the untranslatability that makes poetry what it is” by exploring his own personal vignette when he encountered a French translated version of German philosopher Nietzsche’s work (Perloff, 2). Already familiar with the German version, he found that his favorite German passages were absent in the translation as “they had become French” (Benjamin, Translation, 249). As he describes, he “had the awkward feeling that they no more recognized me than I did them” (ibid., 250). While Benjamin considers philosophical text to be a world of thought—one beyond the considerations of national character—he reasons that “there is no world of thought that is not a world of language, and one sees of the world only what is provided for by the language.” Michel Zink claims that “each language has a tonality of its own” and that translations of literature highlight rather than smooth over cultural conflicts and differences between nations (Zink, 14).

These cultural differences and conflicts in translating literature are further exemplified by the existence of “shibboleth texts” across countries. According to Maritha Mathijssen, shibboleth texts are pieces of literature that serve as a symbol of a nation’s literary heritage, as it glorifies the country’s historical past and heroes. The “shibboleth function” of these shibboleth texts, much like the definition of the word shibboleth, is to discriminate one cultural group from another based on a single word—or in this case, a piece of literature. Famous shibboleth texts include *Beowulf* in Germany and *Chanson de Roland* in France. Despite many of these literary canons drawing upon several different cultures and languages, Mathijssen found that “nations needed to find and construct identities of their own” (224). Through these “shibboleth texts,” countries began to reject others’ literature and establish a national literature identity for themselves. Bergvall’s work *Say: Parsley*, a differential text with print, digital sound/screen, and museum installation versions, brings light to these political and poetic conflicts caused by shibboleths in poetry. Bergvall’s goal for her translational

exhibit is to illuminate the “still frequent degrees of harassment and verbal, sometimes physical, abuse, all according to ethnic and linguistic background” (132). In doing so, Bergvall makes her readers and viewers question their linguistic and cultural perspective and what it means to be an “outsider” in regards to translation. Through this exhibit, Bergvall relates back to Benjamin’s key question in “The Task of the Translator”: “No poem is intended for the reader, no picture for the beholder, no symphony for the listener. Is a translation meant for readers who do not understand the original?” (1).

It may be true that without translation, our world would be at a complete cultural loss. Translation allows us access to a travelling library that facilitates the exchange of cultures, of rich literature and thought, of history and religions. However, Benjamin writes, “It is plausible that no translation, however good it may be, can have any significance as regards the original” (The Task, 1). Mastery of both languages still does not protect against the differences in the semantics of words; the dictionary definition may be the same, but the implied meaning will be different. Furthermore, each language contains its own history and context, a matter that, as Benjamin shows, is impossible to replicate. Yes, translation allows for the exchange of cultural capital across countries; but no, we will never be able to truly embrace all aspects of a foreign text.

#### References

- Benjamin, Walter. “The Task of the Translator.” Web. 15 Apr. 2011. <<http://www.totuuuradio.fi/wordpress/wpcontent/uploads/2010/09/Benjamin-The-Task-of-the-Translator.pdf>>.
- Benjamin, Walter. “Translation—For and Against.” *Selected Writings* 2 (1936): 249-51. Print.
- Bergvall, Caroline. “A Cat in the Throat: On Bilingual Occupants.” *Jacket* 37—Early 2009. 2009. Web. 10 Mar. 2011. <<http://jacketmagazine.com/37/bergvall-cat-throat.shtml>>.
- Mafe, Majena. “Via Error.” 48 Versions of Dante Variations. Arizona State University, n.d. Web. 13 Apr. 2011. <[http://www.asu.edu/pipercenter/how2journal/vol\\_3\\_no\\_3/bergvall/pdfs/bergvall-mafe.pdf](http://www.asu.edu/pipercenter/how2journal/vol_3_no_3/bergvall/pdfs/bergvall-mafe.pdf)>.
- Mathijssen, Marita. “The Editing of National Shibboleth Texts: An Historical Account.” *Text* 17 (2005): 223-35. JSTOR. Indiana University Press. Web. 15 Mar. 2011. <<http://www.jstor.org/stable/30227823>>.

Perloff, Marjorie. "The Oulipo Factor: The Procedural Poetics of Caroline Bergvall and Christian Bok." Jacket Magazine 23 Aug. 2003. Web. <<http://jacketmagazine.com/23/perlof-oulip.html>>.

Seyhan, Azade. "Mapping Geographies of Translation: The Multilingual Imagination in German/European Culture(s)." University of Pennsylvania Department of Germanic Languages. Penn Museum of Archaeology and Anthropology, Philadelphia. 7 April 2011.

Zink, Michel. "Plurilingualism, Hermeticism, and Love in Medieval Poetics." Comparative Literature Studies 32.2 (1995): 12-30. Penn State University Press. Web. 15 Mar. 2011. <<http://www.jstor.org/stable/40246995>>.

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## Yasmina Ahmed

### Elgin Marbles Should Remain in London

During the early 19<sup>th</sup> century, Lord Elgin removed numerous sculptures from the Parthenon in Greece and shipped them to England (Cuno ix; Merryman 1882). Then, in 1816, Elgin sold the sculptures to the British Museum in London, where they continue to remain on display (Cuno x; Merryman 1882). The sculptures, now known as the Elgin Marbles, have been highly influential in European and North American culture throughout the ages. For this reason, many scholars consider these objects to be of world heritage status, which supersedes nationalistic claims to property (Simpson 253). However, many Greeks disagree with this notion and have sought repatriation of the Elgin Marbles. Despite Greece's best efforts, the two-century-long dispute with London over the restitution of the Elgin Marbles remains unresolved. While both parties have made compelling arguments, it is evident that the Elgin Marbles should remain in London.

Greece's case for the repatriation of the Elgin Marbles centers on two main arguments: cultural nationalism and the legality and morality of the removal of the Parthenon Sculptures (Merryman 1896). The former is based on the relationship between cultural property and cultural identity (Merryman 1912). The UNESCO 1970 Convention exemplifies the spirit of cultural nationalism and repatriation. Its preamble conveys cultural property as essential to the cultural identity of people and asserts that its true value can only be completely realized in the fullest context possible (Knox 322-324). Similarly, many scholars acknowledge that the connection people feel to their cultural objects is powerful (Appiah 85; Bauer 710; Merryman 1913) and evident in Mercouri's appeal for the return of the Elgin Marbles.<sup>1</sup> In her appeal, she asserts

<sup>1</sup> Mercouri was the Greek Minister of Culture in 1983. She made the first official request for the return of the Elgin Marbles.



that the “[Parthenon Sculptures] are the symbol of the blood and the soul of the Greek people” (Merryman 1883) and that they rightfully belong to Greece because the monument embodies the spiritual reserve of its people (Cuno xi; Divari-Valakou 116). However, the narrative calling for the return of the Parthenon Sculptures has relied on more than simply eliciting emotional appeal. Greece has also challenged the legality and morality of Lord Elgin’s and the British Museum’s subsequent acquisition of the Elgin Marbles. Greece alleges that Lord Elgin did not receive proper permission to remove the sculptures to England and that the Ottomans, the occupying power in Greece during the removal of the marbles, did not have the authority to pass the title of ownership to Lord Elgin (Knox 327; Merryman 1896-1897). However, despite Greece’s convincing allegations, the British Museum has responded with valid reasoning for their retention.

Moreover, careful analysis of Greece’s appeal does not provide justification for the restitution of the marbles. To begin with, cultural nationalism is a double-edged sword (Merryman 103-104). Therefore, while Greece can argue for the return of the sculptures on the basis that they are fundamental to the cultural identity of the Greek people, the British Museum can justify its retention because they have become symbols of vital importance to the cultural values of Britons. In fact, the Elgin Marbles have resided in England for nearly two centuries, longer than the existence of the modern state of Greece, and have become highly influential to British culture (Cuno xii; Merryman 1915; Simpson 250). Thus, from this perspective, claims to the marbles can be perceived as roughly equivalent, and Greece is no more entitled to the Elgin Marbles than England on the basis of cultural nationalism (Merryman 1916). Consequently, Greece’s request for repatriation on the allegation that the acquisition of the Elgin Marbles was highly suspect must be considered.

Greece’s argument that Elgin’s removal of the Parthenon Sculptures was illegal and immoral is unsupported. Particularly, Greece has challenged the British Museum’s assertions that the Ottoman Empire had the *right* to transfer property rights to Lord Elgin and that Elgin received appropriate authorization to remove the marbles and take them back to England (Knox 327; Merryman 1896-1897). However, under international law at the time, the Ottomans had legal authority over the

Parthenon because the successor nation acquires legal authority over public property following a change of sovereignty (Knox 327; Merryman 1897). Furthermore, the Ottoman government ratified the firman given to Elgin, and thereby granted official permission for the shipment of the Parthenon Sculptures to England (Merryman 1896-1900). Thus, since the removal of the marbles was appropriate under the international law at that time, the British Museum is legally entitled to the ownership of the Parthenon Sculptures (Knox 327; Merryman 1990; Salem 191; Simpson 324). Additionally, investigation of the morality of Elgin’s acquisition provides further support for the retention of the Elgin Marbles in England. Around the time when Elgin was removing the Parthenon Sculptures, the French were aggressively looting Europe for the Musée Napoléon and sought after Greek antiquities. Thus, if Elgin had not removed the marbles himself, most inevitably someone else, e.g., the French, would have (Merryman 1903-1905). Furthermore, the works that were not removed from the Parthenon are in a far worse condition than those currently on display in London. By removing the marbles from the corrosive pollution in Athens, Lord Elgin actually saved the marbles from a devastating fate (Cuno x; Merryman 1905-1907; Simpson 250). Therefore, if Elgin’s actions are contextualized within the appropriate time period, Greece’s accusation that the marbles were taken illegally or immorally cannot be substantiated. Consequently, under the principle of repose,<sup>2</sup> Britain can rightfully retain the marbles until Greece can justify their proposal for the restitution of the Elgin Marbles (Merryman 1911).

However, besides the British Museum’s ability to thwart the opposition’s claims to the marbles, England’s retention of the Elgin Marbles is further supported by the principles of cultural internationalism. The 1954 Hague Convention expresses the sentiment of cultural internationalism in its description of cultural property as the “cultural heritage of all mankind” (Appiah 75; Knox 321; Merryman 1916). Thus, according to this doctrine, cultural internationalism prioritizes the interests of the entire humanity above all by seeking to protect all cultural property, irrespective of the artifact’s origin or present

<sup>2</sup> The general principle of repose states that an existing situation should continue unless some reason is provided for changing it.

location (Appiah 75; Knox 320-321; Merryman 1916). Accordingly, analysis of the principles of cultural internationalism—preservation, integrity and distribution—must be evaluated to determine if they support the retention of the Elgin Marbles in the British Museum. First and foremost, preservation takes priority above all because if the marbles are destroyed, the entire world will be deprived of its cultural heritage. Currently, the Elgin Marbles are well guarded and preserved in the British Museum and there is no evidence to suggest that the marbles would be safer in the Acropolis Museum. Additionally, the potential damage posed by the transportation and removal of the sculptures favors leaving the sculptures in London. Second, if one considers integrity, the idea that the integrated whole of the Parthenon has greater significance than the sum of its disparate pieces, then the reinstallation of the sculptures on the temple makes sense. However, the marbles cannot be reinstalled on the Parthenon without exposing them to the damaging pollution of Athens. Consequently, since preservation trumps integrity, the analysis of integrity also reaches the conclusion that the Elgin Marbles should remain in London. Finally, distribution refers to the idea that all mankind should have the opportunity to experience its own and other people's cultural property. Although many Greek antiquities can be found in major museums and private collections, it cannot be argued that Greece is culturally impoverished. Greece, like many art-rich nations, is struggling to preserve and display the enormous amount of antiquities that it already has. Furthermore, if all Greek antiquities were repatriated to Greece, then the rest of the world would become culturally impoverished. Therefore, the distribution of Greek artifacts is most beneficial for the preservation and scholarship of Greek artifacts for all humanity (Merryman 1916-1922; Merryman 108-110). Thus, all three considerations of cultural internationalism support the retention of the Elgin Marbles in the British Museum. Consequently, at the moment, the repatriation dispute concerning the Elgin Marbles is favoring England.

The discourse regarding the restitution of the Elgin Marbles is symbolic of more than just the struggle between Greece and England over the Parthenon Sculptures. Many scholars and museum directors believe that the Elgin Marbles symbolize all the non-repatriated cultural property in the world's museums (Merryman 1895; Simpson 2005). They fear that one act of repatriation may catalyze the opening of the

“proverbial floodgates,” potentially endangering the collections of the world's major museums (Salem 188). Thus, nations should carefully consider the consequences of their requests. The recent emphasis on repatriation as a solution to the antiquities trade has already had damaging consequences. One must keep in mind that the safest place for artifacts is not always the source nation (Appiah 77-82; Merryman 1889). The sad tale of the Afghan curators illustrates the painful irony that the very regulation intended to preserve the artifacts helped destroy them (Appiah 77-79). Additionally, universal museums provide the unique opportunity to study disparate objects side by side so that new connections can be forged via comparative analysis (Cuno xxxi; Eakin 3; Simpson 244-245). These encyclopedic museums serve as “guardians of the cultural bonds linking different people and civilizations” (Divari-Valakou 118) and present culture as a heterogeneous byproduct of the “overlapping diversity of mankind” (Cuno xix; Eakin 3). However, due to recent legislation and increasing claims of repatriation, museums have had to alter their acquisition policies (Simpson 252; Bauer 718). Now museums are acquiring fewer artifacts; however, the antiquities trade continues to prosper, meaning that more and more artifacts are lost to the antiquities trade each year (Boardman 118; Eakin 1-3).

#### References

- Appiah, Kwame. “Whose Culture Is It?” *Whose Culture?: The Promise of Museums and the Debate over Antiquities*. Ed. James Cuno. Princeton: Princeton UP, 2009. 71-86.
- Bauer, Alexander. “New Ways of Thinking About Cultural Property: A Critical Appraisal of the Antiquities Trade Debates.” *Fordham International Law Journal* 31 (2008): 690-724.
- Boardman, John. “Archaeologists, Collectors and Museums.” *Whose Culture?: The Promise of Museums and the Debate over Antiquities*. Ed. James Cuno. Princeton: Princeton UP, 2009. 107-24.
- Cuno, James. Preface. *Who Owns Antiquity?: Museums and the Battle over Our Ancient Heritage*. By James Cuno. Princeton: Princeton UP, 2008. ix-xxxvii.
- Divari-Valakou, Nicoletta. “Revisiting the Parthenon—National Heritage in a Global Age.” *UTIMUT: Past Heritage—Future Partnerships—Discussions on Repatriation in the 21st Century*. Copenhagen: International Work Group for Indigenous Affairs and Greenland National Museum and Archives, 2008. 116-21.
- Eakin, Hugh. “Who Should Own the World's Antiquities?” *The New York Review of*

Books 14 (May 2009): 1-9.

Knox, Christine K. "They've Lost Their Marbles: 2002 Universal Museums' Declaration, The Elgin Marbles, and the Future of the Repatriation Movement." *Suffolk Transnational Law Review* 29.2 (2006): 315-36.

Merryman, John. "Whither the Elgin Marbles?" *Imperialism, Art, and Restitution*. New York: Cambridge UP, 2006. 98-113.

Merryman, John. "Thinking About the Elgin Marbles." *Michigan Law Review* 83.8 (1985): 1881-1923.

Salem, Aisha. "Finders Keepers? The Repatriation of Egyptian Art." *Journal of Technology Law and Policy* 10 (2005): 173-93.

Simpson, Moira. "Museums, World Heritage, and Interpretation—The Case of the Parthenon Marbles." *Greek Research in Australia: Proceedings of the Biennial International Conference of Greek Studies*. Ed. E. Close, M. Tsianikas and G. Frazis. Adelaide: Flinders University Department of Languages—Modern Greek, 2005. 241-62.

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## Jennica Reichert

### Imitation by Expression

Some may find interest in knowing that a majority of human choices occur at an uncontrollable, subconscious level. Reactions to visual stimuli, ranging from facial expressions to observed behaviors, occur at an infinitesimal rate, such that tangible observations of decision making are limited. Yet, research now reveals that a relatively new phenomenon, mirror neurons, controls an individual's reactions to these stimuli. Essentially, these distinct neurons fire in response to both visual and auditory stimuli, causing individuals to mimic or imitate that stimulus. Controlling imitative responses to facial expressions, habits, actions, behaviors, sounds, and more, they are the imitative control centers of the brain (Lindstrom, 2010 & Dobbs, 2006). What, in particular, elicits mirror neuron firing has recently interested scholars. Such research reveals that facial expressions motivate individuals to imitate visual stimuli.

Inviting facial expressions correlate to mimicry of those positive facial expressions. Expressions directly influence a person's tendency to imitate certain behaviors. Scholars agree that since mirror neurons cause "[us to] mentally rehearse or imitate every action we observe," people naturally wish to emulate stimuli exhibiting expressions of happiness, joy, love, sexuality, or serenity (Dobbs, 2006). Clearly, "[people] are sensitive to positive social signals" (Leitzell, 2008). Through an expansive array of daily activities, one can witness this positive correlation. For instance, David Dobbs narrates how a newborn infant imitated sticking out his tongue in response to a playful display of love and affection (2006). Similarly, individuals frequently mimic other amicable facial expressions, such as smiles. In fact, a greater inclination to imitate the actions and behaviors of smiling individuals exists. Such persons naturally receive "more positive evaluations, a higher level of

attraction, and higher perceived intelligence than a non-smiling face” (Söderlund, 2003, p. 6). An article by Katherine Leitzell qualifies this point, citing that “it makes evolutionary sense that a smile would be [interpreted as] rewarding to the onlooker” (2008). Hence, positive expressions in general appear rewarding, a sensation which individuals naturally mirror as a result of neuron firing. However, these illustrations only demonstrate the most basic influence of expressions on mirror neuron activity and imitation.

Positive facial expressions also influence imitation of a plethora of complex behaviors. One such area of influence includes purchasing trends in consumers. Unsurprisingly, advertisements that appeal to happiness, sexuality, or any of the aforementioned inviting expressions frequently elicit greater patronization of that firm (Söderlund, 2003, p. 8). These engaging expressions signal to consumers a positive stimulus, which mirror neurons then respond to through imitation. To emulate these emotions, consumers purchase products whose advertisements exhibit these expressions (Lindstrom, 2010). Martin Lindstrom specifically explains this effect through two different scenarios: one through exploration of the distinguished Abercrombie & Fitch campaign and a second through a popular Youtube.com video. Strutting gorgeously contoured, well-groomed youths, the Abercrombie & Fitch advertisements expose consumers to a carefree, fun-loving, sexually attractive lifestyle. Likewise, the well-known YouTube video of Nick Baily excitedly opening his new Wii console triggers a similar yearning for euphoria and satisfaction (Lindstrom, 2010, p. 62). In both scenarios, Lindstrom (2010) asserts that these images and expressions activate mirror neurons, causing “dopamine levels to soar into the stratosphere” (p. 65). He denotes that the euphoric state synthesized by the release of dopamine (a neurotransmitter signaling motivation and reward) provides a temporary high in which consumers become sucked into purchasing items that they hope will allow them to imitate these same exuberant expressions (Lindstrom, 2010). The “*I want to become you*” sensation ultimately drives the purchase. Since “dopamine activity in the brain increases in anticipation of many different types of rewards, from gambling-related rewards, to monetary, to social rewards,” this high sensation also applies to other complex behaviors (Lindstrom, 2010, p. 64).

Recently, scholars Eileen Gallo and S. Rao have explored its application to promoting integration of socially beneficial behaviors, including training charity in children. Apparently, beginning at the age of five, children have the capacity to understand and mimic the charitable acts of their parents (Gallo, 2007, p. 49). Both scholars explain how children can essentially learn charitable habits as a result of mirror neuron firing. A willingness to mimic this behavior stems from the aforementioned relationship between expressions and mirror neurons. Observing their parents, adolescents witness the rewards and happiness apparent in their parents’ encouraging expressions. This then serves as a social reward to again trigger the release of dopamine, encouraging the child to consequently mimic the charitable act. Knowing this, Rao further explored the possibility that, if one can teach children charity, perhaps it is possible to teach other behaviors to society. Rather than pursue product placement to test this notion, marketers have invented a new technique, “behavior placement,” wherein subtle behaviors recur throughout television programs in the hopes of gradual societal integration (Rao, 2010). NBC, a proponent of this tactic, describes their methodology and application accordingly:

...certain behaviors are written into the show’s narrative in order to foist a more nebulous kind of marketing on us. For a week in April, NBC will use its shows to convince viewers to “get green,” compost, or otherwise save the planet. The benefits for advertisers are two-fold. Some companies simply want to link their brand to a feel-good and socially aware show, while other companies—like those that sell energy-efficient light bulbs or organic household cleaning products—think advertising on these shows will directly boost sales (Rao, 2010).

Here again, individuals respond to a display of euphoria by engaging in the socially beneficial behavior of “getting green.” Given the success of behavior placement in promoting favorable actions, scholars then wondered if expressions and positive stimuli could explain unwanted behaviors as well and, if so, could these tactics potentially correct them?

As it turns out, uninviting facial expressions also motivate certain imitations of negative stimuli. While research in this field has been minutely less of a focus, it seems logistically sound to associate negative

expressions with negative behaviors and their subsequent unfavorable imitation thereafter. For example, yawning often signals a plague of boredom, exhaustion, or disinterestedness, all negative emotions associated with this one expression. Martin Lindstrom explains that witnessing, hearing, or even reading about yawning triggers mirror neurons to induce near-instant mimicry of this expression (2010). However, many do not consider yawning a severely adverse behavior. So, consider this same effect applied to teens worldwide engaging in war, violence, and brutality for hours on end via video games. “Previous studies have suggested that there is a relationship between playing violent video games and aggressive behavior in children” (Pro-Social Video Games Make Children Kinder, 2009). Internally, gamers witness these expressions of pain, subconsciously attach them to the joyful and rewarding emotions of winning the game, and signal the trigger of mirror neurons that promote imitation of such immoral behaviors. For whatever reason, the “empathy reward regions and pain-related” regions of the brain do not view these behaviors with the typical aversion Lindstrom (2010) encountered in his studies (p. 57). Furthermore, the essentially unharmed nature of the virtual characters who engage in this behavior encourages transcendence of violent behaviors into real-life scenarios. To counteract this effect, recent development into the creation of pro-social video games has ensued. Results revealed that there was also a strong link between playing pro-social video games and helping other people (Pro-Social Video Games Make Children Kinder, 2009). Unfortunately, programmers continually struggle to develop a pro-social video game whose popularity matches that of the violence-oriented games.

Now that the connection between emotions and mirror neuron imitation exists, scholars both caution against and yearn to explore the future applications of such information. Many fear the sharing of mirror neuron scans and studies due to their potential use in manipulating citizens. By manipulation, one infers a lengthy list of employments, ranging from purchasing manipulation to habitual manipulation to electoral manipulation (Rapp, Hill, Gaines, & Wilson, 2009). Some have already offered that present uses of this research take advantage of an individual’s vulnerability. However, most do not take issue with its application to furthering moral and socially beneficial behaviors. If pleasant expressions entice citizens to recycle or act charitably, perhaps

they can additionally motivate healthier eating habits or monetary responsibility. It would appear much too simple of a fix to just visually represent the beneficial nature of a behavior. Yet, sometimes those smaller actions are all that is necessary to effect a change.

#### References

- Dobbs, D. (2006, May/June). A Revealing Reflection. *Scientific American Mind*. Retrieved from <http://file:///F:/Neuromarketing/Research%20Texts/A%20Revealing%20Reflection.htm>
- Gallo, E. (2007). Raising Charitable Children. *Journal of Financial Planning*, 20, 48-49.
- Leitzell, K. (2008, April/May). Just a Smile. *Scientific American Mind*. Retrieved from [http://swoba.hhs.se/hastba/papers/hastba2003\\_007.pdf](http://swoba.hhs.se/hastba/papers/hastba2003_007.pdf)
- Lindstrom, M. (2010). *Buyology: The Truth and Lies About Why We Buy*. New York: Broadway Books.
- Pro-Social Video Games Make Children Kinder. (2009). *Personality and Social Psychology Bulletin*. Retrieved from <http://www.enotalone.com/article/19734.html>
- Rao, S. (2010, April 8). We’re Beyond Product Placement: Here’s “Behavior Placement.” [web log post]. Retrieved from <http://blogs.discovermagazine.com/discoblog/2010/04/08/were-beyond-product-placement-now-heres-behavior-placement/>
- Rapp, J., Hill, R. P., Gaines, J., & Wilson, M. R. (2009). Advertising and Consumer Privacy: Old Practices and New Challenges. *The Journal of Advertising*, 38, 51-61.
- Söderlund, M., and Rosengren, S. (2003). The Smiling Face in Marketing Appeals and Its Effect on the Customer. *SSE/EFI Working Paper Series in Business Administration*, 7 (1). Retrieved from [http://swoba.hhs.se/hastba/papers/hastba2003\\_007.pdf](http://swoba.hhs.se/hastba/papers/hastba2003_007.pdf)

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## Sawyer Waugh

### Leonardo da Vinci: Pilot of Science

Leonardo da Vinci was *l'uomo universale*, the infinitely versatile “universal” man. He strove to master the diverse arts and sciences of the world like many others during the Renaissance. Leonardo examined everything, ranging from mechanics to anatomy to fluid dynamics to mathematics. Such research had many applications in Leonardo’s life: medicine, painting, sculpture, and his pursuit of human flight. Of these applications, Leonardo may have been fondest of flight. His fascination with human flight pushed towards mania; his efforts spanned at least 40 years of his life. The complexities involved in such a feat led Leonardo down a long, meandering path of scientific investigation. Despite repeated failures, Leonardo persevered. His curious mind mandated continuation of his extensive project. His goal lay more in the process than the result. When Leonardo passed, he had never achieved his dream—he had done something much greater. Leonardo’s widespread research had set the foundation for much of modern science. In pursuing his obsession of human flight, Leonardo established himself as a pioneer in contemporary science (Capra 124).

Leonardo’s interest in flight initially led him to study anatomy. His notebooks contain countless sketches of machines of flight, and while each is unique, its constituent parts are often analogous to various animal anatomies. Leonardo tirelessly observed creatures of flight, and then performed dissections to discover what enabled them to fly. His careful autopsies are beautifully described and depicted in his Notebooks, and include studies on the wings of birds, bats, flying fish, and dragonflies. He compared the skeletal structure of these animals to that of a human, and then designed machines to turn a man’s appendages into wings. Eventually, he deemed bird’s flight as the most feasible. Leonardo’s studies, thereafter, turned from anatomy to avian kinesiology. Leonardo was not interested in just getting off the ground; he wished for

a controlled, continuous flight. He meticulously recorded “birds’ turning maneuvers, their ability to maintain equilibrium in the wind, and the detailed mechanisms of active flight.” These observations translated to mechanical designs which would enable a man to fly with agility, balance in the wind, and generate enough force to sustain long-term flight. His exhaustive avian study culminated in a small Notebook called *Codice sul volo degli uccelli*, or the *Codex on the Flight of Birds*. These studies, however, were too inadequate to replicate a bird’s flight. Fritjof Capra, author of *Science of Leonardo*, explains that Leonardo “felt that, in order to understand the movements of the animal body, he needed to explore the laws of mechanics” (132).

First, Leonardo investigated the forces used in avian flight, but soon realized that these were affected by a multitude of variables. Thus, he began his explorations into the nature of gravity. Leonardo summarized gravitational force in his notebooks nearly two hundred years before Newton published his Theory of Gravitation. It stated that “the natural motion of heavy things at each degree of its descent acquires a degree of velocity. Gravity that descends freely in every degree of time acquires a degree of velocity” (Manuscript M). Capra indicates that “Leonardo is establishing the mathematical law that for freely falling bodies there is a linear relationship between velocity and time” (194). Leonardo attempted to counter the effects of gravity using human force, but had no success. He did, however, again beat Newton to the discovery of the Third Law of Motion: for each action there is an equal and opposite reaction. Leonardo wrote in his Notebook, “See how the wings, striking against the air, sustain the heavy eagle in the thin air on high. As much force is exerted by the object against the air as by the air against the object.” Therefore, there did exist a possibility of suspending a man on the air, but his ideas of reciprocal forces and gravitation were not sufficient. He concluded that “In order to give the true science of the movement of birds in the air, it is necessary first to give the science of the winds” (Codex). Leonardo’s studies transitioned from mechanics to fluid dynamics (Capra 147).

Leonardo’s “science of the winds” culminated in *The Codex Madrid*. It contains comprehensive theories of the resistance of water and air to moving solid bodies. Leonardo was fascinated by the movement of water and made detailed investigations in current, turbulence, and flow. He sketched the swirling turbulences he observed



in streams and rivers, and hypothesized about the vortexes of blood in the aortic valve. He compared the flow of water versus air, depicted the movement of particles in a current, and attempted to quantitatively describe the patterns and properties of liquid in motion (Leonardo). He writes, “Observe the motion of the surface of the water, how it resembles that of hair, which has two movements—one depends on the weight of the hair, the other on the direction of the curls; thus the water forms whirling eddies, one part following the impetus of the chief current, and the other following the incidental motion and return flow” (Leonardo). Leonardo connected his findings to the forces that keep a bird in flight—known today as thrust, drag, lift and weight (Capra 183). Such forces were dependent on the presence of friction, which Leonardo thoughtfully theorized.

Leonardo proposed that friction was dependent on three things: the roughness of a surface, the weight of an object on the surface, and the inclination of the surface (Capra 102). Today, friction is measured as the product of the normal force and a coefficient  $\mu$ , where the normal force is the product of the inclination of the surface and the weight of an object, and  $\mu$  is a measurement of an object’s roughness. Leonardo’s accuracy in this description is astonishing considering the idea of mathematical functions was yet to be born. He applied this idea of friction to his studies on aerodynamics to better understand the relationship between a bird’s wings and the air by which it was supported (Capra 205).

Just as he did with friction, Leonardo found recurring patterns in nearly all of his investigations. This pattern recognition began in his study of “pyramidal law.” Leonardo’s pyramidal law was his attempt to describe “functional” mathematics. Today, a function is “a relation between two sets in which one element of the second set is assigned to each element of the first set” (Collins English). This relationship was yet to be exacted, but Leonardo had realized its importance. He described a correlation between values in terms of triangles, or pyramids. The magnitude of one leg of a triangle affects the length of the hypotenuse. If a second leg is involved (i.e., a second variable), these together determine the length of the hypotenuse. If a third input is used, he uses the analogy of a triangular pyramid, where the height of the pyramid is the result of the three triangular faces. Each component of a situation affected the total outcome, as do variables in complex multivariable

calculus. “Augmentation and diminution in the natural forces takes place in this pyramidal manner...The velocity at which a falling body drops increases in a uniform manner, just as the velocity of a weight thrown vertically upward decreases uniformly. In the same way, force augments with velocity and attenuates with distance. And weight and percussion increase in proportion to velocity. The pyramidal law represents for Leonardo a universal constant” (The Mind of Leonardo).

Pyramidal law led Leonardo to link seemingly unconnected phenomena. Leonardo identified periodicity in nature with startling accuracy. His accomplishments were achieved with nothing but the naked eye, despite the fact that it would take both centuries and the invention of the computer to replicate his ideas. These ideas are complex systems in nature visually represented as “fractals.” A fractal is a geometrical representation of a model of chaos theory. Chaos theory is the underlying system used to describe anything undergoing turbulence, or disturbed, random, nonlinear motion like that of clouds, water and air. Just like any other function, a chaotic model can be depicted graphically. These seemingly random and disordered models appear as “a geometric pattern that is repeated at every scale and so cannot be represented by classical geometry” (Collins English). Leonardo illustrated his understanding of such infinitely complex patterns in his Notebooks (Capra 56).

For example, Leonardo marveled at the four geometries of spirals found in nature: convex, planar, concave and columnar. He found that all liquids and gases rotate in these styles, and provides numerical data to explain how “a rapid vortex tends to acquire a void at its center: The lateral weight of the vortex-circulation is two-fold...and such duplication of weight firstly comes into being in the revolving movement of the water and secondly is created on the sides of this concavity, supporting itself there” (Codex). In his notebooks, Leonardo sketched these complex motions. Leonardo drew various substances caught in spiral, likening the movement of water to hair flowing in a breeze, and fields of grass bending as one in the wind. His attempt to find order in the chaos of current is continued today, as scientists attempt to map an underlying structure for dispersal patterns in the world’s oceans. Modern investigation utilizes dynamical systems theory, a tool used to understand phenomena that change over time. Studies have culminated in a model called a

Lagrangian coherent structure. These structures are being used in research to improve aeronautical safety, decrease pollution and increase drug absorption (Venkataraman). The depth of Leonardo's studies on fluid dynamics reveals his hand in today's scientific world.

Leonardo spent decades of his life in the pursuit of flight, but eventually abandoned the project. After years of ingenuity, he sadly concluded that man is too heavy to lift himself from the earth. Birds, contrarily, are very light and have extremely powerful pectoral muscles. They are able to generate a force that greatly exceeds their weight, and resultantly can maintain flight without great effort (Capra 186). Leonardo did not, however, see his studies as a failure. He once stated that "the noblest pleasure is the joy of understanding" (Kemp 98). Leonardo's research granted him understanding, yet drove him to seek further knowledge. Flight was not just a dream, but Leonardo's vehicle for acquiring his greatest pleasure.

#### References

- Capra, Fritjof. *The Science of Leonardo: Inside the Mind of the Great Genius of the Renaissance*. New York: Doubleday, 2007. Print.
- Collins English Dictionary—Complete & Unabridged 10th Edition. 2009. William Collins Sons & Co. Ltd. 1979, 1986.
- Kemp, Martin. *Leonardo Da Vinci, the Marvellous Works of Nature and Man*. Cambridge, MA: Harvard UP, 1981. Print.
- Leonardo, and Ladislao Reti. *Codex Madrid*. Barcelona: Planeta De Agostini, 1998. Print.
- "The Mind of Leonardo." Museo Galileo. Institute and Museum of the History of Science. Web. 18 Apr. 2011.
- Venkataraman, Bina. "Finding Order in the Apparent Chaos of Currents." *New York Times*. 29 Sept. 2009. Web. 14 Mar. 2011.
- Vinci, Leonardo da. *Codex on the Flight of Birds*. Fol 8r.
- Vinci, Leonardo da. *Manuscript M Paris*. Folio 59. 1490.
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## Emily Savin

### Too Smart to Be Nice: "College Girls" and the Women's Education Debate at the Turn of the Twentieth Century

Both popular fiction and public discourse about female college students around the turn of the twentieth century reveal profound societal fears about the effect education would have upon women and upon the United States as a whole. Whether in favor of women's higher education or against it, these texts uniformly address the widespread fear that education posed a threat to femininity. The risks identified by critics were manifold. "College girls" (as they were usually called) would not want to marry, or—even if they did want to—no one would want to marry them. They would become self-involved. They would neglect their domestic responsibilities. They would be unhappy and unfulfilled. In short, the "ideal woman"—a loving, humble wife and mother who was content to devote her life to ensuring the happiness and morality of her family—was at risk of extinction. Despite their many fervent proclamations about the fundamental biological nature of woman, however, an examination of these texts reveals that critics focused their fears not on the overall well-being of womankind, but very particularly on the capacity of women in the upper classes to maintain their social status, marry, and bear children.

Participants in the debate over women's higher education frequently expressed the anxiety that education would deprive the upper-class society woman of the social graces that distinguished her from her inferiors, and even supporters of women's education were not immune to this belief. In *The American Girl at College* (1893), a guidebook written to prepare and encourage young women to pursue higher education, Lida Rose McCabe frets about the way college women dress: "American women are said to be the best-dressed women in

the world. A glance at a gathering of college-bred women, however, rarely fails to reveal how little higher education has contributed to this international repute” (140). She does not believe that this correlation between education and lack of fashion sense is mere happenstance: “Brain-workers are proverbially inclined to run down at the heels. Intellect and artistic dressing have rarely if ever been synonymous” (139). McCabe does not articulate a direct connection between fashion and marriageability, but she does assert the necessity of a more plentiful wardrobe in colleges whose social environments allow for gentleman callers—expressing just a hint of the suggestion that clothing serves more than an aesthetic purpose (138).

In her short story collection *College Girls* (1895), Abbe Carter Goodloe sends a more pointed message: feminine social graces and intellect cannot coexist in one woman, and it is only by sacrificing intellect that a college girl can be accepted by high society and attract an eligible man. Goodloe seems, like McCabe, to be a proponent of college for women, and in the story “La Belle Hélène” she attempts to communicate the message that college girls are not all the gawky, awkward bookworms that they are often thought to be. The story is far from an unambiguous celebration of educated women, however. It begins as a society woman and her daughters greet the news of an imminent visit from a college-educated cousin, Helen, with much hand-wringing: they have not seen her since her childhood and fear that she is “an ugly duckling” (47) who is “too smart to be nice” and “wears specs” (56). One daughter explains, “We all feel miserably sure of what an impossible sort of girl she is. She even took some sort of honor in mathematics at Oxford—just fancy! What she is going to be like in a ball-room no mortal can guess!” (53). Mrs. Morrison and her daughters dutifully arrange a dinner party for Helen; desperate to find men who might conceivably be interested in conversing with her, they invite an elderly professor and a stodgy clergyman, and they write in advance to their more dashing male invitees to entreat them to be kind to Helen despite her utter lack of beauty, charm, and tact. Helen in fact ends up stunning the entire dinner party with her abundant beauty, charm and tact. One smitten young man remarks, “You say she’s been to college all her life and is awfully smart? Well, I suppose she is—she looks that way—but she didn’t come any of it on us” (65). It is only by concealing her intellectual

abilities that Helen is able to achieve success and acceptance in this upper-class society setting: she is admired in spite of her education, not because of it. “College girls” are all right, we learn, as long as they are strikingly beautiful, wear gowns from Paris, and, most importantly, do not demonstrate themselves to be oppressively intelligent. It is only by being indistinguishable from less educated women that college girls can attract the attention of suitable men.

The idea that college education and family life are incompatible is reinforced in a number of works of fiction. In Goodloe’s story “Her Decision,” a young upper-class woman tries to “have it all” (to use an anachronistic expression) and learns that it is impossible to have both intellectual satisfaction and domestic life. Eva Hungerford, a college graduate, has long sworn that she will be a writer and never marry. Yet she fears that her status as a society woman is an obstacle to the honing of her talent: reflecting that literary geniuses are “always ugly and poor,” she “wished she were not so stylish and so distressingly well off in this world’s goods,” desiring instead to be “an old-time ugly, poverty-stricken genius” (158). When she finds herself falling for an avid young suitor, she feels even more torn: “It was very hard to give up everything, and she was very young and her friends thought her beautiful. Could there be no compromise?” (156). The reader who expects a compromise to follow is disappointed. Miss Hungerford is ultimately persuaded by her suitor’s declaration that “there were no end of writers in the world and absolutely but one woman could be his wife.” He asks her “if she really cared more for her musty books and a ‘brilliant career’... than she did for a man who loved her so devoutly that he would willingly lay down his life for her” (160). He is willing to give up his life, but not, it would seem, a writing desk and a few hours a day of his wife’s time. Miss Hungerford’s sensible decision to relinquish her aspirations to grandeur and seek the humble happiness of life as a wife and mother is celebrated by her high-society friends—they are relieved, presumably because she has at last recognized the proper domestic role of an upper-class woman.

Whereas Goodloe appears to be ambivalent about the value of college for women and tries harder to demonstrate that it is occasionally harmless than to argue that it is beneficial, the writer Olive Anderson is a staunch proponent of women’s education; yet even in a work of fiction she does not allow a woman to experience both love and professional

success, let alone a life in high society. The protagonist of her semi-autobiographical novel *An American Girl, and Her Four Years in a Boys' College* (1878), who goes by the nickname "Will" (short for Wilhelmine), is a brilliant and ambitious student of modest means at a fictional coeducational university based on the University of Michigan. The upper-class male classmate she loves, Randolph, falls in love with her, but loses interest when a society belle persuades him that Will's unfeminine ways would be completely socially unacceptable in the wife of a man of his standing: she splits wood, hunts, rides unbroken horses, advocates for women's suffrage, and plans to be a doctor. The ambiguous ending leaves it unclear whether or not Will and Randolph will reconcile and suggests that Will may not be able to pursue a medical education, either (the money that she has saved for her tuition is lost when a well-meaning uncle invests it poorly). The novel celebrates its strong and unconventional heroine throughout, but it fails to grant her either of her two great desires at the end. This baffling plot twist turns what seems destined to be a success story into a cautionary tale—a dire expression of the anxiety with which even the most stalwart supporters of women's college education viewed its consequences for women's happiness, family life, and social standing.

Fears about social status and domesticity fueled the arguments of many experts who opposed women's college education, even when their ostensible concern was the physical health and well-being of female college students. Most famously, Dr. Edward Clarke's book *Sex in Education* (1873) warned of grave health risks to women who undertook college studies: he argued in particular that the development of the delicate and complex reproductive system would be stunted by excessive intellectual activity, which would draw blood to the brain that was needed by the ovaries. This debate took place during the industrial revolution, when more women than ever worked outside the home; but it was college education, not factory labor, that sent doctors and other experts scrambling to warn of a threat to delicate feminine constitutions and uteri, because this was a threat to the society woman. This double standard did not go unnoticed in its own time: paraphrasing common criticisms, a Vassar student commented in 1906, "Woman's health is endangered by a college education! The race is in peril! Man to the rescue! But he raises no great outcry against the millions of women

who are working in the factories under the most unsanitary conditions" (quoted in Lindgren, 45). In *An American Girl, and Her Four Years in a Boys' College*, Will puts this hypocrisy in historical perspective. Responding to Clarke's book in particular, she argues:

Women have washed and baked, scrubbed, cried, and prayed themselves into their graves for thousands of years, and no person has written a book advising them not to work too hard; but just as soon as women are beginning to show in education, up starts your erudite doctor with his learned nonsense... trying to prove that woman's complicated physical mechanism can't stand any mental strain. (98)

College education, not manual labor, excited fears about threats to women's health because it took the society woman outside of the home. The idealized notion of woman was best preserved in the upper classes: women of wealth were able to devote themselves fully to the domestic sphere without worrying about outside employment. Education threatened to distract from domesticity where financial need did not.

Fears about women's reproductive health intersected with concerns about social status in the rhetoric of "race suicide," perhaps the most insidious manifestation of class prejudice that lurked beneath the debate on women's education. President Theodore Roosevelt popularized the term in alarmist speeches in which he deplored the declining birthrate of Americans of Anglo-Saxon descent and the population growth among immigrants of other ethnicities. College-educated women were marrying in significantly lower numbers than their less educated counterparts, and critics feared that the failure of daughters of the American upper crust to reproduce was compounding this crisis. This climate of fear made Dr. Clarke's treatise about the dangerous effects of college upon the development of the reproductive system all the more effective. He warned:

The sterilizing influence of such a training, acting with tenfold more force upon the female than the male, will go on, and the race will be propagated from the inferior classes. The stream of life that is to flow into the future will be Celtic rather than American: it will come from the collieries, and not from the peerage. (139-140)

Thus women were not simply risking their own health, the argument went, but the future of the country, which would before long be overrun by the coal-mining Irish. William DeWitt Hyde went even further in his condemnation of college women who neglected to reproduce, writing that a woman who devotes herself to academia deprives descendants of “what nature lent her as a trust for the benefit of future generations” and “is guilty of a sin against the fountain-head of humanity, a crime against the race” (203). The influence of Darwin is strongly present in this debate: one critic wrote, “We can by no means abolish the grim facts of inheritance and selection from human society. Do not misunderstand me. My sympathies are heartily with the higher education of women but some of its present biological effects are certainly questionable” (Wells, 739). The domestic obligations of upper-class women were not limited to their respective households: it was their duty as a group to produce the next generation of elite Anglo-Saxon Americans.

Like the other anxieties that found their way into the debate over women’s higher education, this nationalistic alarmism was symptomatic of the fears of the old guard at a time when the world was changing rapidly. Over the course of a few decades, industry continued to expand the new middle classes, immigrants entered the U.S. in massive waves, Darwin introduced a radical new view of the history of humankind, a civil war fractured the country and dramatically changed its entire socioeconomic structure, and the women’s movement drew ever closer to achieving women’s suffrage. Opponents of women’s college education—and even some of its supporters—clung to the status quo, and the members of a disappearing American aristocracy looked on in alarm as women’s education threatened to join the other forces that would dismantle it.

#### References

- Anderson, Olive San Louie. *An American Girl, and Her Four Years in a Boys’ College*. New York: D. Appleton & Co., 1878.
- Clarke, Edward H., M.D. *Sex in Education: Or, A Fair Chance for the Girls*. Boston and New York: Houghton, Mifflin and Co., 1873.
- Hyde, William DeWitt. *The College Man and the College Woman*. Boston and New York: Houghton Mifflin, 1906.

- Lindgren, Gunilla. *Higher Education for Girls in North American College Fiction 1886-1912*. Philadelphia: Coronet Books, 2005.
- McCabe, Lida Rose. *The American Girl at College*. New York: Dodd, Mead, & Co., 1893.
- Wells, D. Collin. “Some Questions Concerning the Higher Education of Women.” *The American Journal of Sociology* 14.6 (1999): pp. 731-739.
- “The Gibson Girl Goes to College: Popular Culture and Women’s Higher Education in the Progressive Era, 1890-1920.” *American Quarterly* 39.2 (1987): 211-230.
- Goodloe, Abbe Carter. *College Girls*. New York: Charles Scriber’s Sons, 1895.
- Gordon, Lynn D. “From Seminary to University: An Overview of Women’s Higher Education 1870-1920.” *The History of Higher Education* (1997): 473-498.
- Graff, Gerald. *Beyond the Culture Wars: How Teaching the Conflicts Can Revitalize American Education*. New York: W.W. Norton & Co., 1992.
- Grandgent, Charles Hall. “The President’s Address: The Dark Ages.” PMLA 27, Appendix. *Proceedings of the Thirtieth Annual Meeting of the Modern Language Association of America, and of the Eighteenth Annual Meeting of the Central Division of the Association, 1912* (1912): pp. xlii-lxx.
- Horowitz, Helen Lefkowitz. *Campus Life: Undergraduate Cultures from the End of the Eighteenth Century to the Present*. New York: AA Knopf, 1987.
- Johnson, Owen. *Stover at Yale*. New York: Frederick A. Stokes Company, 1912.
- Weneck, Bette. “Social and Cultural Stratification in Women’s Higher Education: Barnard College and Teachers College, 1898-1912.” *History of Education Quarterly* 31.1 (1991): 1-25.

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## Eric Kim

### The Brain that Changes

Until recently, neuroscientists held the notion that the structure of the brain was fixed after infancy; neurons could never regenerate or form new networks. In the 1990s, however, Gould documented neural cell division in adult primates. A flurry of subsequent experiments illustrated that the brain continuously changes throughout life. This property has been termed “neuroplasticity” and it involves modifying neural connections, building new neural networks, destroying neurons, and generating new neurons. Through neuroplasticity, everything from experiences, injuries, and even thoughts can change the fabric of the brain (Ratey). In fact, if this concept is new to you, your brain is undergoing reorganization as you read. For some, this might be a startling notion: are these structural changes in the brain taking place for better or worse? After all, in a system as complex as the brain, any changes might disrupt a natural balance. On the other hand, neuroplasticity implies an opportunity to improve the brain. Human experience shows both results can occur. For the most part, however, neuroplasticity is beneficial.

It would be wrong to ignore that, in some cases, neuroplasticity can lead to harmful conditions. For example, neuroplasticity may malfunction in response to injury. Normal injuries rearrange nerve cells to help enforce a feeling of pain. These neural changes eventually revert, and the pain subsides. With severe injuries, however, the neural changes may become irreversible, leading to many cases of chronic pain. Amputees often develop this problem in the severed limb, a disorder known as “phantom limb pain” (Plowman). Many other harmful results of neuroplasticity have been documented. For example, writers who used hand muscles frequently strengthen corresponding networks in the motor cortex. In some cases, this development leads to a hyperactive motor cortex that causes painful, involuntary contractions

of hand muscles (Johnston). Likewise, drug use can overstimulate and change neural pathways, ultimately leading to addiction (Plowman). While neuroplasticity can have harmful results, virtually all biological functions have some negative effects. Errors in nuclear division, for example, can lead to Down syndrome. Likewise, faulty protein synthesis can result in diabetes, cystic fibrosis, cancer—the list goes on (Wilson). However, normal functioning of nuclear division and protein synthesis are both critical for human life. Similarly, while neuroplasticity can have some problems, it still plays an overall positive role in our biology.

For one, neuroplasticity allows the brain to improve useful mental functions. When the brain engages in a challenging mental task, it structures a network of neurons to perform the task. With repetition, the neurons thicken, and new connections are added to the network to make it more advanced. To study this role of neuroplasticity, a Turkish research team at the University of Dokuz Eylül examined the parietal lobes of mathematicians; this part of the brain helps process the abstract creativity used in advanced mathematics. The results showed that the density of neurons and neural connections in the parietal lobes were highly correlated with years of training (Aydin). Other studies found similar correlations between violinists and the motor and auditory cortexes, as well as taxi cab drivers and brain regions that store spatial information (Galvan). In other words, practicing a skill, such as mathematics repeatedly solving difficult problems, leads to lasting changes in the brain that make you better at it. Just like physical exercises that can strengthen specific body parts, mental exercises can literally reshape the brain to suit different functions as needed. Without neuroplasticity, the brain would be a fixed structure and any improvements would be impossible.

Beyond improving the usual roles of brain regions, neuroplasticity allows brain regions to adopt radically new functions. This mechanism plays a critical role in compensating for the disruption or loss of a function. The first experiment to illustrate this notion was conducted by MIT neuroscientist Mriganka Sur, who disturbed retinal connections in newborn ferrets by redirecting them to the auditory cortex. Because the structure of the auditory cortex cannot process light, the ferrets should have been completely blind. Remarkably, the ferrets still responded to light stimuli. fMRI imaging showed that neurons in the auditory cortex



had reorganized to resemble networks normally present in the visual cortex. Thus, neuroplasticity can adapt brain regions to suit new needs. Later studies have found numerous parallels in human subjects. Deaf patients, for instance, can use the auditory cortex to interpret sign language, while blind people can use the visual cortex to read Braille. If a finger is lost, its brain area is used by the remaining ones to make them more efficient (Plowman). These studies show that, when regions of the brain can no longer be used for their normal functions, they are adapted for other purposes. In this context, neuroplasticity operates to constantly make the most of its “neural real estate.” This efficiency cushions the impact when normal processes are compromised.

Moreover, neuroplasticity helps patients recover from physical brain injuries. Because the brain is such an integral part of normal functioning, brain injuries often have devastating consequences. Strokes, for example, can destroy an entire hemisphere of the brain, leading to paralysis in half of the body. Other brain injuries occur from brain surgeries, brain tumors, and brain blood vessel disorders; these commonly result in severe speech impairments, disrupted vision, and memory problems. Luckily, neuroplasticity acts as a built-in healing mechanism. When the brain senses injury, it forms new neurons and synapses to repair the damaged networks, often leading to dramatic improvements. Stroke patients, for example, can recover almost full motor function. In this way, neuroplasticity prevents brain damage from leading to permanent disabilities (Johnston).

In a related manner, neuroplasticity assists in recovery from psychological disorders. Insight into this process was first gained by studying the brains of Buddhist monks after meditation. The results indicated that brain regions associated with positive attitudes and happiness underwent lasting changes during meditation that made them more active. In other words, conscious thoughts (such as the positive ones common during meditation) can fundamentally alter the brain, and these thoughts can be controlled. Thus, it is not surprising that, in many cases of depression, patients report marked improvements by simply thinking positive thoughts. In this context, neuroplasticity allows us to actively improve our mental health. When something goes wrong, we have the power to fix it (Kaufman).

Neuroplasticity has shattered the concept of a static brain.

Within less than twenty years of its discovery, numerous benefits of neuroplasticity have been identified. Such broad implications are beginning to change old notions. In education, for example, neuroplasticity has strongly swung the Nature-Nurture Debate in favor of the nurturists; educators are helping children overcome learning difficulties and actually improve their IQ through training programs that restructure the brain. Neuroplasticity is impacting the adult population as well. As news of a malleable brain spreads, people are engaging in exercises to proactively improve themselves (Wesson). Meditation anyone?

#### References

- Aydin, K. Increased Gray Matter Density in the Parietal Cortex of Mathematicians: A Voxel-Based Morphometry Study (2007). *Neuroradiology*, 28, 1859-64.
- Cramer, S. Harnessing Neuroplasticity for Clinical Applications (2011). *Brain*, 134.
- Galvan, A. Neural Plasticity of development and learning (2010). *Human Brain Mapping*, 31(6), 879-890.
- Gould, E. Proliferation of Granule Cell Precursors in the Dentate Gyrus of Adult Monkeys Is Diminished by Stress (1998). *National Academy of Science USA*, 95(6), 3168-71.
- Johnston, M. V. Plasticity in the Developing Brain: Implications for Rehabilitation (2009). *Development Disabilities*, 15(2), 94-101.
- Kaufman, Marc. Meditation Gives Brain a Charge, Study Finds. *The Washington Post* 2005. Print.
- Plowman, E. K., and J. A. Kleim. Motor Cortex Reorganization Across the Lifespan (2010). *Journal of Communication Disorders*, 43, 286-294.
- Ratey, John J., and Albert M. Galaburda. *A User's Guide to the Brain: Perception, Attention, and the Four Theaters of the Brain*. New York: Pantheon, 2001. Print.
- Sur, M. Visual Behavior Mediated by Retinal Projections Directed to the Auditory Pathway (2000). *Nature*, 404, 871-875.
- Wesson, Kenneth. Neuroplasticity. *Brain World* (2010). Print.
- Wilson, John H., and Tim Hunt. *Molecular Biology of the Cell*. New York: Garland Science, 2008. Print.

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## Audrey Hong

### The Word-of-Mouth Möbius

On and on, without a definite beginning and a definite end, the Möbius loop circles. The Möbius is a mathematical anomaly, a non-orientable surface that constantly cycles, uninterrupted by barriers or ends. Traversing the length of the band simply yields a return to the initial point of origin, though curiously, the product surfaces inverted. Fundamentally, whatever travels through reemerges ready to begin the cycle anew (*Internet Encyclopedia*). The progression of word-of-mouth advertising parallels that of the Möbius strip. Word-of-mouth (henceforth to be abbreviated as WOM) is a social phenomenon wherein people share experiences by means of utilizing conversation. Moreover, a WOM campaign is a marketing strategy designed to capitalize upon communication and the spread of information. As with the Möbius, what emerges from a WOM cycle is a slightly altered version of the original, preempted to begin the process once more. With constant human capital as fuel, the procedure continues indefinitely. Word-of-mouth is a cyclic process.

Surprise catalyzes WOM sequence. As postulated by Derbaix and Vanhamme (2002), surprise is a “short-lived emotion elicited by either unexpected or misexpected products/services/attributes, or more precisely, by a ‘schema discrepancy’” (101). The disruption of an individual’s compilation of prerecorded information, or schema, is what triggers the emotion (Heath & Heath, 2007; Gwynne, 2002; Derbaix & Vanhamme, 2002). Surprise is therefore stimulated by discrepancies; the more jarring or unexpected an idea, the more intense the emotion it will elicit. Surprise acts as a direct catalyst to the WOM effect due to a phenomenon referred to as the “social sharing of emotions,” a tendency for people to desire sharing their experiences. The frequency of sharing correlates positively with the amount of disturbance the individual feels (Derbaix & Vanhamme, 2003; Whittlesea & Williams,

2001; Loewenstein, 1994). In essence, the more unsettling an event and stronger the emotional response generated, the more frequently and quickly the public spreads the message. Advertisers commonly seek to appeal to social sharing by utilizing unexpectedness: by heightening the startle-factor of ads, they can exacerbate the jarring nature of these experiences, thereby launching a viral and exponentially growing message. While it is certain that surprise can trigger WOM, how is the process to be continued?

Curiosity is necessary to sustain the WOM cycle. Curiosity can be defined as an intrinsically motivated desire to gain information (Loewenstein, 1994; Whittlesea & Williams, 2001; Derbaix & Vanhamme, 2002). This is known as the Incongruity Theory, a model that expresses the intuition that people tend to be curious about unexpected events that cannot be explained (Loewenstein 83). If surprise is what exposes a “gap” in knowledge, curiosity is the natural human desire to fill these holes, thereby correcting schema discrepancies: “One important implication of the gap theory is that we need to *open* gaps before we *close* them... to highlight some specific knowledge [an audience is] missing” (Heath & Heath 85). Therefore, without surprise, curiosity cannot exist. The immediate and unconscious thirst for knowledge keeps an audience engaged; a man who has his schema disturbed desires knowing not only *why* these gaps were formed, but also *how* to fix them. Quintessentially, surprise may immediately seize attention, but curiosity is what piques and captures interest. Advertisers thus need to expose breaks and cracks in a consumer’s knowledge. However, in order to maintain sustained interest, they must give just enough information to balance the lack thereof. Consider, for example, an ad that is completely bewildering and incomprehensible. If even greatly surprised audience members have no way of making sense of the ad, they will grow frustrated and lose interest, lost in a space that is altogether too vast and perplexing. Therefore, marketers must give *just enough* to subtly turn trenches into holes. The audience, seeking ways in which to fix their schemas, will not only remain curious, but will share the experience with others. The question that remains to be answered, however, is how marketers gain new audiences.

Publicity synthesizes both surprise and curiosity, in turn adding fuel to the WOM cycle. A WOM campaign’s roots are inherently based upon

the properties of viral marketing, a system of referral marketing whereby “marketers make use of consumer-to-consumer communications, which are both rapid and cheap” (Clarke & Theresa123). The rapid spread of the WOM effect has already been detailed by means of creation (surprise) and maintenance (curiosity). However, an underlying consequence of both is the generation of publicity, which any ad campaign that creates sufficient surprise and curiosity will inherently breed. Consider Christina Aguilera’s perfume launch, a near perfect representation of a successful WOM cycle. The popular musician’s advertising committee employed guerilla tactics in order to market the starlet’s new fragrance line. Overnight, the team dispersed 150,000 empty hangers throughout the Israeli city of Tel-Aviv. They placed the hangers in conspicuous locations; the sheer pervasiveness immediately shocked and confused the public. Seeing a city blanketed by empty coat hangers was jarring, incongruous, and evoking of schema discrepancies. Each hanger was adorned with a small card emblazoned with the word “Simply,” and the tagline “Sometimes it’s all you need to wear.” By looking up the brand and slogan, curious city-dwellers were able to fill the gaps in knowledge by learning about the perfume’s creation and background. Thousands of inquisitive citizens flooded the brand’s website, seeking to fill their knowledge gaps. Even further, the sheer shock and interest generated overnight led to comprehensive media coverage. Those who were newly exposed to the campaign through news outlets were surprised by the attention garnered; they sought to learn more to satisfy their own newfound curiosity. The perfume sold out in three days, the highest profit ever generated by a fragrance in Israeli history. If a WOM campaign is effective enough, as the Simply perfume’s was, it is bound to generate publicity on its own. Correctly triggering surprise and curiosity allowed for these viral campaigns to recycle themselves.

In a time of rapid turnover rates and increased induced-obsolescence, marketing campaigns are struggling to survive. Products fly off shelves and into dusty closets faster than advertisers can cope with. The amounts of resources used to traditionally market these products cannot be justified. Realistically speaking, the system currently in place is simply impossible to maintain. A WOM campaign, however, when distilled to its core elements, is fundamentally self-sustaining.

The cyclic nature of the process generates infinite energy with a finite set of pre-established resources. Most importantly, a WOM campaign yields the very capital that allows it to truly take flight. Perhaps it is an outlet by which the public can take hold of the way things are advertised. Perhaps it has the potential to decrease the amount of resources squandered each and every day. And perhaps, above all, it is the next step in generating a truly sustainable marketplace. Perhaps. But who is to say why not?

#### References

- Clarke, I., & Theresa, F. (2005). *Advances in Electronic Marketing*. Hershey, PA: Idea Group.
- Derbaix, C., & Vanhamme, J. (2002). Inducing Word-of-Mouth by Eliciting Surprise—A Pilot Investigation. *Journal of Economic Psychology*, 24, 99-116.
- Gwynne, P. (2002). Surprise as a Marketing Tool. *MIT Sloan Management Review*, 44, 15.
- Heath, C., & Heath, D. (2007). *Made to Stick: Why Some Ideas Survive and Others Die*. New York: Random House.
- The Internet Encyclopedia of Science. Retrieved December 4, 2010, from [http://www.daviddarling.info/encyclopedia/M/Mobius\\_band.html](http://www.daviddarling.info/encyclopedia/M/Mobius_band.html).
- Loewenstein, G. (1994). The Psychology of Curiosity: A Review and Reinterpretation. *Psychological Bulletin*, 116, 75-98.
- Whittlesea, B., & Williams, D. (2001). The Discrepancy-Attribution Hypothesis: II. Expectation, Uncertainty, Surprise, and Feelings of Familiarity. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 27, 14-33.

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## Kelly-Ann Corrigan

### Huckleberry Finn and Inverse Akratic Action

Moral philosophy often explores agents who know what they should do (morally speaking) and either do it or fail to do it. However, little attention is given to the cases in which good people with bad principles who do not know what they should do, do the right thing anyway. Inverse akrasia is a phenomenon in which an agent does the right thing against his best judgment (Arpaly and Schroeder, 1998). Drawing on the works of Nomy Arpaly, Alan Goldman, and Robert Audi, I will argue, using the novel *Huckleberry Finn*, that agents who experience inverse akrasia can be rational and morally praiseworthy even though they are unaware their decisions are morally correct.

In examining the connection between inverse akrasia and rational, moral decision making, I will first look at the model of rational action put forth by Robert Audi and the model of moral worth put forth by Nomy Arpaly as they apply to *Huckleberry Finn*. Next, I will explain why Kant's moral theory precludes the possibility of rational, inverse akratic action. In order to refute Kant's position as well as put forth my own positive argument, I will offer reasons in favor of rational, moral inverse akratic action: moral emotions, spontaneous inspiration, and perceptual shifts.

Robert Audi's "Weakness of Will and Rational Action" (1990) discusses the notion of weakness of will as it is defined as acting against one's better judgment. Weakness of will is often used as another term for inverse akrasia. The actions produced as a result of this phenomenon are known as incontinent actions. One of the most famous cases of inverse akrasia is the case of Huckleberry Finn. In Mark Twain's *The Adventures of Huckleberry Finn*, Huck attempts to help a runaway slave, Jim, escape to freedom. However, as their journey up the Mississippi continues, Huck begins to become plagued by his "conscience." He begins to tell himself that by helping Jim escape, he

is stealing from Jim's owner. After much deliberation, Huck decides to turn Jim in. However, when given the opportunity to do so, Huck does not. Most moral philosophers tend to argue that Huck's actions are incontinent actions and are, therefore, irrational. The four practical arguments that discuss incontinence as irrationality cite practical inconsistency, impaired autonomy, inexplicability, and malfunction. Audi criticizes each of these arguments, arguing in favor of the possibility of rationality coexisting with inverse akrasia. He then puts forth his own model of rational action known as the balance of reasons model. The balance of reasons model is a holistic model which states that a rational action is one that is grounded, in the right way, in sufficiently good reasons of the agent, regardless of whether he figures in premises leading to the making of a judgment that favors that action. Therefore, this model supports Huck as rational as his reasons are grounded in his perception of Jim as a human being. Audi boldly asserts that sometimes natural reasonableness can prevail over our most careful assessments.

Like Audi, Nomy Arpaly argues in favor of rational cases of inverse akrasia as well as the possibility that inverse akratic actions can sometimes deserve moral praise. According to Arpaly's account of moral worth, agents are morally praiseworthy "if they have done the right thing for the relevant moral reasons—that is, in response to the features that make it right (the right reasons clause), and an agent is more morally praiseworthy, other things being equal, the stronger the moral concern that has led to her action." (Arpaly, 2003, p. 55). According to Arpaly's theory, these ideas need not enter an agent's conscious mindset as long as they are present on some level. Hence, according to Arpaly's theory, an agent may be morally praiseworthy even if he is experiencing inverse akrasia. Arpaly cites Huckleberry Finn as morally praiseworthy because his actions are being done for the relevant moral reasons even though they have yet to enter a level of conscious awareness.

Contrary to Audi's and Arpaly's claims, Kantian ethicists state that all rational, morally praiseworthy actions must be performed from duty. Therefore, an agent can only be rational and morally praiseworthy if he does the right thing out of concern for morality. Barbara Herman's "On the Value of Acting from the Motive of Duty Alone" (1993) states: "For a motive to be a moral motive, it must provide the agent with an interest in the general rightness of his actions. And when we say that an action has

moral worth, we mean to indicate (at the very least) that the agent acted dutifully from an interest in the right action.” In other words, for an agent to be rational and morally praiseworthy, he must believe that what he is doing is morally correct. Kantian philosophers may argue that Huck’s action has no moral worth. They may argue that Huck is acting on “mere inclination,” which is akin to how some animals (on instinct) do not harm creatures with infantile features. While Huck’s action itself is good, he does not deserve moral praise for it. Kantian ethicists will point out that because Huck was acting against his best judgment, he could not possibly be acting rationally. Bennett (1974) argues that Huck is a “soft-hearted, squeamish boy unable to see a man in chains.” Huck is simply seen as a racist boy who accidentally does the right thing.

These scenarios fail to take into account the possibility that decisions based on feelings can be rational decisions. Alan Goldman’s “Huckleberry Finn and Moral Motivation” challenges this idea and supports the idea that certain emotions can be useful in moral decision making. Goldman argues that emotions can implicitly embody the contents of judgments. In the case of Huckleberry Finn, Huck experiences sympathy. Sympathy contains the implicit judgment that “a person needs help in light of his situation” (Goldman, 2010, p. 4). Therefore, in Huck’s case, sympathy’s implicit judgment reflects awareness of the reasons to help Jim escape. Thus, we can refer to sympathy as a moral emotion. This idea is also supported in Audi’s article as he supports the idea that sometimes an agent’s “gut-feeling,” which is based on an agent’s emotions, can prevail over careful assessments. Goldman, like Audi and Arpaly, supports the idea that Huck’s actions are both rational and morally praiseworthy.

Kantian ethicists also reject the possibility that a decision made via spontaneous inspiration may be rational or moral. Although Huck’s decision not to turn Jim in is “spur of the moment,” I believe that his decision has its roots in his “natural virtue” or inherent morality (Aristotle, trans. 1952). Arpaly cites that “very few people who give up racist prejudices give them up via deliberation. Usually, the irrationality of their prejudice dawns on them after spending long enough with people of the relevant race and realizing bit by bit that they are very similar to themselves” (Arpaly, 2003, p. 56). I believe that this is what happens to Huck in the very instance that he lies to protect Jim. Furthermore,

Kantian ethicists will argue that Huck’s beliefs and desires pertaining to the situation are incoherent, and therefore, his action cannot be rational. Huck believes he should turn Jim in; however, he has no desire to do so. This is because Huck’s relationship with Jim has developed to a point that Huck is not consciously aware of: Huck has begun to see Jim as an equal (his belief set has been modified). Since Huck’s belief set has been modified, helping Jim is actually coherent with his beliefs although it appears to be the opposite. For these reasons, I argue that Huck’s actions are both rational and praiseworthy.

Taking into account the idea of moral emotions and spontaneous inspiration, I argue that agents that experience inverse akrasia may undergo a subconscious perceptual shift leading them to make morally correct decisions unbeknownst to themselves and contrary to their conscious beliefs. Using the example of Huckleberry Finn, I can argue that Huck is acting neither from “mere inclination” or squeamishness. His action is not accidental. Instead, I argue that as Huck and Jim’s relationship develops, Huck undergoes a perceptual shift. Huckleberry’s racist beliefs and his conscious views begin to deviate more and more as he spends time with Jim. As they begin to share their hopes and desires, Huck begins to perceive data that he does not deliberate upon. This data amounts to the message that Jim is a person much like himself. Although Huck never reflects on these facts, he does begin to treat Jim more and more like an equal. We see this clearly when Huck apologizes to Jim—an action unthinkable in his society; black men were considered to be objects, not people. Huck’s strong reluctance to turn Jim in when he is finally given the opportunity to do so can be credited to Huck’s emotions and the fact that he has begun to perceive Jim as a fellow human being even if Huck’s conscience mind has not yet registered his perceptual shift. Because Huck is reluctant to turn Jim in due to Jim’s humanity, Huck is acting for morally significant reasons. Therefore, Huck is not a bad boy who accidentally did something good but a good boy (Arpaly, 2003, p. 59).

The phenomenon of inverse akrasia does not only occur in fiction; we can also see examples of it in history. Oskar Schindler, a German industrialist, who saved almost 1,500 Jews during the Holocaust, displays another case of inverse akrasia. Although he did not believe he was making the morally correct choice, he helps the Jews anyway.



Much like Huck, it seems to be the case that Schindler experienced a perceptual shift that did not enter his conscious mindset; he helps the Jews because he witnesses their humanity. Like Huck, even though he was unaware of it, Schindler was acting for morally significant reasons. He is, therefore, both rational and morally praiseworthy. Schindler supports the idea that the phenomenon of inverse akrasia can produce actions that can improve and benefit society. Thus, such actions should be noted as both rational and morally praiseworthy.

#### References

- Aristotle. (1952). Aristotle (Great Books of the Western World, Vol. 8). Chicago: Encyclopedia Britannica.
- Arpaly, N. (2003). Unprincipled Virtue. New York.: Oxford University Press.
- Arpaly, N. and Schroeder, T. 1998. Praise, Blame, and the Whole Self. *Philosophical Studies*, 93, 161-188.
- Audi, R. (1990). Weakness of Will and Rational Action. *Australian Journal of Philosophy*, 68(3), 270-281.
- Bennett, J. (1974). The Conscience of Huckleberry Finn. *Philosophy*, 49, 123-134.
- Goldman, A. (2010). Huckleberry Finn and Moral Motivation. *Project Muse*, 34(1), 1-16.
- Herman, B. (1993). *The Practice of Moral Judgment*. Cambridge, Mass.: Harvard University Press.

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## Julie Palomba

### The Simple, Bare Necessities: What Makes the Disney Business Model Simple?

“Whenever someone speaks about creativity and innovation as it relates to leadership, the phrase ‘think outside the box’ is often used. [But] we challenge our clients worldwide to think inside the box because there’s always a box” (Milligan, 2010). This quotation may seem counterintuitive when applied to a company such as Disney whose most valuable asset is limitless imagination. However, Scott Milligan, business programs consultant for the Disney Institute, stresses that “the responsibility of a leader is to translate goals into a simple story that is reinforced daily” (Milligan, 2010). “The box” contains this story. It is composed of “the vision (who you want to be), the mission (what you do), the customer (for whom you exist), and the essence (how you want people to feel about your products/services). When you know what is critical to your box, you can focus on things that are important, save time and resources, and inspire innovation” (Milligan, 2010). This metaphor parallels the “simplicity” concept that is discussed in Chip and Dan Heath’s book *Made to Stick*. The Heath brothers believe that an idea’s “stickiness” (ability to be remembered by an audience) is achieved by identifying the core of the idea, and stripping it of all the superfluous details. The key lies in sticking solely to that core, rejecting any information that does not contribute to it. The Disney business model’s success illustrates the benefits of utilizing simplicity.

Simplification allows for a business model that clearly communicates the core goal to its audience. Simplification rids the model of details that confuse the audience (in this case employee) from retaining the core message, and prohibits losing sight of the main idea amongst too many details (Heath, Heath, 2007; Carville, Begala, 2002; Miller,



1956). George Miller conducted an experiment on audience memory of different tones being played, and found that “When only two or three tones were used, the listeners never confused them... but with five or more tones confusions were frequent... the point seems to be that, as we add more variables to the display, we increase the total capacity, but we decrease the accuracy for any particular variable” (Miller, 1956). These findings on the retentive abilities of an audience can be further applied to support the communication of ideas in the Heaths’ “Simple” chapter, which stresses the importance of stripping away details until only the core remains. While it may be hard to part with some details, they confuse the audience of the core, and cause miscommunication (Heath, Heath, 2007). As the Heaths state, “If you say three things, you don’t say anything” (Heath, Heath, 2007, 33). It is necessary to simplify the concept because, as proven in the earlier experiment, the audience’s mind can only handle processing a limited amount of given information. So, the more it is simplified to its core, the more likely it will be remembered, or as the Heaths would say, the “stickier” it will be (Heath, Heath, 2007). The Heaths also relate this idea to the term “Commander’s Intent.” Commander’s Intent, a military strategy introduced in the 1980s, summarizes a military plan of action’s objective, so that this intent or goal will always remain clear regardless of unforeseen situations caused by the enemy’s reactions or individual interpretations (Heath, Heath, 2007, 26). This ensures that all members will never lose sight of the core idea. This idea also appears in business strategy, as evidenced by Carville and Begala’s theory. They state that an objective must be clear and simple so that its main idea (in this case the core concept) will not be lost in the strategy (the details that go into achieving the objective) (Carville, Begala, 2002).

This memorability from simplicity is necessary for a company like Disney because of the very specific, strict reputation that it must uphold to preserve its image. The Disney brand’s simple core is to provide quality family entertainment. Milligan writes, “when producing *Snow White and the Seven Dwarfs*, the trailblazing first full-length animated feature film, the studio succeeded because although they were doing something new, they never lost sight of the mission” (Milligan, 2010). Following the clear family-oriented goals that were made precedent by *Snow White*, the company will never allow an R-rated movie to be

associated with the Disney name. This movie would be released through Touchstone Pictures, a distributor of more adult-content entertainment affiliated with the corporation. In this and more subtle circumstances in which the company’s integrity may come into play, the core must always be kept in mind in order for Disney to remain successful and differentiated from others.

Simplicity also allows the model’s consistency in decision-making because it ensures that, despite the unpredictable market, the simple model will generate solutions that serve that core goal. The Disney Institute website states, “you’ll learn that in the Disney organization, leaders at every level are constantly aware that they’re ‘telling a great story’; one that consistently complements and pursues the goals of the entire corporation” (Disney Institute). Generative metaphors function as a main simplification tool in generating this decision-making. It allows Disney’s simple business model to employ methods that strip the idea to its core while still allowing it to generate further information or guidance than explicitly stated (Heath, Heath, 2002; Miller, 1956; Schon, 1993; Carville, Begala, 2002). Although eliminating detail to strip the message to its core is stressed, some further information or details may at times be necessary for employees to know in understanding and practically applying the model. Fortunately, Miller (of the earlier tone experiment) states, “We are not completely at the mercy of this limited span, however, because we have a variety of techniques for getting around it and increasing the accuracy of our judgments... [one of which is] to make relative rather than absolute judgments” (Miller, 1956). The Heaths and Schon also believe in this solution, labeling it as the use of metaphor, especially the generative metaphor. Metaphors use schemas to tap into an audience’s preexisting knowledge on a concept, and relate it to explain a new, unknown context. This way, the metaphorical message holds more information than explicitly stated; it includes preexisting information that is already internalized by the audience and can be applied to the new concept; but it avoids the repetitiveness and cumbersomeness of restating these already known details (Heath, Heath, 2007; Schon, 1993). Further, Schon’s concept of generative metaphor serves to generate future decisions that will remain consistent with the core. The Heaths use Disney to illustrate this example, with the Disney “cast member” generative metaphor. This theater metaphor serves as a

guideline for all further ideas that generate from this main analogy. Cast members “audition” for their “roles” rather than “interview” for a “job”; when on shift, they are “onstage”; visitors to the park are “guests,” not “customers”; “jobs” are “performances” and “uniforms” are “costumes.” This generative metaphor provides cast members with a guideline of how to behave in any situation. As long as they stick to the core idea that they are cast members in a show, then they are doing their job, and can generate decision-making in new situations (Heath, Heath, 2007). This idea of decision-making in unfamiliar situations once again calls to mind the Commander’s Intent concept. “‘No plan survives contact with the enemy,’ says Colonel Tom Kolditz, head of behavioral sciences division at West Point. ‘You may start off trying to fight your plan, but the enemy gets a vote. Unpredictable things happen’” (Heath, Heath, 25). This concept directly parallels the business world (although not to imply that the customer is the enemy, of course). Companies create business models, but they cannot fully predict what may occur in the market. By prioritizing the goal using Commander’s Intent, a company creates a simple objective that all employees can understand and apply to decision-making in any circumstance. For example, “Herb Kelleher, CEO of Southwest Airlines, said, ‘I can tell you the secret to running this airline in thirty seconds...’We are THE low-fare airline. Once you understand that fact, you can make any decision about this company as well as I can” (Heath and Heath, 29-30). All further decisions are guided by this simple idea. For instance, when a flight attendant suggested adding a chicken salad meal to enhance the customer’s trip, he asked, “Would giving them chicken salad make us the low-fare airline?” By applying the Commander’s Intent concept to this new situation, we can assume that the business model “We are THE low-fare airline” would not support a rise in fare price due to meal service. Further decisions that must be made in light of an unpredictable market can be successfully made by referring to this simple business model. Similarly, Disney’s success lies in its business model’s ability to adapt in an unpredictable market. Milligan uses this metaphor to describe the company’s philosophy on business models:

Pretend that you’re driving along with a GPS device on your dash. You’ve programmed the destination for your journey, and are monitoring

progress. Unexpectedly, you make a wrong turn. Does the voice on the device criticize you, or warn you that if you don’t follow directions, your trip will be terminated? No. It simply says recalculating, then gives new advice. As leaders, our role is to have a clear view of the destination. No misstep or change should deter us from providing the direction.... (Milligan, 2010)

Disney’s simple, clearly defined business model enables all members of the company to generate decisions that provide a consistent level of quality in any market situation that symbolizes the brand’s image.

For twenty years, the Disney Institute program has taught hundreds of Fortune 500 companies how to employ successful strategies from the Disney business models to improve their own companies. One of the foremost lessons for businesses to learn is to simplify the business model—identifying the core of what the company’s mission is, and adhering to that goal when generating new decision-making and problem-solving. The Disney brand’s core is to provide quality family entertainment. The clear understanding of this shared mission keeps its model consistent in generating solutions, never to lose sight of the core within the details of a situation. Walt himself believed in this power of never losing sight of the core idea as well, and often would say, “I only hope that we never lose sight of one thing, this was all started by a mouse.”

#### References

- Carville, J, Begala, P. (2002). *Buck Up, Suck Up, and Come Back When You Foul Up*. New York: Simon & Schuster.
- Disney Institute; Disney’s Approach to Leadership Excellence; 4/20/11 from [http://disneyinstitute.com/topics/leadership\\_excellence.aspx](http://disneyinstitute.com/topics/leadership_excellence.aspx).
- Heath, C., Heath, D. (2007). *Made to Stick*. New York: Random House.
- Miller, G. (1956). The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity for Processing Information. *The Psychological Review*, 63, 81-97.
- Milligan, S. (2010). Think Inside the Box. *Leadership Excellence*, 27, 9.
- Schon, D. (1993). Generative Metaphor: Perspective on Problem-setting in Social Policy. In Ortony, A. (Ed.), *Metaphor and Thought* (2nd ed., pp. 137-163). Cambridge, UK: Cambridge University Press.

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### Inducing Amnesia for a Cure

Memories, what exactly are memories? Why do we have them, and what purpose do they serve? Memories are a process of recalling a “precious conscious experience” for personal benefit, helping an individual work or survive (LeDoux 69). A more specific category of memories, fear memories, are recollections meant to trigger a bodily response in order to protect us in certain situations (Fields 30). Unfortunately, war, rape, even a dog attack, elicit a fear memory response far too traumatic for the mind to handle. Though these memories are intended to subconsciously warn and protect, they ultimately haunt and manipulate, resulting in memory-related disorders. If memory is directly linked to a disorder, is it possible to treat the disorder through the memory that created it? According to researchers such as Dr. R. Douglas Fields, erasing the memory is plausible and could be extremely “therapeutic” (29). The memory causing the trauma could potentially be eliminated, thus attacking the problem directly by ridding the individual of the source of the disorder. Undoubtedly, erasing memories is a legitimate theoretical method for treating memory-related disorders.

In order to understand how a fear memory can be erased, one must understand how it is formed. Visual stimuli (that eventually become memories) are initially processed through the visual thalamus and transcend pathways which end at the amygdala-hippocampus complex. This complex is directly linked to emotion, making it “the neural substrate of emotional memory” (Herz 22). Thus, emotional memory becomes “easier” to store in this neural area due to the direct connection, eliminating the need for multiple repetition for memorization. Since fear memory is emotional memory, fear memory will store easier than other memories. Also, the brain is designed to create fear memory quicker than other memories in order to provide protection in the future (Fields 30). These fear memories (stored in the amygdala)

are located in the connections between the synapses of neurons, connections that serve as the “secret sites of communication” between neurons (Lehrer 83). Because of its ability, the brain will purposefully strengthen the neuronal synapses to consolidate the memory quicker (without repetition) in an effort to make the memory a survival tool. Thus, one experience can serve as a precautionary measure for the future (Fields 30).

After memory formation occurs, an essential process called memory reconsolidation ensues. When memory recollection occurs after its formation, the memory is brought back into the same transient and labile state where all memories are formed, re-suspended in the synapses between neurons. Now that the recalled memory is in such a vulnerable state, it needs to be consolidated again in order to remain a memory within the individual, a process called reconsolidation. Reconsolidation requires that the memories undergo another memory formation process which necessitates protein synthesis (Duvarci 9269). The proteins synthesized reconnect and strengthen the synapses in order for the memory to become or remain long-term memory (Duvarci 9269). If this reconnecting and strengthening does not occur, then the memory will not be stored and will disappear, resulting in what could be considered amnesia.

Since memory reconsolidation is a protein-synthesis dependent process, stopping the formation of new proteins would theoretically prevent reconsolidation (Papassotiropoulos 2241). Professor Nader and Sevil Duvarci attempted to prove this theory by using the chemical anisomycin. Anisomycin was thought to act as a protein-synthesis inhibitor, thus potentially preventing memory reconsolidation. In their study, “Characterization of Fear Memory Reconsolidation,” Duvarci and Nader conditioned rats to fear a thirty-second audio tone by inducing an electric shock to the rats’ feet following the tone. After conditioning, the tone was played again and anisomycin was administered in hopes that reconsolidation would be prevented. The rats were then played the tone at a later time to test their memory. Since the rats administered with anisomycin had failed to freeze in fear upon hearing the tone, Duvarci and Nader concluded that the rats had effectively lost their conditioned fear memory. This finding was used as evidence to support the hypothesis that preventing reconsolidation would eradicate a memory.

How is this information relevant for treating memory-related disorders? Memory-related disorders, the most common being post-traumatic stress disorder (PTSD), are caused by fear memories (Fields 29). Hypothetically, a similar application of Duvarci and Nader's study could be applied to patients with PTSD; the PTSD fear memory could be eliminated and thus cure the disorder. After Duvarci and Nader worked out the animal model, Nader teamed up with Pitman to apply this model to PTSD patients. As a preliminary pilot study, Pitman tested the blocking of consolidation by administering propranolol to hospital patients within six hours after a traumatic experience such as an auto wreck or rape (Pitman 189). Results showed that administering propranolol after a traumatic experience reduced the intensity of PTSD symptoms and number of potential PTSD patients compared to the placebo (Pitman 192). Because a drug cannot always be administered within a six-hour window following an event, Brunet, Pitman, and Nader decided to test the effects of propranolol on reconsolidation. They had subjects recollect their past traumatic experiences and followed the recollection with an injection of propranolol. Data showed that propranolol had effectively reduced the symptoms of PTSD in patients enough to disqualify a significant number of patients from being characterized as having PTSD (Brunet 505). In the end, propranolol turned out to be an effective drug for treating PTSD by reducing the number of emotional memories that were incurring PTSD.

If the experiments involving propranolol and anisomycin prove successful, then there is potential for a wider application of these methods: the treatment of drug addiction. Drug addiction escalates through reward-related learning. This type of learning arises as positive pleasure stimuli left by the drug (Taylor 186). The pleasure stimuli are incorporated into the memory of the drug which is then subconsciously strengthened through multiple drug experiences. When an addict stops taking such a drug, relapse occurs since the memory of the positive stimulus recollects, feeding the craving (186). These memories of positive stimuli are emotional memories, memories that remind the addict of the nostalgia induced by the drug and the beauty of that "high." Theoretically, drug addiction could be eliminated by preventing the reconsolidation of these emotional drug memories. Studies conducted at Penn have shown that images of drug use create a more positive stimulus

in the brain than other images that are assumed to be pleasing such as images of love and happiness (O'Brien 15). Since drug images have such a strong impact on the emotions of an addict, these images could be used to help an addict recollect his or her most emotional experiences. A drug such as propranolol could then be administered, preventing the reconsolidation of the memories and potentially eliminating drug addiction.

Currently, accepted treatments for PTSD and drug addiction include therapy and support groups. However, these current treatments have an Achilles tendon that a propranolol treatment lacks. The purpose of therapy and support groups is to "control the emotions that go along with certain thoughts and memories" by creating extinction memory (Kennedy 12). Extinction is the process of changing a memory through learning (Duvarci 9269). When memories are recalled during these sessions, they become suspended between the synapses and susceptible to change since the original stimulus is missing (Lehrer 85). The events during these sessions are an attempt to influence the memories while they are vulnerable. When reconsolidation occurs, the memories permanently change, becoming less stressful. Each session adds another recollection and allows the memory to change again. Repetition of such sessions can ultimately achieve extinction memory, potentially eliminating the disorder (Fields 33). The problem, however, is that memory extinction does not result in the loss of the memory. The original memory still exists, only slightly altered. Moreover, therapy may not target all fear memories, leaving unaltered memories to exist. If any of these memories are inadvertently recalled, relapse would occur. If disorders were to be treated through the prevention of memory reconsolidation, then relapse should not occur since the original memory is erased. Though it remains a theoretical process in testing, inducing amnesia to cure memory-related disorders could potentially decrease relapses, translating to greater success.

#### References

- Brunet, Alain, Scott P. Orr, Jacques Tremblay, Kate Robertson, Karim Nader, and Roger K. Pitman. "Effect of Post-retrieval Propranolol on Psychophysiologic Responding during Subsequent Script-driven Traumatic Imagery in Post-traumatic Stress Disorder." *Journal of Psychiatric Research* 42.6 (2008): 503-06. Print.

- Diergaarde, L., A. Schoffemeer, and T. Devries. "Pharmacological Manipulation of Memory Reconsolidation: Towards a Novel Treatment of Pathogenic Memories." *European Journal of Pharmacology* 585.2-3 (2008): 453-57. Print.
- Duvarci, Sevil, and Nader, Karim. "Characterization of Fear Memory Reconsolidation." *Journal of Neuroscience* 24.42 (2004): 9269-275. Print.
- Fields, R. Douglas. "Erasing Memories." *Scientific American Mind* 16 Nov. 2005: 28-35. Print.
- Herz, Rachel S., and Jonathan W. Schooler. "A Naturalistic Study of Autobiographical Memories Evoked by Olfactory and Visual Cues: Testing the Proustian Hypothesis." *The American Journal of Psychology* 115.1 (2002): 21-32. Print.
- Kennedy, Kelly. "Three Effective Treatments." *Air Force Times* 7 Dec. 2009, Washington: 12. NewsBank. Web. 5 Dec. 2010.
- LeDoux, Joseph E. "Emotion, Memory, and the Brain." *Scientific American* June 1994: 50-57. Print. Rpt. In *Scientific American Special Edition* 2002: 62-71.
- Lehrer, Jonah. "Marcel Proust: The Method of Memory." *Proust Was a Neuroscientist*. Boston: Houghton Mifflin, 2008. 81-89. Print.
- O'Brien, C. P., A. R. Childress, R. Ehrman, and S. J. Robbins. "Conditioning Factors in Drug Abuse: Can They Explain Compulsion?" *Journal of Psychopharmacology* 12.1 (1998): 15-22. Print.
- Papassotiropoulos, Andreas, M. Axel Wollmer, Andriano Aguzzi, Christoph Hock, Roger M. Nitsch, and Dominique J. F. De Quervain. "The Prion Gene Is Associated with Human Long-term Memory." *Human Molecular Genetics* 14.15 (2005): 2241-246. Print.
- Pitman, R., K. Sanders, R. Zusman, A. Healy, F. Cheema, N. Lasko, L. Cahill, and S. Orr. "Pilot Study of Secondary Prevention of Posttraumatic Stress Disorder with Propranolol." *Biological Psychiatry* 51.2 (2002): 189-92. Print.
- Taylor, J., P. Olausson, J. Quinn, and M. Torregrossa. "Targeting Extinction and Reconsolidation Mechanisms to Combat the Impact of Drug Cues on Addiction." *Neuropharmacology* 56 (2009): 186-95. Print.
- Yehuda, Rachel. "Post-Traumatic Stress Disorder." *The New England Journal of Medicine* 346.2 (2002): 108-14. Print.

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## Ray Hernandez

### The Effect of Crisis Management on Credibility

As multinational corporations around the world continue to expand to unprecedented proportions, they develop a false sense of invincibility which causes them to underestimate their vulnerability to the public's fickle mind. Though they may wield great power, they remain susceptible to crises which can drastically alter their public image, and as a result, their credibility. In *Made to Stick*, Dan and Chip Heath emphasize the importance of credibility as it relates to public relations and how the masses determine what they will believe and what they will simply dismiss (Heath, 2008). In their book, they discuss how credibility has the ability to influence and drive behavior (Heath, 2008). Credibility has a direct correlation to our perception of the world as it influences our opinions regarding brands, people, and anything which projects an image (Erdem, 2004; Goldsmith, 2000). In their book, *Effective Public Relations*, Cutlip, Center, and Broom (2006) define organizational crisis as "a low-probability, high-impact event that threatens the viability of the organization and is characterized by ambiguity of cause, effect and means of resolution, as well as by a belief that decisions must be made swiftly" (p. 389). Crisis management is essentially the process by which organizations handle these unpredictable events which have the potential to damage the reputation of a company (Harrauld, 1990; Farazmand, 2001). If we determine that a source is credible and possesses sufficient knowledge on the subject, then we are more likely to believe the information they are conveying (Goldsmith, 2000). This emphasizes how vital it is for organizations to maintain their corporate credibility as it will dictate how consumers perceive them. We now live in an increasingly competitive economy, where even a fraction of a percentage in a market base signifies billions of dollars for a multinational company. Organizations are cognizant of the fact that a loss of credibility could signify disaster and wreak havoc on their bottom



line. Understanding this, they have begun to utilize crisis management in order to safeguard themselves against any potential threat to their credibility. The crisis management model allows companies to retain credibility even in the face of disaster.

### The Process of Crisis Management

One of the most crucial stages of crisis management protocol is the development of a crisis response plan. In the face of a crisis, the initial hours following the event are some of the most crucial, and if companies waste these critical moments in the creation of a plan, they will most likely miss their window of opportunity and lose their grasp on the situation (Bowen, 1993). To avoid this, companies should work to establish a plan which will direct how the organization will deal with a crisis (Harrald, 1990; Nunamaker, 1989). It is crucial to construct a framework for dealing with a wide spectrum of scenarios ranging from the resignation of the CEO to a catastrophe resulting in multiple deaths. Due to the different variables involved in any crisis, these plans must be malleable and applicable to a variety of situations. It is virtually impossible to determine the particular tactics which will be relevant to the situational contingencies of a specific disaster, and as a result plans should work to convey principles and strategies rather than specific instructions (Farazmand, 2001; Mitroff, 1987). A survey conducted of the Fortune 100 determined that only 50% of the companies investigated possess any type of a contingency plan in order to cope with a crisis (Mitroff, 1987). This figure is alarming and demonstrates why so many companies are unable to deal with crises once they occur. On the night of March 24, 1989, Exxon learned a valuable lesson in crisis management when their 984-foot supertanker, the Exxon Valdez, ran aground on the Bligh Reef in Prince William Sound, Alaska. The hull shattered upon impact and its precious cargo began to hemorrhage into the sea, spilling more than 11 million gallons of oil into the frigid waters (Bowen, 1993). Exxon frantically attempted to control the crisis, yet due to their ineffective response plan, many of the resources they implemented were inadequate and they failed to take advantage of the first 72-hour window of opportunity. During this stage, less than five percent of the oil was contained (Bowen, 1993). Harrald (1990) states that “with an optimal

response, another 10 to 20 percent of the oil might have been prevented from reaching shore” (p. 25). Exxon’s failure to integrate planning with response led them to severely mismanage the crisis due to their lack of preparation (Harrald, 1990). This emphasizes the significance of the pre-crisis stage as it demonstrates how a lack of crisis management plan led to one of the single greatest environmental catastrophes in history.

Once a definite plan has been devised, the following phase of crisis management involves the actual implementation of strategy into action. When a crisis occurs, a reaction must take place in order to not only neutralize the immediate threat, but to also manage the media frenzy which will inevitably ensue (Mitroff, 1987; Pearson, 1998). After the initial response to a crisis of notable magnitude, a company should institute a command center composed of the top management of the company alongside advisors from a public relations firm. This shifts the decision responsibilities to those at the uppermost echelon of the corporate hierarchy which centralizes the authority of the organization (Nunamaker, 1989; Erdem, 2004; Bowen, 1993). This reduction in the decision making process allows the centralized unit to respond to the crisis more quickly and efficiently. As a consequence of convergence of authority, the information which is dispersed to the media emanates from one consolidated unit, eliminating the threat of conflicting statements (Ulmer, 2001). In the case of Exxon, many announcements made by their executives were inconsistent, and as a result the public began to question their honesty and credibility. If utilized properly, the media has the potential to become one of the greatest assets of an organization. As Ulmer (2001) states in his article, “due to the importance of the media in disseminating information to the larger public before or after a crisis... organizations should work to establish open communication patterns with the media” (p. 601). Exxon’s CEO at the time, Lawrence Rawl, was distrusting of the media, and instead of establishing a mutually beneficial relationship, he erroneously decided to shut them out completely (Harrald, 1990). Not surprisingly, the public became angered at Exxon’s apparent apathy towards the catastrophe as they failed to take ownership and did not appear on the public stage until several days after the event had occurred. By the time their executives finally stepped into the limelight, they were already regarded as villains due to their lack of remorse for their wrongdoings. The public is more willing to forgive



an accident than a cold, remorseless corporation which fails to take ownership for its mistakes (Pearson, 1998; Mitroff, 1989). They instead should have been honest and open with the public, demonstrating compassion and emphasizing Exxon's diligence in resolving the issue. Collaborating with the media is one of the primary steps in crisis management as they provide an invaluable resource in communicating with the public.

### Impacts on Credibility

Effectively utilizing crisis management protocol can reduce the detrimental effect crises have upon an organization's credibility. The impact of negative publicity has the potential to easily surpass any of the actual damage from a crisis. As Exxon learned through their experience, it is possible to eventually clean up an oil spill, yet almost impossible to erase the stain that was left on their public image. After the Valdez crisis, Exxon came to personify corporate irresponsibility and for many people, over 20 years later, this perception still remains (Bowen, 1993; Farazmand 2001). Their corporate credibility was severely damaged which led to a lasting impact on the company as consumers no longer wished to be associated with the brand. In a survey conducted by the public relations firm Porter/Novelli several years after the catastrophe, they determined that 54% of respondents were less likely to purchase Exxon products (Farazmand, 2001).

In contrast to Exxon, some companies have been able to effectively utilize crisis management protocol in order to deal with crises as Johnson & Johnson demonstrated. In 1982, seven people died in Chicago after ingesting Extra-Strength Tylenol capsules which had been laced with cyanide. This led to widespread panic across the nation and the company realized that it needed to react immediately to the crisis (Farazmand, 2001). James Burke, CEO of Johnson & Johnson, took the earliest opportunity to get in front of the issue. He held a press conference in which he demonstrated the company's long-standing commitment to the safety of their customers by issuing a recall of the capsules (Mitroff, 1989). Even though the poisonings had been the result of an individual lacing the bottles once they had left the factory and Johnson & Johnson was not to blame, the organization decided it should still take

accountability for the issue. Besides issuing a recall, they also made appearances in the media where they emphasized their compassion for the victims and assured the public that they would be working diligently in order to ensure their well-being. Their management of the Tylenol tampering events reinforced the company's reputation for integrity and trustworthiness by demonstrating social responsibility (Ulmer 2001; Pearson, 1998).

Crisis management has a direct impact on credibility, which in turn affects the public's perception of a company. When shopping, consumers evaluate brand credibility in order to determine reliability and whether the product they are purchasing is likely to deliver on the promises it makes (Erdem, 2004). Significant research has been conducted in order to evaluate the impact credibility has on consumer choice, and the results demonstrate that it is a significant factor capable of driving consumer behavior by affecting their purchase intentions (Goldsmith, 2000; Erdem, 2004). Goldsmith (2000) states that "[the] findings... demonstrate the value of maintaining a highly credible corporate image because of the influence it has on consumers..." (p. 52). These studies established a direct correlation between credibility and profits by determining how a lack of corporate credibility can lead consumers to construct negative associations towards a company. Effectively utilizing crisis management protocol allows companies to mitigate the impact crises have on their credibility. Due to their mismanagement of the Valdez incident, Exxon slipped from being the largest oil company in the world to the third largest (Bowen, 1993). Though this large loss of the market share is monumental, it pales in comparison to the long-term repercussions its reputation suffered. Although damage to credibility may be more difficult to quantify, it has the ability to severely impact an organization even years after the fact.

### References

- Bowen, M., Power, C. (1993). The Moral Manager: Communicative Ethics and the "Exxon Valdez Disaster." *Business Ethics Quarterly*, 3(2), 97-115.
- Cutlip, S., Center, A., Broom, G. (2006). *Effective Public Relations*. New York: Prentice Hall.
- Erdem, T., Swait, J. (2004) Brand Credibility, Brand Consideration, and Choice. *The Journal of Consumer Research*, 31(1) 191-198.

- Farazmand, A. (2001). *Handbook of Crisis and Emergency Management*. New York: Marcel Dekker.
- Goldsmith, R., Lafferty, B., Newell, S. (2000) The Impact of Corporate Credibility and Celebrity Credibility on Consumer Reaction to Advertisements and Brands. *Journal of Advertising*, 29(3), 43-54.
- Harrauld, J., Marcus, H., Wallace, W. (1990). The EXXON Valdez: An Assessment of Crisis Prevention and Management Systems. *Interfaces*, 20(5), 14-30.
- Heath, C., Heath, D. (2008). *Made to Stick*. New York: Random House.
- Mitroff, I., Shrivasta, P., Udwadia, F. (1987). Effective Crisis Management. *The Academy of Management Executive*, 1(4), 283-292.
- Nunamaker, J., Chen, M., Weber, S. (1989). Organizational Crisis Management Systems: Planning for Intelligent Action. *Journal of Management Information Systems*, 5(4), 7-32.
- Pearson, C., Clair, J. (1998). Reframing Crisis Management. *The Academy of Management Review*, 23(1), 59-76.
- Ulmer, R. (2001). Effective Crisis Management Through Established Stakeholder Relationships. *Management Communication Quarterly*, 14(4), 590-615.

*Instructor: Rodger LeGrand, Critical Writing Seminar in Business & Professional Writing: The Business of Image*

## Kara Brock

### Founding Father of Fluid Flow and Fractals

Envision God's wrath embodied through water's power as it consumes the same humans whose existence it previously sustained. Leonardo da Vinci's sketch "Deluge" illustrates such a scene, bringing the terrifyingly dark image of destructive waves to life through black chalk, with yellow and red inks over a grey paper to add detail to the turmoil. Within chaos and fear, one would not imagine that hidden behind the terrifying turbulence are mathematical patterns. These patterns, called fractals, are used to understand the irregular forms and movement of nature. Leonardo da Vinci utilized his powers of observation to understand the nature of water's movement, which allowed him to become a pioneer in fractal theory.

Fractal theory is a mathematical theory that mathematicians have only recently defined. The late Yale professor Benoit Mandelbrot first coined the term "fractal" in his 1975 book *Fractals: Form, Chance, and Dimension*. He expanded this theory and published *The Fractal Geometry of Nature* in 1982. Mandelbrot explains:

Fractals are geometric shapes that are equally complex in their details as in their overall form. That is, if a piece of a fractal is suitably magnified to become of the same size as the whole, it should look like the whole, either exactly, or perhaps only after a slight limited deformation. (Mandelbrot, "Fractals" 21-22)

He also states that fractal geometry could not possibly have been created before the 1970s, when software and supercomputers were able to compute the complex calculations of this theory. Mandelbrot declares that fractals are too complex and require excessive amounts of time to compute by hand. Furthermore, he expresses that "no one would have considered undertaking this task without having a fair advance

knowledge of the result; yet the result could not even be suspected until one actually had performed the task” (Mandelbrot, “Fractals” 22). Despite these odds, there is evidence that Leonardo da Vinci (1452-1519) had a fundamental understanding of fractal theory long before modern mathematicians.

Fractals are the mathematical language of nature. As renowned physicist Fritjof Capra explains, fractal geometry was developed “to describe and analyze the complexity of the irregular shapes in the natural world around us” such as clouds, rock formations, branching of trees, and water flow (Capra, *Web* 138). As Mandelbrot himself put it, “Clouds are not spheres, mountains are not cones, coastlines are not circles, and bark is not smooth, nor does lightning travel in a straight line” (Mandelbrot, *Fractal* 1). Therefore, the complex shapes of nature are not expressed in patterns of Euclidian geometry, but rather fractal geometry.

Both Mandelbrot and Leonardo developed knowledge of fractal theory through extensive observation of the movement of water. For example, Mandelbrot stated that, “in the 1960s, the basic idea of the theory of fractals was already present in my mind, having been devised to study such phenomena as the....turbulence in fluids” (Mandelbrot, “Fractals” 21). Similarly, Leonardo had a deep respect for nature and declared that water was “the expansion and humor of all living bodies” (Capra, *Science* 173). This respect inspired him to search for a geometric expression of its movement.

To understand how Leonardo gained knowledge of fractals, one must first understand his unique perspective on fluid flow. Leonardo’s fascination with water allowed him to find comparisons regarding its movement among seemingly different fields. In fact, Enzo Macagno, professor of Hydrosience at the University of Iowa, acknowledged that, in a single manuscript, Leonardo proposed at least fifteen analogies between fluid mechanics and different topics (Macagno 7). One example is that he drew comparisons between hydraulic engineering and botany (Macagno xiv). Based on his extensive botany studies, Leonardo discovered that “All the branches of any tree at any degree of height, if put together are equal... to the cross-section area of its trunk” (Macagno 1). In the same entry, Leonardo also stated “any branching of the waters of equal velocity at any place of their course are (if added together) of the

same cross-section as their beginning.” Through the complex synthesis of different disciplines of study, Leonardo was able to develop a unique understanding of water’s motion as it relates to other patterns in nature.

Leonardo became so fascinated by water’s flow that he searched for a mathematical way to describe its movement. To accomplish this, he developed a unique geometry he described as “geometry done with motion” (Capra, *Science* 200). The birth of this research coincided with in-depth studies of the water eddies and shapes of waves in his Notebooks. He understood this geometry as the “flow” of one shape to another and centered his studies on the fact that there can be no loss of volume throughout this flow (Capra, *Science* 205). Leonardo began by exploring the transformations of straight-lined figures, which can be simply proven through Euclidean geometry. As time progressed, however, Leonardo, like Mandelbrot, recognized that fractals “were in many ways more intuitive and natural than the artificially smooth objects of traditional Euclidian Geometry” (Mandelbrot, *Fractal* 1). This realization led Leonardo to transcend the existing mathematical thought of his time and research the transformations of figures on a curved plane. He produced many sketches of these curvilinear transformations in Codex Madrid II (Capra, *Science* 205). These sketches resembled swirling substances in rotating fluid and further suggested that the movement of water vortexes was the main inspiration for his studies of the geometry of transformation. Furthermore, many of his sketches were complemented with mathematical descriptions, such as “the water m, n, descends in b and strikes under rock b, and rebounds c...” (Gombrich, 176). This provides evidence of an explicit mathematical understanding of his depictions of water’s movement. Leonardo was so devoted to this subject that he continued to research it for twelve years.



Figure 1: “Studies of Flowing Water, with Notes.”

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Elizabeth II



Figure 2: “Deluge”

The Royal Collection © 2011 Her  
Majesty Queen Elizabeth II

Leonardo portrayed his interest in complex forms of nature in his sketches of water movement. These depictions are not only aesthetically pleasing but show the intricate movement of water current and flow. Self-similarity—"the quality or state of having an appearance that is invariant upon being scaled larger or smaller"—is also present in his art. For example, in the sketch "Impact of Water on Water," small swirls of water can be seen within a larger swirling pool ("self-similarity"). This picture reflects the fractal characteristic of self-similarity between the pieces and the whole. Disorder is best portrayed in his sketch "Deluge," which depicts an apocalyptic flood in treacherous detail. In this drawing, chaos occurs as water consumes the landscape. The violent turbulence is chaotic and appears random. However, after careful observation, one can note the self-similarity and accurate mathematical calculations behind this drawing. The repetition of irregular figures of nature to create order in chaos is characteristic of fractal geometry. Finally, the fractal concept of microcosmos to macrocosmos is illustrated through comparing Leonardo's sketches "A Map of the Arno West of Florence" (Figure 3A) and "The Veins of the Arm" (Figure 3B). These sketches utilize different hues of blue to compare the massive and powerful river Arno to the delicate veins of the circulatory system.

Further similarities can be observed between Leonardo's water studies and the mathematical Julia sets. Discovered by the French mathematician Gaston Julia (1893-1978), these sets were representations

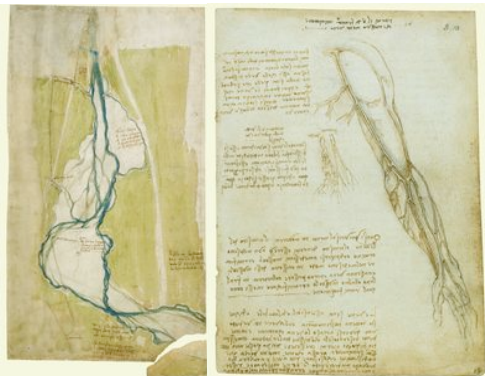


Figure 3A: "A Map of the Arno West of Florence" The Royal Collection © 2011 Her Majesty

Figure 3B: "The Veins of the Arm" The Royal Collection © 2011 Her Majesty Queen Elizabeth II

of fractal shapes. The mathematical pattern for this set is composed of a complex variable that is squared and added to a complex constant in a repeating sequence (Capra, *Web* 145). Mandelbrot discovered Julia's work and used advanced computer software to render reproductions in great detail. The result is eerily similar to Leonardo's water depictions of

swirling eddies. Capra also noted the striking similarity between these Julia sets and the psychedelic artwork of the 1960s, which was produced under the influence of LSD. This led Capra to declare that "it would seem therefore that the fractal patterns...must somehow, be embedded in the human brain" (Capra, *Web* 150). Thus, it appears that Leonardo, inspired by water's movement, was able to understand and reproduce these patterns that exist deep within the human mind.

The theory of fractals is based not only on mathematics and science, but also art and nature. While Mandelbrot describes fractals in a theoretical and mathematical perspective, Leonardo was able to understand fractal patterns as they existed in nature. His unique perspectives on science, math, art, and nature allowed him to create aesthetically pleasing images with complex mathematical and scientific meaning hidden behind the lines.

Leonardo's ability to simultaneously combine the realms of art and science in his work poses the following question: What do artists and scientists have in common? Simply put, both seek to represent the reality of the world. Leonardo, who was both an artist and a scientist, was able to develop a unique perspective of the patterns of nature. He not only represented water's flow artistically, but he also explained it mathematically. Finally, with his brilliant skills in complex synthesis, he was able to merge these understandings to develop an art that represented the patterns of nature. Without computer software and well-defined mathematical fractal theory, Leonardo's art may not display perfect theoretical fractals. However, it was not his intention to solely explain a mathematical concept. Instead, he sought to describe nature and, how it "tends to improvise and provide variations on a theme, rather than repeat patterns exactly" (Rehmeyer 122). Thus, Leonardo was a fractal artist with a commitment to describing patterns the way they existed in nature: irregularly.

#### References

- Capra, Fritjof. *The Science of Leonardo*. New York: Anchor Books: 2008.
- Capra, Fritjof. *The Web of Life*. New York: Anchor Books: 1996.
- Macagno, Enzo. *Leonardian Fluid Mechanics in the Manuscript I*. Iowa Institute of Hydraulic Research, Iowa City: 1989.

Mandelbrot, Benoit B. "Fractals and an Art for the Sake of Science." *Leonardo*, Supplemental Issue. 2 (1989): 21-24. JSTOR. Web. 27 Nov. 2010.

Mandelbrot, Benoit B. *The Fractal Geometry of Nature*. New York. H.B. Fenn and Company: 1977.

Rehmer, Julie. "Fractal or Fake? Novel Art-Authentication Method Is Challenged." *Science News*. 171.8 (2007): 122-124. JSTOR. Web. 27 Nov. 2010.

"Self-similarity." Merriam-Webster.com. 2011 <http://www.merriam-webster.com> (7 June 2011).

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## Nicole Woon

### Breaking the Sound Barrier: *Psycho's* Aural Impact

"Gasping, screaming, yelling, running up and down the aisles, and even fainting": only one film could ignite such a loss of control where people went berserk in the audience (qtd. Williams, Kendrick 3). Alfred Hitchcock's *Psycho* is the quintessential psychological horror flick, captivating audiences since its theatrical debut in 1960. Despite initial negative assessments claiming *Psycho* to be "an offense against taste and an assault upon the sensibilities of the audience," critics eventually determined the movie to stand "in the same creative rank as the great European films" (Hatch; Sarris). *Psycho's* timeless quality arose from the way it challenged viewers' cinematic preconceptions. Switching the protagonist midway through the film is an unexpected, disorienting plot twist and needed to be presented properly to the unsuspecting moviegoers of 1960. Hitchcock could not abruptly force a new environment and mindset on the audience without additional cinematic help. Because the film's radical visuals are unable to stand alone, he resorts to more subliminal methods—like sound—for support. *Psycho's* unique sound design reflects the innovative plot.

Hitchcock's narrative decision to kill the protagonist halfway through the film pioneers an avant-garde plot structure for Hollywood cinema. While audiences originally believe that Marion Crane (Janet Leigh) is a main character throughout the film, her unexpected murder by Norman Bates (Anthony Perkins) instantly proves them wrong. Viewers assume iconic movie starlet Janet Leigh is *Psycho's* leading character because of the way the plot initially unfolds. The audience hence develops a strong connection with her and expects to follow her storyline until the end. Hitchcock, however, breaks this construct of "character invincibility" (Kendrick 6). Marion's murder "rips her character away



from the audience as the subject of identification,” physically reducing her to a corpse and “narratively transforming [her into] the catalyst” for a murder investigation (Kendrick 6). Hitchcock purposely creates associative pathways he knows his film will ultimately violate, disrupting the external priming that viewers retained from prior films. Their preexisting notion that films needed to be “linear” with “little stylistic embellishment” did not apply to *Psycho* (Kendrick 5).

Hitchcock enforces *Psycho*’s nonlinear plot direction by placing viewers directly into the characters’ shoes during the infamous shower murder. As the most visually intense scene of its time, the pivotal sequence revolutionizes the previous association of “brutal violence” with “what’s kept off-screen” and unabashedly depicts graphic acts on-screen. More importantly, of the thirty-four camera shots, six shots are from Marion’s point of view as compared to an astounding sixteen shots from Norman’s. These cinematic angles force viewers to “[alternate] violently between the killer’s viewpoint and the victim’s,” thrusting them into the middle of the bloodshed (Kendrick 8). The shower scene starkly contrasts all prior camera views, which present the audience with an objective perspective. From Marion’s exploits in Phoenix to her encounters at the Bates Motel, shots are depicted from a spectator’s presumed view as a distant outsider. It is thus an uneasy transition from objective to subjective when the viewer observes the murder through both Marion’s and Norman’s eyes. As Marion’s blood goes down the drain in the shower scene’s concluding visuals, the audience loses its relationship with Marion and is inevitably forced to connect with Norman. “The dissolve from drain to [Marion’s] eye” creates “a surreal connection” (Erb 60); Marion’s death parallels how the audience’s concept of classical Hollywood cinema is destroyed. From that point forward, Hitchcock uses subjective camera angles to assert the narrative’s new Norman-centered direction. His cutting-edge visuals complement the plot twist and consequently turn *Psycho* into a benchmark for future movies. Yet *Psycho* is most innovative in an aspect not seen by the audience, but heard.

Such a groundbreaking plot structure necessitates groundbreaking sound. Because *Psycho* possesses such a disorienting storyline, applying sound as used in previous films would not work. Hitchcock recognized he could not transfer the subdued sound techniques of *Blackmail* (1929)

and *Saboteur* (1936) to *Psycho*. Instead, the sound needed to be dynamic and unexpected to enhance the plot’s change of direction. The spectacle of Marion’s murder, for instance, attacks the viewer “aurally with [composer] Bernard Herrmann’s shrieking violins, Leigh’s ample vocal chords, and the hideously audible sound of the knife piercing Marion’s body seven separate times” (Kendrick 8). The aggressive force of sound matches the intensity of the visuals; the two work synergistically during the event to assault the spectator’s senses. Sound brings scenes to a startling new level, destroying any conventions that music must be subliminally in the background while the actors take center stage. Sound is a character in its own right.

The unique sound design adds to the unprecedented plot development, manifesting itself particularly in Mother’s voice. Norman’s mother’s voice is a recurring motif throughout the film and exhibits Hitchcock’s experimentation with spatiality. Although the distance between Mother and other characters changes during film scenes, her voice maintains its tinny tonality at a constant volume. The unchanging sound during scenes is “consistently psychotic in the sense that it is never properly stabilized in space, either at the diegetic or extradiegetic levels” (Erb 56). In layman’s terms, her eerie voice not only provokes insanity in *Psycho*’s characters, but also reaches beyond the screen to affect the audience. It foreshadows the spectator’s experiences with madness after the murder. Upon Marion’s death, the viewer must associate with Norman and reluctantly form an uncomfortable, intimate relationship with him. This unlikely link is Hitchcock’s way of bringing the audience into Norman’s mind to relate to Mother, a connection subconsciously presented from the movie’s onset. The film eventually reveals that Norman and Mother are the same person; the original Mrs. Bates died many years ago and only lives on as a concept inside his head. As *Psycho* progresses further into Norman’s world, Mother’s voice is increasingly directed towards the audience. Her voice’s psychotic nature “seeks to dissolve distinctions between character and viewer, spectator and screen,” blurring the line between objective and subjective (Erb 56). It tells the viewer that he or she is hearing Mother’s voice in the same way Norman is; the spectator identifies with Norman and Mother without explicitly realizing it. Hitchcock unites visuals and sound to constantly force viewers to “resituate [themselves] in relation to the film”



during transitions between the worlds of Marion, Norman, and Mother (Kendrick 9). The disorienting elements of *Psycho*'s sound design help enforce Hitchcock's unorthodox story.

*Psycho*'s use of sound also exhibits itself through the film's musical score. Hitchcock himself expressed how "a third of *Psycho*'s power came from Herrmann's music" (qtd. in Sullivan 26). Without the threatening discordant chords or hauntingly lyrical passages, *Psycho* would not have the same effect. The disorienting soundtrack reflects the derangement occurring in Norman's and the spectator's mind. While string instruments are generally associated with lilting, romanticized stanzas, Hitchcock cuts against the grain with a score sounding the exact opposite of lush. Herrmann's "stark, jagged music, so redolent of Bartok and Stravinsky, gripped spectators in their seats, filling them with a nightmarish apprehension of the terror to come" (qtd. Rozsa, Sullivan 26). The throbbing string rhythm hits the viewer immediately during the opening sequence and continues throughout the film. While *Psycho* has its share of unusually serene, underplayed passages, even these create uneasy mixed feelings in the audience. Viewers do not know if they are being "lulled into a false sense of security or cued right away that something dreadful will ensue" (Sullivan 26). Ultimately, Herrmann focuses on creating an orchestral soundtrack destined to have a profound effect on audiences. The music, combined with a twisted plot structure and other cinematic techniques, help *Psycho* "achieve something of *mass emotion*" where spectators "were aroused by pure film" (qtd. Hitchcock, Kendrick 5).

Sound design is one of *Psycho*'s lasting footprints on the world. Horror is the one film genre requiring effective sound design to cue scares and their buildup, stimulate the spectators' feelings, and ultimately "evoke a bleak, disturbing world" (Sullivan 23). Hitchcock's masterpiece successfully achieves this feat of heightening emotions. *Psycho* disorients viewers with anxious excitement and terror. In doing so, it continues to pave a new road for audience expectations. Hitchcock not only created an instantly recognizable piece of movie music, but also established a precedent for sound design. *Psycho*'s aural advances are a standard for Hollywood cinema as it enables modern sound design to flourish while always keeping the spectators' reactions in mind. From the moment it was released, *Psycho* caused sheer pandemonium in

audiences everywhere, luring in curious moviegoers with its promotional exposure and inspiring intense emotions. The overwhelming reception broke box-office records across the globe and made *Psycho* the top moneymaking film of Hitchcock's career. While this led to an afterlife of diverse interpretations, homages, and remakes, all renditions share a common thread: a seamless synthesis of visuals and sound that embrace the original delightful horror of *Psycho*. As *Cineaste* editor Jack Sullivan observed, "*Psycho* is the sound of primordial dread" (21).

#### References

- Erb, Cynthia Marie. "'Have You Ever Seen the Inside of One of Those Places?' Psycho, Foucault, and the Postwar Context of Madness." *Cinema Journal* 45.4 (2006): 45-63. MLA International Bibliography. EBSCO. Web. 4 Nov. 2010.
- Hatch, Robert. "Films." Rev. of *Psycho*. *The Nation* 191.1 (2 July 1960): 18-19. Web. 23 Nov. 2010.
- Kendrick, James. "Disturbing New Pathways: Psycho and the Priming of the Audience." *Journal of Popular Film & Television* 38.1 (2010): 2-9. EBSCO MegaFILE. EBSCO. Web. 4 Nov. 2010.
- Psycho*. Dir. Alfred Hitchcock. Perf. Janet Leigh, Anthony Perkins. Universal Studios, 1960. DVD.
- Sarris, Andrew. "The Movie Journal." Rev. of *Psycho*. *Village Voice* 16 June 1960 [New York]. Web. 23 Nov. 2010.
- Sullivan, Jack. "Psycho: The Music of Terror." *Cineaste: America's Leading Magazine on the Art and Politics of the Cinema* 32.1 (2006): 20-28. MLA International Bibliography. EBSCO. Web. 4 Nov. 2010.

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## Scott Blackburn

### The Imagined Nationalism of the Mau Mau

In 1952, a military conflict erupted in colonial Kenya between the British colonists and a group of rebels known as Mau Mau. After eight years of bloody civil war, the Mau Mau uprising was defeated. Three years later, Kenya became an independent nation, and scholars have debated the historical meaning of Mau Mau ever since. The difficulty in understanding Mau Mau lies in its inherent paradox. Mau Mau is undeniably tribal—it was led by Kikuyu tribesmen, its members were overwhelmingly Kikuyu and its rituals were Kikuyu rituals. And yet, out of Mau Mau arose an idea of a united nation. Even the most ardent critics of Mau Mau agree that “[Mau Mau] brought into sharper focus the nature of the larger political problems in Kenya.” Mau Mau transitioned Kenya from a colony to a country. This tribal/national incongruity has generated a deluge of academic opinion and controversy. Some argue that Mau Mau was atavistic and ignore their nationalist rhetoric; others claim that Mau Mau was a unifying force and dismiss the purely Kikuyu elements of the movement. One can find a solution to the apparent paradox in the difference between the conceptual and the substantive—Mau Mau was substantively tribal but conceptually national. To understand the historical importance of Mau Mau, one must understand both realities.

Tribalism is represented in the facts of Mau Mau—it was composed of Kikuyu elements from top to bottom. Mau Mau oath-taking ceremonies were adapted from Kikuyu rituals. Even the most ardent supporter of Mau Mau nationalism cannot ignore the fact that Mau Mau was born out of the Kikuyu. The nationalism of the Mau Mau rebels lies in their beliefs and is, therefore, harder to understand. The idea of “national,” particularly in post-colonial Africa, is difficult to define. Any definition—be it linguistic, geographic or cultural—has empirical exceptions. Benedict Anderson’s *Imagined Communities* confronts this problem. It argues that if a people can feasibly imagine themselves

to be of a limited group with a single name and imagine themselves to be sovereign (or having the desire to be sovereign) then that people are a significant nationalist grouping regardless of other political forces. This idea of nationalism defined outside of shared culture, language or geography is imagined nationalism. Imagined nationalism is felt rather than known, experienced rather than defined. The conflict between tribal and national forces evaporates when one redefines nationalism in these terms. This concept of imagined nationalism enabled Mau Mau, and consequently Kenya, to overcome the structural legacies of colonialism.

To understand the imagined nationalism of Mau Mau, one must first understand its historical specificity. In the colony of Kenya, the Kikuyu tribe was most adversely affected by the imposition of colonial rule. The desirable farmland in Kenya was Kikuyu land and when British settlers claimed this land, the Kikuyu were marginalized first as tenants, then as laborers and finally as squatters. Kikuyu squatters were increasingly ostracized from the late 1900s to the early 1950s, as the settlers desired more control both of their farmland and of their labor force. As a result, the local population became increasingly impoverished. In 1952, this pressurized situation sparked the Mau Mau rebellion. Mau Mau, however, was not a typical colonial African uprising. Unlike other agrarian revolts, Mau Mau did not restrict itself to the rural countryside, and unlike other ethnic uprisings, Mau Mau did not define its goals by the return to Kikuyu dominance. With the power of their imagined nationalism, Mau Mau was able to permanently alter the colonial power structure that had inhibited Kenyan development.

It is critical to understand that power structure, to grasp the impact that Mau Mau had on the political process. Mahmood Mamdani’s *Citizen and Subject: Contemporary Africa and the Legacy of Late Colonialism* details the extensive political damage of the period. He suggests that colonizers established a bifurcated system of governance, the national (primarily urban) civil society and the local (primarily rural) native authority. He concludes that two legacies of this system continue to hamper African states long after the exodus of the colonial powers. The first is ethnic division. Mamdani explains that “[T]ribalism as revolt became the source of profound dilemma because local populations were usually multiethnic and at times multireligious.” Since rebel movements were tribal and colonies were multiethnic, tribal revolts were either

limited in scope or viewed as illegitimate. Tribal movements could topple local native authorities (usually dominated by a different ethnicity) but they could not legitimately control an entire country. The second legacy is a divide between urban and rural society. Mamdani argues, “Urban power spoke the language of civil society and civil rights, rural power of community and culture.” In other words, the colonial power structure operated in two spheres of legitimacy only loosely connected to one another. Successful national unification required bridging the gap between these two disparate political powers. While Mamdani’s analysis of Mau Mau is historically insufficient, these two impediments to independence accurately describe the political situation in Kenya at the time of Mau Mau.

Imagined nationalism in the Mau Mau movement allowed it to overcome the ethnic divide that was inherent in the rebellion. This is most clearly emphasized in analysis of Mau Mau songs and poetry. According to Kenyan historian Maina-wa-Kinyatti, “The Mau Mau movement used the folk-poetry method of mass-communication and in the process produced a most formidable political literature in song form.” These songs clearly express nationalist feelings, “For we have one single purpose: To lay hold of Kenya’s freedom.” In his historical examination of Mau Mau songs, James A. Wilson argues that Kikuyu songs bridged the gap between the illiterate and the literate and effectively spread a more unified sense of nationalism that “celebrated the idea of life after colonialism.” The texts of the songs demonstrate these nationalist principles that go beyond feeling and into ideology. Lyrics such as “And why do you desire to be self-ruled?: Because I will not be a slave in my motherland” exemplify this transition. The unifying ideology of the songs, combined with the spread of the nationalistic feelings through the songs, created in Kenyans a sense of being Kenyan. Mau Mau as a revolt was a failure, but Mau Mau as a conduit for nationalist sentiment had lasting impact.

The imagined nationalism of Mau Mau also enabled the movement to link rural unrest with urban civil disobedience. The noted African historian John Lonsdale argues, “the blood of Mau Mau, no matter how peculiarly ethnic in source or aim, was the seed for Kenya’s all-African sovereignty.” He suggests that the Kenya Africa Union (KAU), the political organization from which Mau Mau emerged, had nationalistic

visions that dictated their policies but failed to connect those visions to the spirit of rural Kenyans. Mau Mau succeeded where KAU failed because the leaders of Mau Mau took the nationalistic message of KAU and clothed it in the rural, tribalist trappings of the Kikuyu. Thus, “[d]espite its restricted regional constituency it provided the most extensive foundation for collective action and participation that had existed in Kenya hitherto.” While the Mau Mau revolution was eventually quelled by the British, the feelings of nationalism and the connection that these feelings created between rural and urban Kenyans remained. Because of this connection, KAU would eventually produce the future leaders of free Kenya, most notably Jomo Kenyatta, the nation’s first president.

The debate between a tribal Mau Mau and a national Mau Mau is more than an intellectual exercise. In Kenya, one definition provides the government with historical legitimacy and the other suggests that the contemporary Kenyan state stands on a foundation of indiscriminant violence. To bridge this gap enables Kenyans to demystify Mau Mau and place the events of the period into proper historical context. Estimates suggest that as many as 300,000 Kenyans and British were killed during Mau Mau. One must understand that this violence was not simply a fight between a colonial power and a tribe—Mau Mau represented a more powerful movement with a more significant message. Imagined nationalism was, in Kenya, the cure for colonialism.

#### References

- Anderson, Benedict. *Imagined Communities: Reflections on the Origin and Spread of Nationalism*. London: Verso, 1991.
- Furedi, Frank. *The Mau Mau War in Perspective*. London: James Currey, 1989.
- Kinyatti, Maina wa, “Mau Mau: The Peak of African Political Organization in Colonial Kenya.” *Kenya Historical Review* 5, no. 2 (1977): 287-310.
- Kipkorir, B. E., “Mau Mau and the Politics of Transfer of Power in Kenya, 1957-1960,” *Kenya Historical Review* 5, no. 2 (1977), 313-28.
- Lonsdale, John. “KAU’s Cultures: Imaginations of Community and Constructions of Leadership in Kenya after the Second World War.” *Journal of African Cultural Studies* 13, no. 1 (2000): 107-24.
- Mamdani, Mahmood. *Citizen and Subject: Contemporary Africa and the Legacy of Late Colonialism*. Princeton, NJ: Princeton UP, 1996.
- Wilson, James A. “Political Songs, Collective Memories, and Kikuyu Indi Schools.”

History in Africa 33, no. 1 (2006): 363-88.

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## Sari Leventhal

### Product Placement: Changing the Face of Advertising

Most people do not remember the 2004 Pepsi Superbowl commercial. Nor do they remember the Ford commercial, Staples commercial, or the Charmin toilet paper advertisement. Unless you are one of the corporate executives that assisted in planning one of the million dollar commercials, odds are, the most memorable part of the television programming was the “wardrobe malfunction.” In 2008, a study was conducted that found that, on average, consumers only remember 2.21% of commercials they see (Lindstrom, 2008, p. 38). This number is a 26% reduction from the percent of commercials recalled by consumers in 1965. Although companies are investing more time and money into traditional forms of advertising, they are clearly becoming less effective. The decrease in effectiveness of traditional advertisements has created the need for companies to seek new forms of advertising in an attempt to attract consumers. Product placement is a form of advertising in which a product is incorporated directly into the entertainment media, rather than being shown in a commercial. It has proven to be an effective form of marketing if used correctly. Numerous studies have been done to assess the effectiveness of product placement; however, its potential to revamp the advertising world is often overlooked. Product placement is poised to become a more prominent form of advertising if it is used responsibly.

Because traditional advertising is no longer effective, a demand for new forms of advertising has been created. A change in technology, coupled with an increase in the quantity of commercials that consumers are exposed to, has left a void that product placement can fill (Lindstrom, 2008; Patrecca, 2006; Albiniak, 2010; Morton and Friedman, 2002). An average American will be exposed to over two million commercials

by the age of sixty-five (Lindstrom, 2008). Patrecca (2006) quotes a consumer who illuminates the frustration most consumers have begun to feel towards advertisements. The consumer says that advertising has become so ubiquitous that it is turning people off and desensitizing them to the message. This desensitization, coupled with an increased use of digital video recorders (DVRs), has created a large decrease in the effectiveness of commercials. DVRs allow for consumers to fast forward through traditional commercials, and are present in nearly 40% of U.S. households (Albiniak, 2010). Product placement fights both of these issues; by integrating advertisements into a show's plot product placement makes it impossible for consumer to fast forward through them, and by not interrupting the show, product placement will be less bothersome to consumers.

There undoubtedly is a flaw in current advertisement effectiveness that needs to be addressed; product placement fills this gap by creating interactive and integrated advertisements. Integrated and interactive advertisements are becoming more of the norm, in an attempt to engage more customers (Patrecca, 2006; Headlam, 1998; Furia, 2005). Companies are beginning to understand that consumers are tuning out excessive advertisements (Patrecca, 2006; Headlam, 1998; Lindstrom 2008). Patrecca (2006) summarizes a belief that is held by many consumers when she says, "When advertisers make the ads fun and interactive, they're not so bad." In her study, Patrecca highlights examples of increasingly creative product placement; one company actually paid a pregnant woman to wear the company's name on her stomach. Similarly, Furia (2005) agrees that there is a new wave of integrated advertisements. He uses the example of the television show "The Apprentice." The television program sells hour-long programs that are dedicated to a specific company. For example, in a past episode, contestants attempted to come up with taglines for Burger King while donning Burger King uniforms. The episode had been paid for by Burger King, in an attempt to integrate their brand into the show. While companies are their own personal ways to get ahead, it is clear that the face of marketing is changing.

These interactive and integrated product placements have proven to be successful. In 1982, Reese's Pieces candy was featured in the movie "ET the Extraterrestrial." In the three months following the

release of the movie, brand sales increased by 65% (Buss, 1998; Farhi, 1998; Morton and Friedman, 2002; Lindstrom, 2008; Reed, 1989). In 1998 Equisearch.com, a website that is geared towards equestrians, was featured in the movie "The Horse Whisperer." The website saw a 40% increase in web hits and quadrupled their sales revenue during the two-month span following the movie's release (Buss, 1998; Morton and Friedman, 2002). Ray-Ban Sunglasses has been utilizing product placement effectively for decades. The sunglasses have been integrated into movies such as "The Blues Brothers," "Top Gun," and "Men in Black." Each movie proved to be a successful investment for Ray-Ban; their sales increased by up to 50% after the movies aired (Headlam, 1998; Lindstrom, 2008).

Many studies say that, because product placement is proven to be successful, companies will increasingly utilize the new form of advertising in an attempt to get ahead of competitors (Patrecca, 2006; Headlam, 1998; Furia, 2005; Lindstrom, 2008). Patrecca (2006) states that the increase in the amount of product placement comes from advertisers trying to out-yell each other. Rance Crain, the editor-in-chief of *Advertising Age* magazine, says, "Advertisers will not be satisfied until they put their mark on every blade of grass" (Lindstrom, 2008, p. 47). As corporations increase the amount of money they spend on product placement, other corporations feel that they need to match that amount; thus they are turning to rely upon product placement. According to Lindstrom (2008, p. 47) and Furia (2005), up to 75% of all prime-time network shows will soon feature product placement integrated into plot lines. Furia's article says that, although American television has always been a commercial medium, the "line between content and advertising is being blurred due to an increase in the amount of integrated product placement."

Although it has been established that increased use of product placement is changing advertising firms' strategies, critics question the ethics of its use. Studies have shown that the public opposes product placement when they view it to be used irresponsibly. Product placement is viewed to be irresponsible when it infringes upon an individual's capability to make autonomous decisions by being disguised as news, or when it targets vulnerable populations, such as children. De Gregorio and Sung (2010) say that "indiscriminate placement runs the



risk of rapidly eroding the generally positive perceptions [of product placement].” The quote refers to the use of product placement in a way that blatantly manipulates consumers, such as when the target audience is geared towards children. Newell, Belvins and Bugeja (2009) bring up a similar point when they conclude that there is opposition towards video news releases (VNRs), which are segments of product placement woven into news broadcasts, shown with the hope of convincing viewers that the advertisement is news. Consumers are against VNRs because they believe that it infringes upon their ability to make their own decisions, as they have no defense against VNRs. Lastly, Auty and Lewis (2004) bring up a similar point in their study, which concludes that, because children are incredibly susceptible to the effects product placement, it is unethical to target them. All three articles conclude that product placement is unethical when used irresponsibly.

Although consumers frown upon the usage of product placement in certain situations, studies have shown that consumers have no problem with product placement when it is used responsibly. On the whole, individuals do not feel that product placement is unethical (de Gregorio and Sung, 2010; Newell, Belvins and Bugeja, 2009). De Gregorio and Sung (2010) studied how the attitude towards product placement differs among demographic groups. The article came to the conclusion “that not a single one of the groups sampled indicated a negative perception of the practice [of product placement].” The article’s findings showed that all groups were in favor of allowing product placement to continue if it was used in a responsible manor. Similarly, Newell, Belvins and Bugeja (2009) found that individuals do not want the government to regulate product placement. They concluded that individuals feel that they possess the skills needed to fight against product placement and do not want it to be regulated by government, because it does not infringe on their ability to make autonomous decisions. Clearly these two articles found through their surveys that society supports product placement and does not want it regulated. Auty and Lewis’s (2004) article differs slightly in that it focuses solely on the ethicalness of targeting children with product placement. Although the article concludes that children should not be targeted, the article implies that adults are fair game, as they possess the skills needed to interpret product placement. Thus, it can be seen that each article found that, contrary to popular belief,

society on the whole does not have any significant issues surrounding the ethicalness of product placement.

Product placement only has the opportunity to drastically change the face of advertising if it is used responsibly because if product placement loses the support of consumers, the use of product placement will be outlawed. Subliminal messaging, a promising form of advertising, was outlawed due to public outrage regarding the ethics of its use (Lindstrom, 2008). Product placement has the potential to suffer a similar fate if it is used to target vulnerable populations or to advertise biologically harmful substances. However, the government will not begin to regulate product placement until consumers condemn its usage (de Gregorio and Sun, 2010). Marketers must ensure that product placement does not acquire the disapproval of consumers. Should product placement continue to gain in popularity among advertising executives, it will greatly outpace traditional forms of advertising.

Unscrupulous advertising techniques have been documented for centuries, leading to the “buyer beware” mantra known around the world. The tremendous subconscious power of product placement advertising requires us, as consumers, to be aware and informed. Lindstrom, an author who devoted years to research what makes advertisements effective, states that he wrote his book *Buy-ology* in an attempt to educate consumers. He felt that consumers would only be able to protect themselves against the impulsive purchasing decisions that advertisements induce if they understood the strategies of marketing executives. According to this thought process, if consumers understand the tactics and usage of product placement, they will be better able to resist the temptations it creates. The overwhelming successes that were seen by products such as Ray Ban Sunglasses, Reese’s Pieces and Equisearch.com illustrate the effectiveness of product placement. It undoubtedly appears that new forms of advertisements will continue to grow in popularity, and we, as adult consumers, must be ready for this change.

#### References

- Albiniak, P. (2010). Twentieth: Placing more products. *Broadcasting & Cable*, 140(40), 10. Retrieved from EBSCO MegaFILE database.
- Auty, S., & Lewis, C. (2004). *Exploring Children’s Choice: The Reminder Effect of*



- Product Placement. *Psychology & Marketing*, 21.9, 697.
- Bruce, H. (1998, June 25). Ultimate Product Placement: Your Face Behind the Ray-Bans. *New York Times*, p. 4. Retrieved from EBSCO MegaFILE database.
- Buss, D. (1998, December). Making your mark in movies and TV. *Nations Business*, 28.
- Farhi, P. (1998, December 17). AOL gets its message out in mail. *Washington Post*.
- Headlam, Bruce. "Ultimate Product Placement: Your Face Behind the Ray-Bans." *New York Times* 28 June 1998: Print.
- Chang, S., Newell, J., & Salmon, C. T. (2009). Product placement in entertainment media. *International Journal of Advertising*, 28(5), 783-806.
- de Gregorio, F., & Sung, Y. (2010). Understanding attitudes toward and behaviors in response to product placement. *Journal of Advertising*, 39(1), 83-96.
- Furia, J. (2005, October 25). Plot line: drink Pepsi!—commercial alert. *Commercial Alert*—Protecting communities from commercialism. Retrieved November 11, 2010, from <http://www.commercialalert.org/issues/culture/product-placement/plot-line-drink-pepsi>
- Kaplan, L. J., Maerz, L. L., Schuster, K., Lui, F., Johnson, D., Roesler, D., Luckianow, G., & Davis, K. A. (2009). Uncovering system errors using a rapid response team: Cross-coverage caught in the crossfire. *Journal of Trauma*, 67(1), 173-179.
- Morton, C., & Friedman, M. (2002). 'I Saw It in the Movies': Exploring the Link Between Product Placement Beliefs and Reported Usage Behavior. *Journal of Current Issues & Research in Advertising*, 24(2), 33. Retrieved from Business Source Premier database.
- Newell, J., Blevins, J. L., & Bugeja, M. (2009). Tragedies of the broadcast commons: Consumer perspectives on the ethics of product placement and video news releases. *Journal of Mass Media Ethics*, 24(4), 201-219. doi:10.1080/08900520903321025
- Lindstrom, M. (2010). *Buy-ology. 2010: Broadway Books*.
- Patrecca, L. (2010). Product placement—you can't escape it. *USA Today*. Retrieved from EBSCO MegaFILE database.
- Reed, J. D. (1989, January 2). Plugging away in Hollywood. *Time*, 103.
- Smit, E., van Reijmersdal, E., & Neijens, P. (2009). Today's practice of brand placement and the industry behind it. *International Journal of Advertising*, 28(5), 761-782.
- Taylor, C. R. (2009). Product placement: A hot topic gets hotter. *World Advertising Research Center Limited*.
- Wiles, M. A., & Danielova, A. (2009). The worth of product placement in successful films: An event study analysis. *Journal of Marketing*, 73(4), 44-63. doi:10.1509/jmkg.73.4.44

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## Sean Niznik

### Searching for the Truth: The Misinterpretation of the Sophists

Plato would agree that it is extremely frustrating to listen to uninformed speakers attempt to impart knowledge about a subject matter understood only by experts. In fact, this is a criticism that Plato has leveled at the sophists and their rhetorical method. There exist fundamental disagreements between the sophists and the philosophers over the correct method for presenting arguments. The conventional wisdom today is that the sophists were individuals who used rhetorical strategies to argue their points and persuade their audiences without having a comprehensive understanding of the topic being discussed. On the contrary, philosophers such as Plato are known for following an ongoing search to discover the truth, regardless of the social and political consequences that might result. In trying to determine the validity of each side's method, it is important to analyze the rhetorical strategy of the sophists and how it has been received and critiqued by non-sophist intellectuals. This sheds light on the bias of philosophers and the misinformation that has resulted. The rhetorical style of the sophists is misunderstood.

Plato criticized the sophists on many counts. Plato condemned the sophists, in Patricia O'Grady's words, as "nothing else...than the money-making class of the disputatious, argumentative, controversial, pugnacious, combative, acquisitive art." One of the greatest issues that Plato had with the sophists was that he claimed that they aimed to create persuasive techniques rather than find valid arguments. He felt that only philosophers held consistent beliefs, commitment to reason, refined self-knowledge, and technical knowledge of the subjects at hand. Another criticism of Plato was that the sophists raised fortunes

by charging fees for their teaching, something that Plato and others regarded as insupportable. Along with this, Plato derided the sophists for their willingness to teach anyone who had the money to pay.

According to Plato, education was only for the upper classes, and an educated citizenry could endanger the aristocratic class. Furthermore, Plato criticized sophistry for not being a true art, which has instruction based upon knowledge. Due to his belief that rhetoric was so powerful that those who practiced it could prevail over those who had a superior knowledge of a subject, he viewed the sophists as imposters. Plato's harsh condemnation is unfounded, as many of his statements inaccurately portray the sophists and do not take into account all of the aspects of their rhetorical method.

The purpose of the sophistic method was not merely to persuade. Chloe Balla explains that philosophers like Plato and Aristotle distorted the rhetorical strategy of the sophists after they labeled them as rhetorical empiricists. Thus, they incorrectly connected the sophistic movement with an interest in "concrete human experience" or with a practical orientation. This tendency can be traced back to Plato's attempt in *Gorgias* to reduce rhetoric to mere experience. Balla notes that Plato criticized the sophists for "their interest in moneymaking, their willingness to tolerate time constraints set by various political and judicial assemblies, and...their dependence on the reception of their audience." Plato's logic is faulty, as there is no reason to believe that the authors of sophistic speeches had an interest in training students solely in persuasive rhetoric. As Michael Gagarin shows, the sophists did not have the primary intent to persuade through their oratory. For instance, Gorgias wanted to bring both truth and pleasure through his use of logos. Gorgias states that "the adornment of logos is truth" and "it is necessary to honor with praise what is praiseworthy and place blame on what is blameworthy." This shows the great value that the sophists placed on creating sound arguments and accurately representing reality. Gorgias suggests that the sophists aimed to bring pleasure when he refuses to narrate well-known facts about Helen because he feels that "to tell those who know what they know carries conviction but brings no pleasure." Another way that Gagarin confirms the misinterpretation of the sophists is by showing that the arguments made in the works of Gorgias were not as strong or convincing as they could have been. Gorgias tries to propose

reasons for Helen's conduct. In doing so, he briefly mentions two strong reasons before choosing to dwell on an additional two reasons that do little to justify Helen's behavior. Gorgias' main goal, therefore, was not to persuade. Persuasion was not the aim of the sophists; if the sophists truly wanted to persuade, they would have used methods which more powerfully convinced the reader of their viewpoints.

The philosophers also failed to fully understand the demands of Greek society, which shaped the rhetorical strategy of the sophists. Much of the criticism leveled at the sophists by philosophers does not take into account the historical context of the sophists. One component central to the development of the sophists which is often overlooked is that they emerged in response to the exciting environment in Athens. O'Grady notes that, in this environment, "Culture was flowering, the arts and sciences were booming, and there was a high level of intellectual curiosity that led to the questioning of superstitions and conventions." The sophists of the mid-fifth century BC introduced a new curriculum which they taught in a new style, seeking to develop rhetoric or skills in argumentation. They became teachers of higher education, imparting wisdom on a wide range of subjects, including history, genealogy, mathematics, geometry, linguistics, and grammar. The sophists also helped to satisfy the democratic demands of Athenian society. As Kimball states, "The skills [of the sophists] were crucial in a democratic city-state where winning votes determined the outcome of every question arising in both deliberative bodies." Democracy in Athens was very different than democracy today. In the time of the sophists, democracy was exceedingly strong because Athenians had the time to participate, were forced to participate to avoid being fined, and maintained public approval by participating. This caused active social relationships and increased the importance of the social-political life of the polis. Furthermore, Plato's assertion that the sophists charged money for their instruction is correct. However, his claims do not take into account the practical nature of the sophists' fees. The sophists were freelance, independent teachers who traveled from city to city, simply trying to make a living and feed a demand for education that was highly prevalent throughout Greece. They were able to provide a service of educating the youth, while simultaneously supporting themselves financially. Therefore, the sophists were merely fulfilling the need to have oratory as

a central part of their society.

The transition from oral to literate society around 450 BC also contributed greatly to the misinterpretation of the sophists. According to John Scenters-Zapico, during this transition period Plato's "entire epistemology was unwittingly a programmed rejection of the old, oral, mobile, warm, personally interactive lifeworld of oral culture." Plato's ideas were a direct result of the transition from rhetorical argumentation to the new method of literate argumentation. One of the most important changes was the introduction of an alphabet complete with vowels. Argumentation became dependent on written texts that allow the audience to examine and reexamine what is stated. This is in contrast to the sophists, who mostly relied on the repetition, antithesis, and alliteration of oral culture. Proponents of the written word, such as Plato, denounced the sophists as formulaic and superficial. The sophist critics ignored the importance of oratory in the time period of the Athenians; instead, they tried to anachronistically make sense of the sophistic method in their own time period. One of the largest issues with understanding the sophists in modern society is that "our tradition does not rely on the oral skills that Athenians needed, making it hard for us to understand and appreciate many of the means the sophists used..." As a result of the transition from an oral society to a literate society, Plato misrepresented the sophists and failed to realize his own doctrine of truth by not giving a truthful assessment of the usefulness of the sophistic method in the democratic society of Athens. The literate tradition that replaced the oral tradition has remained at the forefront of society, upholding the misconceptions of the sophists that were molded during Plato's time period.

The sophists do not receive credit for their contributions to individuals and society as a whole. Philosophers and other critics have a tendency to overlook or only briefly mention the contributions of the sophists. As a result, their method has become misrepresented, and they are viewed as inferior by many in the academic field. Isocrates is harshly critical of almost every aspect of the sophists and their oratory, going so far as to call them hypocrites and denounce their method of teaching as ineffective. Interestingly, Isocrates does make it a point to applaud the sophists for the ability of rhetoric to develop both sobriety and justice in the character of depraved individuals. He states, "I do think that

the study of political discourse can help more than any other thing to stimulate and form...qualities of character." This surprising diversion from Isocrates' main argument demonstrates that even the harshest critics can see the existence of the positive aspects that sophistic rhetoric can contribute to individuals. In addition to building character, another main attribute of sophistic rhetoric is that it is beneficial as a supplement to the "real" arts. Plato admits that rhetoric can assist a true expert in attaining the practical goal which he aims to achieve but cannot attain through art alone. James H. Nichols Jr. supports this claim, stating that "Gorgias can persuade patients to submit to medical treatment when doctors...fail to persuade." It is a valid assertion that doctors must have strong rhetorical skills in addition to a thorough knowledge of medicine in order to assure their patients that their diagnoses are correct and the treatments that they assign are appropriate. Without these skills, a doctor is ineffective and useless. In order for those skilled in the arts to learn the necessary rhetorical strategies needed to successfully carry out their work, it would have been imperative that they take instruction from the sophists. It is apparent that rhetoric is not simply mere flattery, with which it is commonly associated. Instead, it is a vital tool that both shapes individuals and serves the important purpose of bolstering the arts. Critics should spend less time criticizing the sophists in order to further expose the broad spectrum of benefits that sophistry can provide.

The rhetorical style of the sophists has been misunderstood and misrepresented due to the bias of philosophers and critics. While Plato certainly was not the first critic of the sophists, he was definitely the most influential since all of his works survived and are readily available today. Readers must be warned that Plato was frequently a hostile and unfair witness to the sophists. The sophists, in fact, did not only intend to persuade with their method; they had many greater objectives that gave validity to their method. Also, they used the best method of argumentation for their time period, given the historical context of the Athenian democracy. While some sophists understandably used their powers in a negative way, the majority of them contributed positively to society in significant ways. For Plato and other philosophers to label all sophists and their method as crooked is a gross generalization. Philosophers, in accordance with their own doctrines of truth, should keep their minds open and take the time to thoroughly analyze all

aspects of the sophists in order to discover the true nature of sophistry.

#### References

- Balla, Chloe. "Plato and Aristotle on Rhetorical Empiricism." *Rhetorica: A Journal of the History of Rhetoric* 25 (Winter 2007): 73-85.
- Gagarin, Michael. "Did the Sophists Aim to Persuade?" *Rhetorica: A Journal of the History of Rhetoric* 19 (Summer 2001): 275-291.
- Kimball, Bruce A. *Orators & Philosophers: A History of the Idea of Liberal Education*. New York: Teachers College Press, 1986.
- McCoy, Marina. *Plato on the Rhetoric of Philosophers and Sophists*. Cambridge: Cambridge University Press, 2008.
- Nichols, James H., Jr. *Gorgias and Phaedrus*. Ithaca: Cornell University Press, 1998.
- Norlin, George. *Isocrates*. Cambridge: Harvard University Press, 1956.
- O'Grady, Patricia. *The Sophists: An Introduction*. London: Duckworth, 2008.
- Scenters-Zapico, John. "The Case for the Sophists." *Rhetoric Review* 11 (Spring 1993): 352-367.

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## Rachelle Clark

### The High Cost of Private Investment

After facing severe financial crises in the 1980s and 1990s, many countries in Latin America opted to invest in privatized healthcare in order to liberalize their markets and create a new period of economic growth. With the recommendations from many different international financial institutions and world organizations, countries such as Argentina, Costa Rica, Brazil, and Colombia implemented these structural changes. However, about 20 to 30 years later, observers can see that the delivery of these private health services has been extremely controversial. Privatization of medicine begins when governments outsource to different corporations and companies to provide health services to their countries. Then, these countries completely downsize the existing funding for public healthcare programs and health initiatives. These changes have been expensive and hard to implement, causing the desired objectives of the structural adjustment programs to be failures despite optimistic projections. The privatization of medicine in Latin America has had extremely negative consequences in the region.

Scholars, economists, and government heads believe that the private investment into the health sector has created a fundamental change for the growth of the economies in the Latin American region. In a speech at the Wharton School, the ex-president of Colombia Álvaro Uribe explained his views on prioritization of investment into the health sector as "fighting for the right of free enterprise" (Uribe). The World Bank, the International Monetary Fund, and other international financial institutions deem that private organizations will aid the development of access to medicine in these countries with more private investment. The desired effect is that these countries of the Global South can become more powerful, aiding the globalization process.

However, the problem with this belief is that there is an inherent

greed to become more powerful players in the international arena. When there is privatization of healthcare into the regions, healthcare systems are upgraded and more efficient, but only a specific portion of this population is able to feel the effects of these structural adjustment programs. Many also believe that free market enterprise within the healthcare sector is important to the ideological principles of those countries, but in reality access to medicine and healthcare is the most basic right any human can have. Those in support of private investment into the health sectors forget about the human lives that are sacrificed in support of these new healthcare structures.

In Latin America, the new privatization of medicine has especially affected the poor within these countries. Most medicine is available through private health insurance and not provided by the state. When citizens have corporatized jobs or work through the government, access to this type of insurance is easily available. However, in these countries, most people work for themselves and not large-scale companies; this leads to a lack of private health insurance. In order to have access to medicine, many have to pay huge copayments that are impossible to afford. Private care doesn't include long-term nursing, psychiatric and geriatric care, and insurance coverage for elderly care is extremely limited (Höfter 425). As a result, only 3.2 percent of patients covered by *Instituciones de Salud Previsional* (Provisional Health Institutions, ISAPREs) are 60 years or older, in comparison to 28.9 percent of the general population that is this age. There are also different discriminations within the private sector including not only age, but also gender and income/jobs discrimination. Because of high premiums and less coverage, many people cannot afford private healthcare and therefore 24 percent of patients who have private healthcare still go to public clinics because they cannot afford required copayments (Höfter 429). Many hospitals also reject between 30 to 40 percent of patients because they cannot pay. These consequences for Latin American citizens prove that the new system put in place has caused many citizens to suffer from a lack of access to medicine—in other words the opposite of privatization's intended effect.

Government structures have also suffered because they have taken out huge loans that are extremely hard to pay back. Anthropologists Rylko-Bauer and Farmer admit in their research that

many international financial institutions, such as the World Bank, have taken advantage of these poor developing countries under “the guise of rescuing these countries from inefficient bureaucracies and rising costs” (Rylko-Bauer and Farmer 492). International financial institutions have especially advocated for immense sums of money borrowed by developing countries in order to pay for the recommended changes to their respective health sectors. Many of these organizations demanded new changes to healthcare policy but at the costs of “regulariz[ing] payment of the large external debts” (Iriart and Waitzkin 179). In accordance with these directives, developing countries within the region take out massive loans in the hopes of creating better healthcare and access to medicine for their people. These massive loans led Latin American countries into insurmountable debt within the government and healthcare systems.

Because so much effort and resources have been put into privatizing the health sector, public programs have seen huge cutbacks. Some of the “public healthcare reforms valued at US\$300 million were recently developed,” but these large amounts of structural adjustment programs left many issues unresolved (Lloyd-Sherlock 160). Currently privatization of medicine has taken over most of the health sector, which leaves a small area for the governments of these developing countries to implement small-scale hospitals and public programs in order to vaccinate, protect against, or eliminate basic diseases. Unfortunately, though, the SAPs implemented have actually caused preventable disease to come back and haunt certain areas of the region. In Argentina, the number of people who had access to polio immunizations “decreased by 23.3 percent between 1992 and 1998” and instances of childhood diarrhea “increased by 41 percent from 1991 to 1996” (Iriart, Waitzkin, & Merhy 75). These statistics show that preventative programs have not been implemented as they used to be and more people of this region are getting sicker because of the privatization of healthcare.

The last consequence of this privatization of healthcare is that it leaves the existing private and public hospitals at subpar efficiency and effectiveness. The governments do not allot enough resources for the public health sector to “entail funding increases large enough to address the problems of decrepit hospitals, obsolete equipment, and woefully underpaid staff” (Lloyd-Sherlock 160). Public hospitals are infamous

for their lack of quality because they operate with the motto that “a service for the poor is a poor service” (Höfter 427). Another problem with the efficiency in the hospitals of the region is “brain drain.” In all of the Global South, many “well trained and competent doctors and knowledgeable people” have started to abandon the health sectors within these developing regions and have gone to look for employment in countries elsewhere because of higher paying wages (Lloyd-Sherlock 75). Brain drain is a dire problem because as more people emigrate to the Global North, those countries in Latin America are left without doctors and people knowledgeable enough to perform the necessary medical procedures. These problems cause an even greater disparity between the rich and the poor in these countries because it makes access to proficient equipment and trained doctors even more competitive.

Overall, the private investment into the health sector has had many negative consequences for not only the citizens of these countries in the Latin American regions, but the stability of finances and government structure as well. Lending agencies and managed care organizations cannot point to many reform successes, but failures come often. Looking towards the future, many Latin American countries should anticipate that the private corporations and investors who helped create these massive structural adjustment programs in the health sector will leave these countries as soon as profits and margins fall. This will cause even more problems because these governments will be forced to confront huge amounts of external debts and lack of corporations managing their private healthcare systems, and even more people will lack access to basic healthcare. This has already occurred in Argentina; many managed care organizations and corporations have left the country, and its government and citizens are still feeling the negative effects. The country faces regular “shortages of basic medications and supplies” and the external debt has increased exponentially (Iriart and Waitzkin 189). Argentina and all other countries in the region are left in a condition worse than they were before. However, many new movements of “unemployed and landless workers, poor populations in urban neighborhoods, and other marginalized groups” are forming a network of resistance in countries such as Brazil, Paraguay, El Salvador, and Colombia in order to protect their rights to health and access to medicine (Iriart, Merhy, and Waitzkin 77). Only time will tell how effective these

groups will be and when the governments will finally recognize the extent to which private investment in their nations’ healthcare systems has created more problems for the region.

#### References

- Armada, Francisco, Carles Muntaner, and Vicente Navarro. “Health and Social Security Reforms in Latin America: The Convergence of the World Health Organization, the World Bank, and Transnational Corporations.” *International Journal of Health Services* 31.4 (2001): 729-68. Print.
- Farmer, Paul. “Chapter 5: Health, Healing, and Social Justice.” *Pathologies of Power: Health, Human Rights, and the New War on the Poor*. Berkeley: University of California, 2003. Print.
- Höfter, Ricardo H. “Private Health Insurance and Utilization of Health Services in Chile.” *Applied Economics* 38 (2006): 423-39. Print.
- International Bank for Reconstruction and Development/The World Bank. *World Development Report 1993: Investing in Health*. Rep. New York: Oxford UP, 1993. Print.
- Iriart, Celia, and Howard Waitzkin. “Argentina: No Lesson Learned.” *International Journal of Health Services* 36.1 (2006): 177-96. Print.
- Iriart, Celia, Howard Waitzkin, and Emerson Merhy. “HMO’s Abroad: Managed Care in Latin America.” *Sickness and Wealth: The Corporate Assault on Global Health*. Ed. Meredith P. Fort, Mary Anne Mercer, and Oscar Gish. Cambridge, MA: South End, 2004. 69-78. Print.
- Lloyd-Sherlock, Peter. *Healthcare Reform and Poverty in Latin America*. London: Institute of Latin American Studies, 2000. Print.
- Rylko-Bauer, Barbara, and Paul Farmer. “Managed Care of Managed Inequality? A Call for Critiques of Market-Based Medicine.” *Medical Anthropology Quarterly* 16.4 (2002): 476-502. Print.
- Uribe, Álvaro. Keynote Speech. Wharton Latin American Conference 2011. 25 March 2011.
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Emma Mlyniec

Tips on How to Become the Perfect Princess

The little girl I babysit plays house dressed up as Cinderella. Together we pretend to cook, clean, and take care of a baby doll until Prince Charming comes home for dinner. As thrilling as this make-believe game is, her aspirations do not include being a stay-at-home mom. These values seem antiquated to this 21<sup>st</sup> century girl who hopes to go to college and become a doctor. On the other hand, while dressed as Cinderella, my young companion wants nothing more than to be beautiful, be quietly helpful, and wait for her Prince. Princesses exist outside reality in the enchanted and idealized world of fairytales. In these timeless fantasies, the princess represents the ideal woman. For fairytales written decades or centuries ago, the quiet, pretty princess makes sense as society’s vision of the ideal woman. Women’s rights and participation in the workforce have come a long way since the Brothers Grimm rounded up fairytales in the 1800s, so the modern conception of the ideal woman is more complex. As an avid purveyor of fairytales, the Disney Corporation has been creating movies about old and new princesses from 1937 to the present. Disney has the artistic license to design, describe, and tell the tales of the princesses in any way it chooses. It has the power to sculpt and re-sculpt the character of the perfect princess playing the ideal gender role. Disney has been consistently putting out fairytale movies throughout decades where women’s roles in society have fluctuated. Likewise, the gender roles of Disney Princesses have not been stagnant.

While viewers can easily see gender roles when watching a movie, few bother to count which norms a movie is pushing on them most frequently. Sociologists Elizabeth England, Lara Descartes, and Melissa A. Collier-Meek conducted a very thorough sociological study of the gender roles of Disney princes and princesses. Their team viewed all of the movies shown in the chart below multiple times and gender-coded

them for character attributes, social role modeling, and plot resolution, such as “ending in marriage.” The characteristics were divided up into traditionally masculine and feminine categories and tallied every time the character portrayed or was said to have a certain characteristic. Masculine characteristics included “curious about princess, wants to explore, physically strong, assertive, unemotional, independent, athletic, engaging in intellectual activity, inspires fear, brave, gives advice, and leader.” Feminine characteristics included “tends to physical appearance, physically weak, submissive, shows emotion, affectionate, nurturing, sensitive, tentative, helpful, troublesome, fearful, ashamed, collapses crying, asks for advice or help, and victim” (England 5-7).

Film	Year	Times Princess Displays Feminine Characteristics	Times Princess Displays Masculine Characteristics
EARLY FILMS			
Snow White	1937	137 (91.3%)	13 (8.7%)
Cinderella	1950	187 (81.7 %)	42 (18.2%)
Sleeping Beauty	1959	76 (88.4 %)	10 (11.6 %)
MIDDLE FILMS			
The Little Mermaid	1989	161 (61.5%)	101 (38.5 %)
Beauty and the Beast	1991	87 (53%)	77 (47%)
Aladdin	1992	77 (60.6%)	50 (39.4%)
Pocahontas	1995	130 (55.3%)	105 (44.7%)
Mulan	1998	120 (57.7%)	88 (42.3%)
MOST CURRENT FILM			
Princess and the Frog	2009	93 (53.4%)	81 (46.6%)

As you can see from the chart, the percentages of instances that princesses acted masculine and feminine fluctuated between movies. Their table of coded characteristics supports the sociologists’ conclusion that “These gender role portrayals are complex, and trends towards egalitarian gender roles are not linear over time” (England 1). My further analysis assumes their definition of typical masculine and feminine behavior and further analyzes the princesses’ role in each movie’s plotline through the Disney decades.

Domesticity, passivity, and agreeability strongly characterize the first generation of princesses. This generation is made up of *Snow White* (1937), *Cinderella* (1950) and *Aurora*, the princess from *Sleeping Beauty* (1959). Sociologist Kay Stone notes that “The popularized heroines of the Brothers Grimm and Disney are not only passive and pretty, but

also unusually patient, obedient, industrious, and quiet” (Stone 44). Upon entering a cottage in the woods, Snow White’s first thought is to clean it. She sings happily as she cleans and seems to be thrilled to do it. Contrastingly, Cinderella is forced to do domestic work by her evil stepmother and stepsister; however, “She accepted, without complaint, the hard labor her step-mother assigned, and always sang and smiled pleasantly while working” (England 9). Cinderella’s agreeability goes hand in hand with her passivity in that she never verbally challenges her stepmother’s authority. Snow White and Aurora display even greater passivity by being “barely alive. In fact, two of them hardly manage to stay awake” (Stone 44). Women cannot be particularly assertive when they are passed out. The only time these princesses ever show assertiveness is with animals, rather than people (England 8). Cinderella jokingly flicks and chides a bird for waking her up, but would never say a negative word or lay a finger on her prince. Snow White and Cinderella also exemplify traditional maternal qualities when interacting with non-human characters. Cinderella does the domestic and nurturing task of making clothes for friendly mice, and Snow White readily jumps into the role of mother, cook, and maid for seven dwarves. Their sole goal in life appears to be marrying a prince and dusting up after him.

Despite more traditional gender roles, the first three princesses are actually less sexualized in terms of animation than their successors. This is historically relevant, as Elizabeth Bell asserts that the princesses resemble ideal beauties of their time. Snow White can be compared to the *ingénue* of silent movies while Cinderella is more of a “Grace Kelly” and Aurora tends towards Barbie (Bell 109-110). With a small bust and a proportional waist, Snow White looks like the youngest princess by far. Cinderella and Aurora are curvier, but they dress rather modestly (Chapman 3). Sociologists note that these princesses seem to move through their worlds “*en pointe*” (Bell 111). This is due to the fact that the live action actors used to inspire the animators’ artwork were all ballerinas who could easily portray the grace and poise required for a traditional, feminine, fragile princess.

The second generation of princesses effectively broke the agreeable and domestic tendencies of the previous era. This grouping includes Ariel from *The Little Mermaid* (1989), Belle from *Beauty and the Beast* (1991), Jasmine from *Aladdin* (1992), Pocahontas (1995),

and *Mulan* (1998). None of these princesses concern themselves with sweeping. While older princesses obeyed orders without complaint, Jasmine, Pocahontas, and Ariel consistently make trouble for their fathers by refusing to settle down. They have broad goals characterized by curiosity and a desire to explore new places. Analyst Rebecca-Anne C. Do Rozario describes the middle generations of princesses’ function to be more “self-centered and directed to self-discovery and self-rule rather than obedience to dictated masculine or feminine roles” (Do Rozario 51). Do Rozario also notices that the middle princesses “enact a shift from the princesses of ballet to the heroes of sport” (Do Rozario 47). These animated ladies portray far more athleticism, which is commonly thought of as a masculine characteristic. Pocahontas paddles a canoe through rapids and dives off of waterfalls. Ariel escapes multiple dangerous situations with her deft swimming skills. Jasmine pole-vaults from rooftop to rooftop. Mulan fights alongside men and holds her own in the army. Although Belle is not particularly athletic, she is an avid reader, which shows a level of intellectuality that does not appear in older princesses’ repertoire of classic feminine skills. These princesses also end up rescuing their princes from drowning, murder, battle injury, and arrest—a feat unheard of for a first-generation princess. By 1990 in the real world, women made up nearly half of the work force, and the Supreme Court’s renewed support of Title IX had given a huge boost to women’s participation sports. To the unsuspecting viewer, Disney was keeping up with society’s new gender norms.

Disney does not, however, deserve too much credit in terms of respecting women for their prowess and talent. The second-generation artwork shows a much more sexist and exaggerated portrayal of women’s bodies. Huge busts, tiny waists, curvy hips, and mile-long legs (or mermaid tails) characterize all of the middle princesses besides Mulan. The live action models for Ariel and Belle were no longer ballerinas, but rather a 104 lb woman from an improvisational group whose figure lent itself more to a burlesque style of dance (Bell 113). If viewers take these animations to heart, they fall under the impression that an ideal woman should not have room for her organs unless they have moved from her waist into her chest. While Cinderella may have looked like Grace Kelly, there is no living creature with Ariel’s measurements.

The middle generation princesses’ break from traditional femininity

in terms of their actions and motives is also not as clear as it appears on the surface. Although Belle serves as a teacher to the male Beast, much of what she teaches him is about manners, emotions, and the proper way to go about domestic tasks, such as eating with silverware. England also points out that “She fell in love with a man who was arguably victimizing her” (England 11). At least the sleeping princesses were locked up by evil witches rather than their husbands. While it may seem revolutionary that *Pocahontas* does not end in marriage, it reinforces a woman’s traditional role as nurturer by Pocahontas’ decision to stay behind and look after her community rather than have adventures (Dundes 354). The movie spins the decision as proper womanly self-sacrifice rather than a manly choice to become a political leader. In comparison, one might attempt to commend Ariel for making no selfless sacrifices whatsoever. She is the first and only princess to actively seek out her prince. While her goal of becoming human may spring out of curiosity and a desire for independence, it is nevertheless sustained by her typical desire for marriage to a prince. Furthermore, her choice to give away her voice in order to get to her prince is reminiscent of Snow White and Aurora’s non-verbal sleeping state. Once again the audience ingests the sexist idea of a prince falling in love with a woman on the basis of her looks alone. Ariel also relies on a considerably less intelligent male seagull for help in understanding the purpose of various objects from shipwrecks. Coming from a man, his word is gold and she is easily convinced a fork is for brushing her oversized, Farrah Fawcett hair. Adding to her list of failed feminism, Ariel only gets married in the end with specific permission from her father. *Aladdin* similarly ends with a happy marriage after consent from Jasmine’s father, the Sultan. As a warrior, Mulan is the most masculine princess of any, but it is interesting to note that most marketed Mulan products have her in the feminine kimono-dress that she loathes in the movie.

The two newest princesses seem to have caught up to modern egalitarian gender values; however, they also share some characteristics with the first generation princesses. Tiana is the princess in *The Princess and the Frog* (2009) and Rapunzel is the star of the movie *Tangled* (2010). Tiana poses a very interesting and complicated case. She is sassy and assertive with the prince, calling him out on his laziness, and she performs a climactic rescue. She admittedly marries a prince, but also

continues her life as a career woman rather than riding off in a carriage to simply be a princess. She is the first Disney princess to ever hold her own job; however, her jobs as a maid and waitress are domestic. On the other hand, England speculates that, since Tiana is the first black princess, these domestic career options may also be tied into race rather than gender (England 10). Although white women were making some political progress in New Orleans in the 1920s, most black women still held domestic jobs just like Tiana. By the end of the movie, Tiana becomes owner and chef of a restaurant. This shows a huge new degree of independence as a woman with real power in the workforce. Rapunzel is arguably the most progressive in terms of gender roles. The animation of *Tangled* shows a return to a more age-appropriate princess. She ends up cutting off her long, blonde, Barbie hair in favor of a brunette pixie cut. Once again Disney has a princess cleaning and cooking without complaint; however, after she finishes she does a myriad of artistic work, reads ravenously, solves puzzles, and plays darts and chess. This is a smart, talented princess with a lot to offer besides her body and agreeability. Rapunzel is athletic, adventurous, brave, and assertive with the prince. Although the plot ends in the traditional marriage, the movie makes a point of saying that she waited until she was older. These are signs that Disney princesses are catching up with current American values where women can be expected to be educated and join the workforce rather than being married off at 16.

The gender roles of Disney princesses have broad implications for social norms. A huge portion of our population has seen some or all of the Disney princess movies, so the exposure to the norms they present is significant. Little girls pick their favorite Disney princesses and mimic them with pretend-play and dress up. Because of this imitation, Disney princesses essentially are role models for young girls. Studies have shown television to be a “dominant source of social influence on children’s gender concepts” (England 2). Due to these findings, it is clear that the social constructs Disney puts forth through its princesses have an impact on the values that young girls emulate and internalize.

#### References

- Bell, Elizabeth, Lynda Haas, and Laura Sells. *From Mouse to Mermaid: The Politics of Film, Gender, and Culture*. Bloomington: Indiana UP, 1995. Print.

Chapman, Leah. "A New Type of Disney Princess: Does Ariel Succeed Where the Others Have Failed?" Associated Content from Yahoo!—Associatedcontent.com. 2 Mar. 2009. Web. 19 Apr. 2011. <[http://www.associatedcontent.com/article/1517110/a\\_new\\_type\\_of\\_disney\\_princess\\_does\\_pg5.html?cat=9](http://www.associatedcontent.com/article/1517110/a_new_type_of_disney_princess_does_pg5.html?cat=9)>.

Do Rozario, Rebecca-Anne. "The Princess and the Magic Kingdom: Beyond Nostalgia, the Function of the Disney Princess." *Women's Studies in Communication* 27.1 (2004): 34-59. EBSCO MegaFile. Web. 28 Mar. 2011.

Dundes, Lauren. "Disney's Modern Heroine Pocahontas: Revealing Age-old Gender Stereotypes and Role Discontinuity Under a Facade of Liberation." *The Social Science Journal* 38 (2001): 353-65. JSTOR. Web. 10 Apr. 2011.

England, Dawn, Lara Descartes, and Melissa Collier-Meek. "Gender Role Portrayal and the Disney Princesses." *Sex Roles* 64.7 (2011): 555-67. EBSCO MegaFILE. Web. 28 Mar. 2011.

Shary, Timothy. *Generation Multiplex: The Image of Youth in Contemporary American Cinema*. Austin: University of Texas, 2002. Print.

Stone, Kay. "Things Walt Disney Never Told Us." *The Journal of American Folklore* 88.347 (1975): 42-50. JSTOR. Web. 28 Mar. 2011.

Aladdin. Dir. Ron Clements and John Musker. Perf. Scott Weinger, Robin Williams, Linda Larkin. Disney, 1992. DVD.

Beauty and the Beast. Dir. Gary Trousdale and Kirk Wise. Perf. Paige O'Hara, Robby Benson, Richard White. Disney, 1991. DVD.

Cinderella. Dir. Clyde Geronimi. Perf. Ilene Woods, James MacDonald, Eleanor Audley. Disney, 1950. DVD.

The Little Mermaid. Dir. Ron Clements and John Musker. Perf. Jodi Benson, Samuel E. Wright, Rene Auberjonois. Disney, 1989. DVD.

Mulan. Dir. Tony Bancroft and Barry Cook. Perf. Ming-Na, Eddie Murphy, B.D. Wong. Disney, 1998. DVD.

Pocahontas. Dir. Mike Gabriel and Eric Goldberg. By Carl Binder, Susannah Grant, Philip LaZebnik, Irene Bedard, Judy Kuhn, Mel Gibson, and David Ogden Stiers. Perf. Mel Gibson, Linda Hunt, Christian Bale. Buena Vista Pictures Distribution, Inc., 1995. DVD.

The Princess and the Frog = La Princesse et la Grenouille. Dir. Ron Clements and John Musker. Perf. Anika Noni Rose, Keith David, Oprah Winfrey. Walt Disney Studios, 2010. DVD.

Sleeping Beauty. Dir. Clyde Geronimi. Perf. Mary Costa, Bill Shirley, Eleanor Audley. Disney, 1959. DVD.

Snow White. Dir. Cottrell William. Disney, 1938. DVD.

Tangled. Dir. Nathan Greno and Byron Howard. Perf. Mandy Moore, Zachary Levi, Donna Murphy. Disney, 2010. DVD.

Appendix:

Extra Coding Charts:

Table 2 Masculine characteristics portrayed by the princesses in the Disney princess films

Characteristic	Frequency Code	Percent of Total Behaviors
Assertive	204	12.47
Athletic	88	5.38
Brave	60	3.67
Independent	49	3.00
Wants to Explore	44	2.69
Intellectual Activity	38	2.32
Physically Strong	35	2.14
Gives Advice	17	1.04
Performs Rescue	13	.80
Unemotional	13	.80
Inspires Fear	3	.18
Leader	3	.18

Table 3 Feminine characteristics portrayed by the princesses in the Disney princess films

Characteristic	Frequency Code	Percent of Total Behaviors
Affectionate	273	16.70
Fearful	141	8.62
Troublesome	93	5.69
Tends to Physical Appearance	81	4.95
Helpful	69	4.22
Nurturing	61	3.73
Tentative	57	3.49
Submissive	48	2.94
Sensitive	37	2.26
Collapses Crying	37	2.26
Described as Pretty	37	2.26
Asks for Advice or Help	34	2.08
Physically Weak	33	2.02
Ashamed	27	1.65
Victim	23	1.41
Gets Rescued (England 7)	17	1.04

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## From Darwin to Dior: An Evolutionary Analysis of Consumer Behavior

Why do we buy? This question, though enormously important, seems like a simple one. But for years, market researchers, economists, and sociologists alike have been struggling to answer it, studying everything from consumers to marketing techniques to environmental factors. One field of study called evolutionary psychology seeks evidence from our past to explain our present. When applied to consumer behavior, evolutionary psychology analyzes our purchasing decisions in the context of evolution. Here, evolution refers to the scientific theory first proposed by Charles Darwin in 1859, which states that natural selection causes organisms, including humans, to become better adapted to survive and reproduce in their environments. Because evolution is an extremely slow process—so slow, in fact, that perceivable anatomical and behavioral changes take millions of years to evolve—evolutionary psychologists assume that we humans have retained most of the behaviors of our closest ancestors, the Pleistocene hunter-gatherers, who lived for over 1.2 million years (by contrast, modern humans have only existed for a fraction of that time: about 50,000 to 200,000 years). If this assumption is true, there should be evidence that people today still exhibit their ancestors' behaviors—that consumers today still buy products based on obsolete instincts. Indeed, human evolutionary instincts shape modern-day consumer behavior.

Today's consumers appear to be heavily influenced by their evolutionary instinct for survival. Food preference is one such survival instinct. In the past, our hunter-gatherer ancestors sought to consume fatty, sweet, and salty foods. Rich in nutrients, these foods made our ancestors strong and therefore enhanced their ability to survive (Colarelli

& Dettmann, 2003; Saad & Gill, 2000). The evolutionary benefit of consuming fatty, sweet, and salty foods caused our ancestors to evolve a preference for them, which explains why people today continue to enjoy the taste of these foods. Modern food consumption patterns show a clear preference for fatty, sweet, and salty foods. Every year, American consumers spend as much as 19 billion dollars on salty snacks; likewise, over one-fifth of America's total food expenditures are on oils, fats, sugar, and confectioneries (Colarelli & Dettmann, 2003, p. 849). Unsurprisingly, Coca-Cola, which manufactures sugary soft drinks, is one of the most familiar brands in the world, and fast food restaurants are exceedingly popular. Even though consumers know that eating fatty, sweet, and salty foods can cause negative health effects, such as obesity and heart problems, they nevertheless purchase these foods in accordance with their evolved survival instinct.

Similarly, the consumer phenomenon of collecting reflects our ancestors' foraging behavior—another survival instinct. According to Martin Lindstrom (2008), brand consultant and author of *Buyology*, modern-day consumers are “hardwired to accumulate” because they were “bred from hunters and gatherers” (p. 104). Psychology professors Diane DiClemente and Donald Hantula (2003) explain why collecting was necessary for our ancestors' survival: “When foraging for food, the ultimate goal of the organism is to maximize net energy gain by collecting more food in less time” (p. 786). In other words, in order to save energy, our ancestors would gather more food than they could eat at once and were subsequently left with “collections” of food. This behavior has parallels in modern society, in which collecting refers to the purchase and accumulation of many products of the same brand or type, such as Star Wars merchandise or baseball cards. In fact, collecting is a fairly common phenomenon: George O'Brien (1981) estimates that one of every three Americans collects (p. 25). O'Brien's estimate does not appear to be an exaggeration; the collectibles industry was worth 8.2 billion dollars in 1995, and 49 million people now use eBay, one of the world's premier websites for collectors (Lindstrom, 2008, p. 105). The prevalence of collecting in current consumer culture demonstrates a link to our evolutionary past. Although collecting does not seem economically practical nowadays, it was very useful in our ancestors' day, when it ensured them a sufficient supply of food.



Like food-related behaviors, an organism's choice of habitat is critical to its survival, so our ancestors evolved habitat preferences that continue to affect our present-day behavior. Our early ancestors, who lived in tropical Africa, evolved a preference for the savanna because it offered the most advantageous habitat—that is, the habitat in which their ability to survive was optimal. The savanna's open plains and scattered trees provided abundant food, visibility for hunting, and shelter from sunlight and predators (Colarelli & Dettmann, 2003; Lynn, Kampschroeder, & Pereira, 1999; Saad & Gill, 2000). Considering that time has not permitted us to depart far from our ancestors' evolutionary instincts, it makes sense that people today still show a preference for "savanna-like environments." In particular, consumers consider savanna environments to be attractive, and this attraction accounts for certain consumer preferences. For example, Colarelli and Dettmann (2003) and marketing professors Gad Saad and Tripat Gill (2000) agree that consumers generally prefer hotels and resorts that feature savanna-like landscapes. Consumers are also willing to pay higher prices for houses, golf courses, and campsites with savanna-like views (Lynn, Kampschroeder, & Pereira, 1999, p. 228). Moreover, as Colarelli and Dettmann (2003) found, consumers are even attracted to products that are merely advertised with savanna-like landscapes. Marketers use such landscapes to evoke "positive emotional associations," which play a part in convincing consumers to buy the products (Colarelli & Dettmann, 2003, p. 850). This example illustrates that at least to some extent, marketers are aware of consumers' evolutionary instincts and craft their advertisements to appeal to those instincts.

In addition to survival instincts, reproductive instincts manifest themselves in consumer behavior. Reproduction is an integral component of evolution, as it is the process by which evolutionary adaptations are sustained and spread throughout a population. Thus, it follows that individuals would evolve behaviors to increase their chances of reproducing. An important example of such a behavior is sexual selection. In sexual selection, individuals of the same species compete against each other for mates. The individuals with the strongest "fitness indicators" are the ones most likely to win a mate. According to evolutionary psychologist Geoffrey Miller (2009), fitness indicators advertise "fundamental biological traits such as good genes, good

health, and good social intelligence" (p. 13). Sexual selection therefore favors individuals with strong fitness indicators because they carry the most advantageous genes. In peacocks, a male's fitness indicator is its plumage; the more colorful and impressive the peacock's plumage, the healthier and stronger is the peacock, and the more likely is the peacock to be selected for mating (Lindstrom, 2008). The principle of sexual selection can likewise be applied to humans. In humans, wealth is an indicator of evolutionary fitness; a person with abundant financial resources is better able to acquire essential goods and services, namely food, shelter, and medical care. Since wealth can be indicated by the products that people own, consumers can make expensive purchases to advertise their evolutionary fitness. Such spending is called conspicuous consumption. Saad and Gill (2000) and economics professor Gianni De Fraja (2009) are in consensus that conspicuous consumption is a way of signaling financial resources in order to be selected for mating. Just as the male peacock flaunts its vibrant tail feathers to attract a female peacock, a male consumer flaunts his flashy sports car to attract a woman (Lindstrom, 2008). In fact, female peacocks almost always select the male with the biggest plumage, and research shows that women often prefer wealthy men: "Men seek wealth because they know it attracts women...In order to perform this function, wealth must of course be displayed" (De Fraja, 2009, p. 63). Although it is debatable as to whether conspicuous consumption is actually an effective mating strategy in practice, its existence does reveal the influence of reproductive instincts on consumer behavior.

The process of reproduction includes the nurturing of offspring; this, too, is an evolutionary instinct that can be seen in consumer behavior. Humans, like many animals, have the biological responsibility of raising their offspring, so it makes sense that humans would evolve the instinct to nurture their infants. Indeed, research shows that humans have such an instinct. As Aimee Cunningham (2008) reports, neuroimaging research has revealed that people exhibit affectionate and nurturing behavior upon seeing a baby's face. Lynn, Kampschroeder, and Pereira (1999) describe that these positive behaviors are triggered by specific physical characteristics of babies' faces, which are called neonatal features and include "a head that is large in proportion to the body, a large protruding forehead, large eyes that are set low in the face, and



bulging cheeks” (p. 228). The fact that humans are, in effect, biologically programmed to respond positively to neonatal features provides insight into why consumers buy neonatal products. For example, dolls and other baby-like toys are quite popular among consumers. Cabbage Patch dolls, which display exaggerated neonatal features, accounted for about 10% of the toy market in 1983, and consumers had spent over one billion dollars on the dolls by 1986 (Lynn, Kampschroeder, & Pereira, 1999, p. 228). The popularity of other such products and characters as teddy bears, Mickey Mouse, Pillsbury Doughboy, and Campbell Soup Kids is also consistent with humans’ affinity for neonatal features. Lindstrom (2008) found that the neonatal phenomenon even applies to non-human products, such as cars: “As the subjects gazed at a Mini Cooper, a discrete region in the back area of the brain that responds to faces came alive. The fMRI had just pinpointed the essence of the Mini Cooper’s appeal...the Mini Cooper registered in subjects’ brains as an adorable face” (pp. 31-32). In this case, consumers’ attraction to neonatal features may have caused them to purchase the car, despite the fact that neonatal features have nothing to do with the function of the product.

So far, we have seen a strong and clear connection between evolution and consumerism. However, as evolutionary biologists will argue, it is impossible to prove scientifically and conclusively that evolutionary instincts are actually the cause of consumer behavior. But if we revisit the opening question of this paper (“Why do we buy?”), we find that evolutionary psychology provides a plausible theory, supported by solid scientific evidence, about what drives consumer purchases. This theory, however fascinating, paints a grim picture of modern society. At best, our evolutionary instincts are irrelevant to our current lifestyles; at worst, those instincts are maladaptive and compel us to make irrational and potentially damaging decisions. Unfortunately, marketers are all too aware of this mismatch; they exploit our obsolete instincts by selling us products that we do not need—products that, in fact, may harm us. On a broader scale, this mismatch demonstrates that cultural evolution is occurring at a much faster rate than biological evolution. What this means for humankind in the long run remains to be seen.

## References

- Colarelli, S., & Dettmann, J. (2003). Intuitive evolutionary perspectives in marketing practices. *Psychology & Marketing*, 20(9), 837-865. doi:10.1002/mar.10099.
- Cunningham, A. (2008). Baby in the brain. *Scientific American Mind*, 19(2), 16. Retrieved from EBSCO MegaFILE database.
- Darwin, C. (1859). *On the origin of species by means of natural selection, or the preservation of favoured races in the struggle for life*. London: Murray.
- De Fraja, G. (2009). The origin of utility: Sexual selection and conspicuous consumption. *Journal of Economic Behavior & Organization*, 72(1), 51-69. doi:10.1016/j.jebo.2009.05.019.
- DiClemente, D., & Hantula, D. (2003). Optimal foraging online: Increasing sensitivity to delay. *Psychology & Marketing*, 20(9), 785-809. doi:10.1002/mar.10097.
- Lindstrom, M. (2008). *Buyology: Truth and lies about why we buy*. New York: Broadway.
- Lynn, M., Kampschroeder, K., & Pereira, A. (1999). Evolutionary perspectives on consumer behavior: An introduction. *Advances in Consumer Research*, 26(1), 226-230. Retrieved from Business Source Complete database.
- Miller, G. (2009). *Spent: Sex, evolution, and consumer behavior*. New York: Penguin.
- O'Brien, G. (1981, April 26). Living with collections. *New York Times* (1923-Current file), p. SM27. Retrieved from ProQuest Historical Newspapers The New York Times (1851-2007). (Document ID: 112901822).
- Saad, G., & Gill, T. (2000). Applications of evolutionary psychology in marketing. *Psychology & Marketing*, 17(12), 1005-1034. Retrieved from Business Source Complete database.

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## A Tiger Defanged Bares Its Claws

Due to repeated attacks by Mongol invaders and Chinese combatants, the Japanese gradually began to close off their nation during the feudal period. Up until the Meiji Restoration, Japan remained in self-seclusion, leaving it in a regressed state during most of the 19<sup>th</sup> century. In the 21<sup>st</sup> century, Japan faces many new challenges, chiefly due to the threat of global terrorism from North Korea, as well as domestic terrorism from splinter groups such as Aum Shinrikyo. Bound by constraints on its military following its defeat in World War II, the Japanese government has had trouble finding its role in deterring terrorism and containing the risk of attack over time. Robbed of its martial bite, the Japanese tiger has adapted, using new tactics to ensure its security. Despite booming tourism and export industries, Japan has begun moving towards a newer, pragmatic form of neo-isolationist counterterrorism policy.

As a term, neo-isolation remains somewhat vague. David Dunn, a lecturer in international politics at the University of Birmingham, initially defines it as a concept akin to unilateralism (Dunn 237). More specifically, scholars should see neo-isolationism as a form of international pragmatism, one in which nations mostly seclude themselves from the world stage and avoid action unless coerced by another national actor. Granted, this coercion could come from previous relationships and obligations, which must be taken into account. As a result, a good working explanation of neo-isolationism should describe a nation that avoids voluntary action on the world stage, and if it must take action, does so in a limited manner. Additionally, the nation should make immigration and external influence difficult to achieve, and direct resources to maintain a strong, positive domestic policy.

Because of the varying nature of risk, counterterrorism may act as an umbrella term for several key concepts. According to Glenn Hook, a Japanese Studies lecturer at the University of Sheffield, tactical terrorism

employs the “unintended...damage” that comes from modern warfare, particularly civilian casualties, using the chance of attack to manipulate governments (Hook 140). By this definition of terrorism, it would follow that counterterrorism must work to minimize this risk, although Hook makes the case the governments must account for and utilize risk in their policy (143). On the other hand, Todd Sandler, a professor of international politics at University of Texas, Dallas, establishes a more concrete meaning for counterterrorism, including the practices of “giving foreign aid, gathering intelligence, curbing money laundering, and forging information linkages” (203). Additionally, Sandler notes that counterterrorism should work towards “weakening the terrorists,” taking “defensive and proactive countermeasures against domestic terrorists” as well as transnational threats (205). Even though Hughes, a professor of Japanese Studies at Warwick University, may not explicitly explain counterterrorism, he does make much reference to the “anti-terrorism” agenda, chiefly in reference to Japan (328). This agenda, at least in Japan’s case, should be “comprehensive,” involving civilian, military, and economic intervention in the spread of terrorism (Hughes 328). With this compound definition, it becomes easier to examine the nature of risk within domestic counterterrorism procedures.

Historically, Japan has had reason to fear the outside world, and this policy greatly resurfaced following 9/11 and prior attacks. After the Red Army Faction hijackings and operations in the Middle East during the ’70s and ’80s, Japan became very suspicious of foreigners, and has since instituted various means of weeding out “criminal” foreigners, primarily considered either Chinese or Korean (Shipper 317, 320; Steinhoff 724). According to Shipper, the Japanese Ministry of Foreign Affairs regularly inflates Chinese crime statistics and formerly ran anti-Korean propaganda, creating a hostile climate towards both, especially Koreans who are viewed as “wild and deeply emotional” (304, 312-313). Similarly, the Aum Shinrikyo attacks resulted in a new wave of somewhat surreal counterterrorism education videos, animated, comedic, and serious, targeted at the general populace, featuring whites and blacks as model travelers and an unfortunately suspicious Asian man (Leheny 225). Few can deny the apparent trend here, as Japan shifts closer to a more closed foreign policy in order to beef up their counterterrorism program. Significantly, this new neo-isolationist approach does not mean

a return to feudal policy, but rather that Japan will start taking more caution in its international commitments and actions. Of course, perhaps they should not be blamed for slightly xenophobic behavior, as much of the threat comes from North Korea (Steinhoff 732; Hughes 328-9). Indeed, it seems some of these threats could be very real, especially considering the continued presence of North Korean “spy ships” in Japanese waters since 1994 (Hughes 329). However, Japan has greater fears contributing to its neo-isolationism.

Once former President Bush declared the War on Terror, Japan entered a new era of bilateral agreements with the United States that paradoxically reflect its solitary leanings. While Japan sent some forces to Iraq in order to aid the US, former Japanese Prime Minister Koizumi Junichiro greatly limited the scale and function of troops deployed (Hughes 333). In order to achieve this, the Japanese leadership reinterpreted Article 9 of the Constitution, which prohibits any military buildup. Rather, Koizumi read Article 9 as denying any offensive force, but not self-defensive force, agreeing to send some troops as well as financial aid (Hughes 328). Therefore, while Japan may have overcome a half-century of military inaction in the wake of 9/11, they did so defensively, allowing for future deployments to bolster Japanese sovereignty. In fact, due to the limited nature of the aid given, Japan’s contributions post-9/11 appeared symbolic rather than helpful (Katzenstein 236). Owing to Japan’s debt to the US after WWII, few can deny that Koizumi worked solely to maintain relations. As a caveat, Koizumi’s affect on the Diet should be taken into consideration, as the government may not have taken action otherwise. Nevertheless, Japan’s evolving constitution persists in granting the nation even greater international, defensive powers.

Along with basic, defensive aid, the Japanese reinterpretation of Article 9 expanded counterterrorism capabilities to unprecedented levels. The Koizumi government passed the Bill to Support Counterterrorism (BSC) on October 29, 2001, which allowed for Japanese intelligence operations across the globe (Katzenstein 237). Even though this initially seems like a more open policy, it must be further examined. When compared with Koizumi’s hesitant support in Iraq, the BSC actually asserts Japanese nationalism. After overcoming the hump of action, Japan saw opportunities to become more self-

sufficient, and arguably reinterpreted Article 9 in order to increase internal security, external security, and nationalism. Conversely, the reigning Democratic Party of Japan (DPJ) has put a qualification on this recent legislation, giving the Diet the power to withhold military power when they deem necessary (Katzenstein 147). Furthermore, Japanese officials advocated an expansion of the police force in order to quell the drug trade and illegal immigration, ensuring a pure, Japanese populace through the manipulated statistics and propaganda (Katzenstein 147; Shipper 312-313). Japan has experienced a paradigm shift, moving from a passive role as America’s tool to an active one as its own nation. This new legislation regarding Article 9 grants Japan the ability to assure greater international security, but at the expense of strong domestic policy. While it may seem like Japan avoids the definition of neo-isolationism by further placing foreign policy over domestic, the current DPJ administration will most likely make moves towards limiting international relations and adhering more closely to the Constitution. Moreover, international action in this manner still supports domestic supremacy, as Japan focuses its global efforts on North Korea, especially following the past few nuclear tests.

Peter J. Katzenstein attracts much acclaim as a scholar of Japanese security, and he officially believes that Japan has not even begun to return to its Tokugawa days. However, even Katzenstein admits that the government must protect ethnic purity to totally ensure internal security, claiming that no definite plan for domestic protection exists (147). The DPJ’s reaction to the situation has yet to be seen, although they may end up constraining many of the strides made with Article 9. Nonetheless, both administrations worked and will work their ways to a more closed Japan, even if only a “hermetically sealed, homogenous nation” does produce a desired outcome (Katzenstein 147).

#### References

- Dunn, David H. “Isolationism revisited: Seven persistent myths in the contemporary American foreign policy debate.” *Review of International Studies* 31 (2005): 237-231. Web.
- Hook, Glenn D. “Introduction risk and security in Japan: From the international to the societal.” *Japan Forum* 22.1/2 (2010): 139-148. EBSCO MegaFILE. EBSCO. Web. 20 Mar. 2011.

Hughes, Christopher W. "Not quite the 'Great Britain of the Far East': Japan's security, the US-Japan alliance and the 'war on terror' in East Asia." *Cambridge Review of International Affairs* 20.2 (2007): 325-338. EBSCO MegaFILE. EBSCO. Web. 20 Mar. 2011.

Katzenstein, Peter J. *Rethinking Japanese Security*. New York: Routledge, 2008. Print.

Leheny, David. "Terrorism risks and counterterrorism costs in post-9/11 Japan." *Japan Forum* 22.1/2 (2010): 219-237. EBSCO MegaFILE. EBSCO. Web. 11 Apr. 2011.

Sandler, Todd. "Terrorism and Policy: Introduction." *Journal of Conflict Resolution* 54.2 (2010): 203.

Shipper, Apichai W. "Criminals or victims? The politics of illegal foreigners in Japan." *The Journal of Japanese Studies* 31.2 (2005): 299-327. Project Muse. Web. 11 Apr. 2011.

Steinhoff, Patricia G. "Hijackers, bombers, and bank robbers: Managerial style in the Japanese Red Army." *The Journal of Asia Studies* 48.4 (1989): 724-740. Jstor. Web. 11 Apr. 2011.

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### A Disjointed Education: How Teacher Competition Derailed the Humanities

Humanism arose with the distinct objective of fostering civic virtue and morality in European cities and nations through the rediscovery of the classics. At the beginning of the fifteenth century, educational institutions that originally focused on the professional studies of scholasticism began to focus on humanist topics of eloquence and rhetoric with greater vigor. Despite their lofty goals, humanistic scholars did not entirely devote themselves to classical virtue; they too were motivated by the lure of material and social goods. As the humanities developed into the late fifteenth century, faculty positions and stable salaries became realistic targets for aspiring students and instructors. Increased incentives offered to humanists diverted the humanities from their original goal of engendering a more virtuous society because of the deleterious effects of teacher competition.

By the second half of the fifteenth century, the popularity of humanism had increased substantially and humanists began adding university teaching to their repertoire of activities. Humanism had emerged from the shadow of scholasticism and made up the bulk of the growth experienced by Italian universities. Because of the forceful efforts of Guarino Guarini in Ferrara and Lorenzo Valla in Rome, universities across Italy began to expand their humanities departments at a rapid pace.<sup>1</sup> Leaders of Florence, Bologna, and other important Italian towns also bought into the perceived benefits of humanism and chased humanist teachers with the desire to make their studies "immediately available to [the local elite] and their circle."<sup>2</sup> Consequently, funding for the humanities came primarily

<sup>1</sup> Paul Grendler, *The Universities of the Italian Renaissance* (Baltimore: John Hopkins Press, 2002), 220-221.

<sup>2</sup> *Ibid.*, 223-224.

from local magistrates or papal authorities and would subsequently swell as competition for the best scholars heightened.

Professorships and advisory positions to papal authorities or regional rulers were extremely lucrative for the aspiring humanist. Since both professions required a thorough knowledge of Latin, they were exclusively fit for individuals educated in the classical languages. Professors and papal secretaries lived comfortable lifestyles even after retirement because they “were often in personal contact with the princes of Italy and of transalpine Europe...and [were placed] naturally into a relationship of trust with the pope.” The University of Rome, which was sponsored directly by the pope<sup>3</sup>, attracted some of the best scholars by virtue of its high salaries. Instructors at the university would easily make over 100 Roman florins per year, a highly appealing salary for any Italian.<sup>4</sup> To put this in perspective, the teacher Pomponius maintained an annual salary of roughly 200 Roman florins and could afford two houses on the Quirinal hill in Rome, a vineyard, and a sizable plot of farmland.<sup>5</sup> Indeed, humanists across all institutions would earn higher salaries and greater fame than the humanists of previous generations and repeated the rewards lavished by their patrons.<sup>6</sup>

With humanities departments providing augmented benefits to their instructors, scholars flocked to the major cities of Florence, Bologna, and Rome and threw their own talents into the already-crowded applicant pool. Lesser-known humanists were commonly employed by small communities to privately educate a small group of students who may not have reached university age yet.<sup>7</sup> However, even with the inclusion of private teachers and tutors, schooling positions paled in comparison to the number of humanists fighting for jobs. Without funding from a specific patron, humanists would struggle to find any means of earning a salary. As a result, humanists sought to outdo each other and quickly learned that the best way to gain a vaunted professorship or a secretary position was through

<sup>3</sup> Egmont Lee, *Sixtus IV and Men of Letters* (Rome: Edizioni Di Storia E Letteratura, 1978), 47-51.

<sup>4</sup> *Ibid.*, 248-255.

<sup>5</sup> *Ibid.*, 178.

<sup>6</sup> Grendler, *Universities*, 225.

<sup>7</sup> Paul Grendler, “Schooling in Western Europe,” *Renaissance Quarterly* 43 (1990): 777.

political alignment and careful flattery. Prospective academics applying for professorships would have to work carefully to ensure that their magistrates viewed them favorably and that their opinions would not offend any powerful civic factions. Prominent humanists including Marsuppini, Landino, and Poliziano made the most of their relationship with men like Lorenzo de’ Medici to reap political rewards and professorships.<sup>8</sup>

In wake of the limited number of high-paying options available to humanists, competition among scholars became increasingly aggressive and vindictive. Job seeking became a zero-sum game in which scholars worked to embolden their own works while maneuvering around and attacking their competition. Fiery debates arose in humanist circles as scholars endlessly lambasted the works of their peers to present themselves in a more positive light. Acquiring the attention of an important figure like a papal or regional authority would almost guarantee success for a struggling humanist—a feat most commonly achieved through the public ridicule of a rival scholar.<sup>9</sup> Therefore, younger scholars would relentlessly criticize the work of more established humanists to craft a name for themselves and to catch the attention of their ruling individuals. Indeed, Politian would attempt to legitimize his criticisms by claiming that his actions were similar to those of the ancients; Theophrastus argued against his teacher Aristotle, who had disagreed with his teacher Plato before him.<sup>10</sup>

Lorenzo Valla’s creation of the ‘dialectic’, a new method of studying the classics, was a hallmark feature that helped solidify the importance of the humanities, but it also forced academic debate to focus on minute technical details of classical works rather than their content. Earlier scholars, when devising their moral theorems, struggled with the multitude of logical beliefs espoused by ancient philosophers. According to Grafton and Jardine, Valla proposed that, “if logicians constructed their propositions ‘*grammaticae*’—in conformity with correct ancient usage—the majority of the intellectual issues clouded by contorted expressions

<sup>8</sup> Grendler, *Universities*, 223-224.

<sup>9</sup> Anthony Grafton and Lisa Jardine, *From Humanism to the Humanities: The Institutionalizing of the Liberal Arts in Fifteenth- and Sixteenth-century Europe* (Cambridge: Harvard University Press, 1986), 63.

<sup>10</sup> *Ibid.*, 95.



would be clarified without recourse to logic-chopping.”<sup>11</sup> Humanistic rhetoricians attempted to reconstruct classical intention based upon “a preconceived standard of what things are likely to happen, what behavior may be expected of given types of men, [and] what outcome may generally be assumed in certain kinds of situations.”<sup>12</sup> In other words, Valla proposed that recreating the conditions that existed when classical authors wrote was critical to understanding their true meaning. The dialectic, in theory, would resolve questions with uncertain interpretation and would “countenance [a scholar’s] lack of confidence in the attainability of certainty, and [be] rich enough to allow [him] to explore the relative plausibilities of conflicting dogmas.”<sup>13</sup> Unfortunately, the dialectic did not neatly clarify contentious issues but opened the door to more disputes on minor differences in interpretation, as scholars would understandably differ in their classical reconstructions. Humanists would fight over the minutest of differences within the endlessly debated works of classical authors to one-up their rivals and peers.

The pressures associated with teacher rivalries made certain scholars resort to underhanded tactics to substantiate their claims and to undermine their peers. Domizio Calderini, one of the more renowned humanists, was notorious for academic dishonesty. Grafton informs us that Calderini “falsified his notes on Martial in order to refute a justified attack by Perotti [and]...invented a Roman writer, Marius Rusticus, from whom he claimed to derive disquieting information about the youth of Suetonius.”<sup>14</sup> Plagiarism also became a significant problem and cast a dark cloud over many lectures and writings. Teachers were regularly accused of having stolen from another teacher’s lecture and to have incorporated those ideas into their own works. Calderini, for example, was embroiled in a dispute with a rival lecturer, Sabino, over the authenticity of his commentary on Juvenal. Although the issue was

ultimately left unresolved, both authors published their works despite their obvious similarities.

Ultimately, many scholars realized the futility of endlessly criticizing their peers with recycled arguments and sought out new and untested fields to write about. By differentiating themselves, these scholars hoped that they would earn more attention and could possibly catch the eyes of powerful patrons. As a result, these humanists would sometimes make observations and arguments that bordered on the absurd or insignificant. Paolo Marsi, for example, went to extreme depths to prove that a single word describing ritual materials used by Ovid meant the “*spica* of a nard” rather than a very fine saffron. Perhaps more surprisingly, he received extensive criticism from multiple sources for his seemingly trivial observation. When considered with the initial purpose of humanism, to foster morality and virtue within the people, debate over ritual materials seemed rather meaningless. By using Valla’s dialectic, however, these rhetoricians could claim that such trifling details were important for determining what Ovid truly intended. However, students would be extremely confused by the diversity of arguments taught and would miss many of the moral lessons present within their classical texts. Teachers focused more on their own unique ideas rather than the fundamentals of rhetorical style or of virtuous education.

The intense spotlight on specific grammatical devices and tiny technical details detracted from the humanists’ original goal of engendering a virtuous society based upon the classics. Like any educational movement, humanism failed to live up to the qualities that its proponents fervently claimed it would. As it grew in importance and strength across Italy, its educational goals became entangled with the financial incentives of teaching and subsequently lost its initial focus.

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<sup>11</sup> Ibid., 73.

<sup>12</sup> Hanna H. Gray, “Renaissance Humanism: The Pursuit of Eloquence,” *Journal of the History of Ideas* 24 (1963): 512.

<sup>13</sup> Lisa Jardine, “Lorenzo Valla: Academic Skepticism and the New Humanist Dialectic,” *The Skeptical Tradition* 15 (1977): 158.

<sup>14</sup> Anthony Grafton, “On the Scholarship of Politian and Its Context,” *Journal of the Warburg and Courtauld Institutes* 40 (1977): 161.

<sup>15</sup> Eva Matthews Sanford, “Renaissance Commentaries on Juvenal,” *Transactions and Proceedings of the American Philological Association Society* 79 (1948): 105.

<sup>16</sup> Grafton and Jardine, *From Humanism to the Humanities*, 84.

<sup>17</sup> Ibid., 87.

## Ran Geng

### The Commercial Secret of Taste

When you eat, can you perceive taste accurately? If you prefer one brand of food to another, have you ever considered that they might be the same? Actually, we cannot perceive food as it originally is. Our tongue is not merely a gustatory organ; its perspective is just as colorful as our vision, as dynamic as our auditory sense, and as deep as our brain. Lehrer, who has examined how people made use of this feature in history, writes in his book *Proust Was a Neuroscientist* that evolution has long since traded away our tasting abilities for better vision, meaning that our brain is often forced to decipher our tastes based upon other information, such as the appearance of the food, the surroundings in which it is consumed, others' recommendations, and so on. All these suggestions give people a better eating experience. However, at the same time people enjoy their gift of dynamic taste perception, restaurant owners and food manufacturers can also make use of it. Actually, non-gustatory factors influence the sale of food more than the taste of the food.

The smell of food can largely determine the consumers' choice. Most people believe in their taste buds, but these taste buds account for very little of what people really perceive. Actually, 80-90% of taste perception is a result of smell. When people consume, aromas reach their nose through the oral cavity (Searby, 2009), where "gaseous particles of food bind to 10 million odor receptors" (Lehrer, 2008). The retro-nasal effect can strongly trigger our past experiences of encountering that specific smell. In this process, the odor receptors send their signals to the limbic system in the brain, where memory, impulses and preferences are stored. If a positive memory is retrieved, it generates good expectations for the food, and we are more likely to enjoy it. Therefore, according to Searby (2009), who studied how manufacturers advertise their food, aroma is very important to the identity of a food product. After repeated consumption, a satisfying aroma forms a long-

term memory in customers' brains, and whenever the same aroma is presented again, they will be more willing to purchase it. However, the same effect also troubles some manufacturers. Since there is more and more demand for nutritional options, they have to reformulate the food by reducing the fat content, adding proteins and adding vitamins. But during this process, the food loses its original odor that customers previously recognized. Thus, grocery companies are constantly exploiting new ways to preserve and enhance the aroma of their products.

Along with smell, color is another intrinsic factor of food that accounts for taste perception. How would you feel about yellow gelatin? Would you enjoy green ketchup as much as the normal red one? According to a report about the relationship between color and taste perception (Jahnke, 2007), yellow color makes gelatin taste sour, and green color makes ketchup taste disgusting. This can be attributed to people's preference of natural ingredients; for example, they assume that ketchup should be red because it is made from tomatoes, but if the ketchup is an inharmonious color such as yellow, green, blue or purple, it will be associated with spoiled, moldy food, which results in suspicions of its quality. This is why the strangely colored Heinz ketchup gradually lost its popularity, and was finally forced to be discontinued in 2006. It is obvious that the seemingly irrelevant visual properties continuously mislead our gustatory perception, just as smell does. If the color of a product generates negative expectations, it may be more likely to fail as green ketchup did; but if the color indicates natural, healthy or delicious features, it will be more attractive. Thus, food manufacturers no longer have to struggle to improve the taste of their products. They can simply add desirable pigments, food essence, or even just incorporate flavors into the plastic packages in order to attract customers (Jahnke, 2007).

These intrinsic properties of food are not the only attraction. Consumers are also easily controlled by the information artificially implanted on the products, such as brand name, friends' comments, the environment in which they are consumed, etc. In 2003, Herz, a psychologist of smell, confirmed the strong impact of external information on our sensory perception. In her experiments, two groups of subjects were presented the same odor, but people having been told that it was natural reported a more positive experience than those having been told that it was synthesized. By directing the expectations, commentary words

like “natural” and “synthesized” tricked people to judge the chemicals even before they generate a physical response. This explains why the marketing departments of restaurants are willing to spend an immense amount of money on advertisements. In the face of such exaltations, who can remain objective? No one. People are always swayed by what is claimed as true. As a result, clever advertisers simultaneously convince us to “try out” the food while altering our judgment of the food; thus, we voluntarily pay repeatedly for the same product. Therefore, once a brand name becomes recognizable, its manufacturers will no longer need to constantly come up with new flavors to attract customers; the public will automatically promote for them. Does McDonalds have better food than any other fast food restaurant? Does Sheraton really serve more delicious dishes than college cafeteria? No one can tell based on taste buds alone. Since modern people have long been indoctrinated by the fame of those brands, they can no longer separate presumptions from the real taste. At this point, McDonald’s and Sheraton are actually selling an idea; it is their names instead of the taste that build up their popularity.

Another type of external information that restaurants can utilize is the atmosphere. Manufacturers whose food is sold in supermarkets may not be able to control where people consume it, but restaurant owners can satisfy their customers by adjusting the environment in which their food is eaten. Room decorations, plates, wineglasses, and waiters—every component can fill the customers with presumptions about the dishes. These presumptions play a crucial role in taste perception. For instance, an article (Zwerdling, 2004) reports that wineglasses with a delicate design can trick people into believing that the wine tastes much better than when normal glasses are used, because people expect a better experience before their tongue even touches the liquid. Thus, it is not difficult to imagine that the same effect applies to the plates, the bowls, the ceiling, the wallpaper, and the service as well. When put together, these fancy effects become much more influential than the physical properties of the food itself. Restaurant owners who understand this principle always have an advantage over their competitors. “The king of chefs” (James, 2002), Escoffier, for example, insisted on serving his dishes with silver plates, requiring his waiters to wear tuxedos, making music accessible to private dining rooms, and shading table lamps with rosy silk. He even requested that customers dress formally and that

each woman be accompanied by a man. In this way, he created an air of nobility and dignity around his restaurant. And without the need to actually change the recipes, Escoffier managed to transform his small, young restaurant in England into one of the most recognizable hotspots of the time (James, 2002).

Among all factors that influence our taste, personal value is the most newly exploited, and the most difficult to gauge. It has recently been proven that consumers often associate food with certain social values (Allen et al., 2008). If one’s personal values are congruent with the indications of the food, he/she will feel a closer relationship with that idea, and thus, will be more likely to enjoy the food. For example, Allen et al. (2008) discovered that people who endorsed social power enjoy red meat more than vegetables, because the former symbolizes social status, recognition, and fame, while the latter represent social equality, anti-authority, and rejection of power. Part of this experiment also tested these people’s evaluation of vegetables that looked exactly like red meat, and it shows that the ingredients do not matter at all; the enjoyment was purely a psychological response to social indication. That’s another reason why Escoffier’s restaurant was much more popular than the local restaurants even though he was foreign to England. Knowing that he did not share the same culture with his customers, he adjusted his recipes according to their backgrounds, and reflected upon different cultures and social cognitions in his cooking. Consequently, he was able to meet the standards of a wider range of people.

With all those methods utilized, our appreciation of food is not just about taste. While clever restaurant owners, food manufacturers, and advisers are applying these methods to promote their product, how should consumers react to them? On one hand, tastes help identify the quality of the food physiologically. Bitter flavors and some other bad tastes usually warn people of poison and other dangers. If they are distorted artificially, consumers will not be able to judge the quality of the food correctly. On the other hand, these methods can provide more satisfaction by creating dynamic sensations within people’s brain. As long as we feel good, it really does not matter where that satisfaction comes from. Thus, consumers need to achieve a balance between the objective taste and our subjective perception. In areas where food safety is strictly monitored and the chemicals used for flavoring are not harmful

to one's health, people can happily follow the lead of subjectivity, while in countries where the quality of food is seldom monitored, people may want to keep an eye on the potential danger it may cause. Under different situations, the standards of the balance differ, but as long as we understand how those dynamic perceptions are generated, we can always figure out an appropriate way to react to them.

#### References

- Allen W M et al. (2008). The Interactive Effect of Cultural Symbols and Human Values on Taste Evaluation. *Journal of Consumer Research*. Vol. 35, Aug.
- Herz R (2003). The Effect of Verbal Context on Olfactory Perception. *Journal of Experimental Psychology: General*. Vol. 132: 595-606.
- Jahnke, Morgen (2007). The Influence of Color on Taste Perception" Interesting Thing of the Day. 19 Mar.
- James K (2002). Escoffier: The King of Chefs. New York. 129-134.
- Joseph A B and Warren S M (1982). The Influence of National Versus Generic Branding on Taste Perceptions. *Journal of Business Research*. Vol. 10(3), Sept: 385-396.
- Lehrer, Jonah (2008). Proust Was a Neuroscientist. New York: Houghton Mifflin Company, Print.
- Michael W A et al. (2008). The Interactive Effect of Cultural Symbols and Human Values on Taste Evaluation. *Journal of Consumer Research*. Vol. 35, Aug.
- Searby L (2009). A Whiff of Opportunity. *International Food Ingredients*. Nov 2: 15-17.
- Zwerdling D (2004). Shattered myths. *Gourmet*. Aug.: 72-74.
- Instructor: Dorothy Charbonnier, Critical Writing Seminar in Psychology: The Novelist and the Neuroscientist*

## Stacy Burkhalter

### The Art of Communication: The "Odd Couple"

The eyes see and the mouth speaks but words are blind and photographs mute. This sensory deprivation causes a void in which clear communication becomes difficult. There is a fragile relationship between the two mediums; Dr. Charles Martin of Queen's College, New York explains in his essay "Visual Arts and the Strain of Words" that the nature of the tension between the two mediums is analogous to the "odd couple" of art—both friendly and helpful, but also antagonistic (Martin 1). Traditionally, it has been said that pictures speak louder than words; however, photographic theorist Susan Sontag questions this view in her book of essays entitled *On Photography*. She makes a significant concession: "In fact, words do speak louder than pictures." The photograph itself is "mute"—subject to the feelings and attitudes of others (Sontag 108). Theorists Ludwig Wittgenstein and Charles Martin, photographic theorists Susan Sontag and Roland Barthes, and photographers Eugene Smith and Robert Frank all underscore how words and photographs are important yet individually inadequate when used as documentary tools.

Ludwig Wittgenstein, in his book entitled *Philosophical Investigations*, argues that individual, solitary words are vague and it is only when one applies a greater meaning through the context of additional words that the word begins to hold significance. He argues that if given a situation where a child did not know what the word "two" was or what the word "nut" was and was shown two nuts, "The person one gives the definition to doesn't know what one wants to call 'two'; he will suppose that 'two' is the name given to this group of nuts!" (Wittgenstein 11). This ambiguity can easily be solved through further explanation of the subject matter. Mute and removed from context, photographs can be even more ambiguous. Because of the subjectivity of the interpretation of

photographs, they necessitate captioning to establish the context for the photograph. Charles Martin in his article “Photography and Biography” gives the example of Robert Frank’s 1955 photograph, “Trolley—New Orleans” in which the photograph depicts a trolley with a white man, a white woman, a white boy, a white girl, a black man, and a black woman in succession (Martin 3, Figure A). If the viewer knows nothing of the time just before the Civil Rights Movement in the South, then the audience doesn’t understand the reason for taking the photograph—they do not understand its powerful depiction of the mood and consequential action of the time. Martin points out that without the understanding that everyone in the photograph is positioned in such a way to clearly portray the order of the perceived power and importance of sex and race politics of the time, the *punctum*, or poignancy, that Roland Barthes describes in his book *Camera Lucida* is lost on the viewer (Barthes 27).

Susan Sontag argues similarly for the necessity of context in photography through the use of Eugene Smith’s photographs of the Japanese city of Minamata (Sontag 106, Smith 12). One comes to understand, primarily through Smith’s captions, that the people in the fishing village of Minamata were drinking water polluted by a chemical plant that was pumping mercury into their local river. As a result, the people of Minamata suffered excruciatingly painful deaths, and pregnant women gave birth to children who were found to also be poisoned. Smith captured the very heart of the issue with his photo essay, “Minamata,” as he captured each heartbreaking piece of the city’s story. Sontag uses these images to argue that although these horrifying pictures are gruesome in and of themselves, how they are perceived depends on their context. She argues that photographs can only be “passively encountered” and therefore rely upon words to provide context. If Smith had been using the photographs to supplement an ecology report the effect would have been different than if they were viewed in the context of a documentary or crime report. Similarly, if Smith’s photograph “Tomoko Uemura in Her Bath” is labeled a “Pieta” and the viewer recognizes (usually by means of words previously obtained and understood) what the Pieta represents, then the photograph takes on a completely new set of connotations; the mother becomes a saint and the child, innocent and unworthy of death. Words are thus implicated in being the more effective communicator of the two mediums (Sontag 108).

Sontag points out that, ultimately, photojournalists intend to transform the contents of their photographs through the words that they use; Smith, enraged at the idea that such atrocities could be occurring without repercussion, decided to make what he saw clear to the world and used captioned photographs to convey his horror. Smith’s photographs, combined with his words, proved so powerful that they got him beaten and nearly killed by the corporation that was implicated in the crime of the poisoning of Minamata.

Marxist theorist Walter Benjamin argued that photography’s role as a documentary tool is also tenuously caught up with its role as an aesthetic medium and that words can rescue the photograph from being seen in an aesthetic way (Benjamin 1934). The danger of viewing photographs through a pictorial lens as opposed to a documentary one, Benjamin argues, is that “it has succeeded in turning abject poverty itself, by handling it in a modish, technically perfect way, into an object of enjoyment.” Photographs inexorably beautify—even a photograph of a rubbish heap can be perceived as beautiful. This beauty, however, can be turned into horror with the insertion of a few choice words. Benjamin therefore argued for the existence of more photojournalists—or, more specifically, writers who take pictures. Sontag explains, implicating herself, “Moralists who love photographs always hope that words will save the picture” (Sontag 107). The reasoning, emotion, and thought behind capturing a photograph is lost without the permission of the photographer to see a little more clearly through words. Sontag’s *On Photography* is full of words and references to photographs. However, the only photograph contained in the entire book is of herself on the back cover, emphasizing all the more the concept that words are the more effective communicator. Photographic theorist Roland Barthes operates similarly in his book *Camera Lucida*. Although Barthes puts photographs in his book to illustrate his arguments, one key photograph is missing. Barthes speaks for a large portion of his book about a photograph of his deceased mother; the photograph is a picture of her as a child in front of a garden. He explains a *punctum* that only he can feel, but tells the reader that they will not be able to understand the *punctum* for themselves, choosing to keep the photograph a secret memory. Instead, he chooses to describe it with words. Barthes’ words are incredibly moving as he describes his mother’s loss in his own life, writing, in



essence, an extended caption or dedication to the photograph of his mother.

Along with the seeming necessity of words to clarify, and specify photographs, Charles Martin exemplifies the strain between the two mediums by making them analogous to an “odd couple.” Words do specify, but often the words that are paired with photographs in museums and history books are not the words of the photographer but the words of another who thinks they have “come to know something about the photograph” (Martin 17). Sometimes this knowledge is misleading or is twisted to support the pre-formed bias of the viewer. One of the areas in which this problem is seemingly most prevalent is in the area of propaganda. There are many cases in history in which a single image has been used as fuel for the flames of public support and affection in one country, and negativity and derision in another (Sontag 107). Martin also claims that words, rather than clarifying, often restrict the meaning of the photograph and channel the thoughts and emotions of the viewer, which can be seen as authoritarian (Martin 19). Martin stipulates in “Photography and Biography” that because of photography’s inability to explain or clarify a situation without words, it is not an ideal tool for the purpose of documenting history (Martin 13). He goes on to state that because of the tendency of words to create bias and the ability of words to create fiction versus non-fiction, writing is also not a good way to document history, even though the use of both words and photographs are the primary way of presenting such history (Martin 13). Both photographs and words are seen to lie in instances like *Wisconsin Death Trip*, in which atypical photographs were manipulated and presented as normality and the words used to supplement the photographs were misleading and, at times, pure fiction (Sontag 72). When something such as this is presented as a factual account of history, the problem of the quality of the combination of words and photographs to document history is exemplified.

Although photography has traditionally been lauded as the most concise, transparent, and unbiased of the arts, words are, in fact, the more effective communicator. Photography embodies one measure of the ideal—filling the role of the “eye” of documentation: pictures represent clear, visual representations of places never visited, people never seen, and objects never before imagined. This makes them ideal

for newspapers and magazines whose purpose is to allow the viewer to “see” events. Photographs thus hold the burden of being expected to represent what is real; seeing is, after all, believing. This burden does not necessarily lie on the back of words; writing is recognized and widely used for its ability to express ideas which are contrary to fact. Despite photography’s widespread use in printed media, photographs are not used as the sole representation of history; photographs are fettered to the written word. From captions and stories like Barthes’ *Camera Lucida* and Eugene Smith’s *Minamata*, to labels and titles in museums, to keywords on Tumblr, words effectively explain, qualify, and specify photographs. As Wittgenstein and Martin explained, words *can* be skewed or biased; however, a person can explicate something through words in a way that is not possible through photography. Sontag speaks to the idea that a photographer cannot impute meaning into his or her photograph, but can only watch as others project their emotions and experiences onto the work (Sontag 108). In other words (words being the normative qualifier), whereas words can solve their own difficulties through greater exegesis, photographs cannot speak for themselves and cannot provide their own context. Therefore, as Walter Benjamin hoped, wherever there is fear of the subjectivity of photographs, there will always be the hope of words to save them.

#### References

- Barthes, Roland. *Camera Lucida: Reflections on Photography*. New York: Hill and Wang, 1981. Print.
- Benjamin, Walter. Speech for the Institute of the Study of Fascism. Paris. 1934. Speech.
- Frank, Robert. Trolley—New Orleans. Photograph. New Orleans, LA.
- Martin, Charles. “Caption to the Visual: Photography and Biography.” Department of Comparative Literature, Queen’s College, Spring 1996. Web. Mar. 2011.
- Martin, Charles. “Caption to the Visual: Visual Art and the Strain of Words.” Department of Comparative Literature, Queen’s College, Spring 1996. Web. Mar. 2011.
- Smith, W. Eugene, and Aileen M. Smith. *Minamata*. New York: Holt, Rinehart, and Winston, 1975. Print.
- Sontag, Susan. *On Photography*. New York: Picador USA, 2001. Print.
- Wittgenstein, Ludwig, and G. E. M. Anscombe. *Philosophical Investigations: The German Text, with a Revised English Translation*. Oxford: Blackwell, 2001. Print.
- Instructor: Andrea Applebee, Critical Writing Seminar in English: On Photography*

## Kristin Marra

### An Apple a Day Keeps the Memory Loss Away

From lines forming outside of its stores the day the newest hot item comes out to its logo gracing the covers of nearly all student laptops in lecture halls, it's tough to deny the ever-increasing popularity of the Apple brand. There are over 93 million Mac owners in the world today and the numbers are nearly doubling every three years (Forrester Research, Inc.). Despite the controversy over the effectiveness and efficiency of Apple products, it can be agreed that good advertising has played a large role in consumer increase. Incorporating memory techniques such as mental simulation and the Velcro Theory of Memory, these advertisements "stick" in the minds of consumers and can be remembered much later (Heath & Heath, 2007). Apple advertisements use effective memory techniques to enhance brand recognition for their products.

Apple advertisements are so memorable due to their use of "hooks," a concept created by Chip and Dan Heath (2007) in the book *Made to Stick*. They write, "Memory...is like Velcro. If you look at the two sides of Velcro material, you'll see that one is covered with thousands of tiny hooks and the other with thousands of tiny loops" (p. 110). This concept—that in order for information to be remembered, it must come with "hooks" that can attach to the "loops" of the brain—is called the Velcro Theory of Memory (Heath & Heath, p. 111). Ricciardi et al. (2006), in their study entitled "Neural Correlates of Spatial Working Memory in Humans: A Functional Magnetic Resonance Imaging Study Comparing Visual and Tactile Processes," explain the effectiveness and importance of hooks in the working memory. This study was designed to determine brain patterns of neural response to the same working memory task presented in either visual or tactile format. Results indicated that, generally, the same parts of the brain were used during information processing in both the visual and tactile ways (Ricciardi et al., 2006,

pp. 339-349). These findings support the idea that it does not matter if the information is presented tactilely or visually; what matters are the hooks that come with each piece of information in order for the working memory to function properly. These hooks, described by the Heath brothers (2007), are the key ingredients to making information memorable. Apple uses many forms of hooks in its advertisements; thus brand recognition for Apple products is enhanced through the Velcro Theory of Memory.

Emotional arousal and decision-making are two examples of hooks on information. Cahill and McGaugh (1995), in their experimental study "A Novel Demonstration of Enhanced Memory Associated with Emotional Arousal," investigate the relationship between emotional arousal and memory. In an experiment in which subjects viewed either an emotionally neutral story or a more emotionally arousing story, subjects who viewed the arousal slides experienced a greater emotional reaction, and thus exhibited enhanced memory of the story (pp. 410-421). The results of the experiment support the idea that emotional arousal influences memory, allowing it to be considered a hook on information. Aakers, Batra, and Myers (2006), in their book *Advertising Management*, show that two-sided ads—ads that force the audience to choose one brand over the other—are more likely to be persuasive in changing brand attitudes because they are comparative rather than one-sided (p. 410).

Apple advertisements employ these two hooks—emotional arousal and decision-making—in order to influence consumers' decision to buy iPhone and MacBook products. Niraj Chokshi (2010), in his article "Apple Tugs at Heartstrings in New iPhone Ads," explains the emotional connection that these advertisements create with the audience. He writes, "They're conveying how you'll feel if you use the product, by making you feel alongside those in the commercial." For example, the iPhone commercial "Meet Her" depicts a grandfather seeing his granddaughter for the first time using the video feature on the new iPhone, subconsciously making the audience associate such feelings of pride and joy with the Apple product. Similar to the emotional hook, Apple's MacBook commercials force the audience to make a decision, another hook on information. The current Get-A-Mac Campaign, launched in May 2006, consists of portraying two actors that personify

the computers they represent—Justin Long representing the Mac and John Hodgman the PC—and forcing the audience to choose the cool, friendly Mac over the up-tight, insecure PC (Rhoads, 2007). This decision-making process, along with the emotion provoked by iPhone commercials, shows how Apple takes advantage of the Velcro Theory of Memory by employing hooks in their advertisements.

In combination with the Velcro Theory of Memory, Apple makes its product information memorable through the use of mental simulation in its advertisements.

Memorization, whether pertaining to information or physical skills, is about embedding an idea into the mind. Mental simulation, the act of reproducing events in the mind, does just that—it allows individuals both to rehearse and transform abstract thoughts into concrete ideas. This is an inherent quality to a sticky idea (Heath and Heath, 2007). Driskell et al. (1994) prove, in their article “Does Mental Practice Enhance Performance?” that mental simulation allows the brain to transform abstract ideas into concrete, physical skills, such as trombone-playing or ice skating. Similarly, Rivkin and Taylor (1998), in their article “The Effects of Mental Simulation on Coping with Controllable Stressful Events,” draw the same conclusions about mental simulation in problem solving, leading to a concrete, definitive plan of action. Zwaan et al. (1995) in their article “Dimensions of Situational Model Construction in Narrative Comprehension” show that causal discontinuities lead to increased elevation of reading times, proving that people use mental simulation when presented with a story (p. 395). Since when reading a story (which is generally abstract) there is a consistent effort to memorize the information being presented, the authors are all pointing to the fact that people remember ideas or skills better when concreteness is used. Chip and Dan Heath (2007), agreeing with this idea, write, “Abstraction makes it harder to understand and to remember . . . .Concreteness helps us avoid these problems” (p. 100). From these studies, it is apparent that ideas are more concrete during mental simulation and that memorization is most effective when ideas are concrete, therefore proving that mental simulation enhances memorization of information. Using these effective methods can thus enhance brand recognition.

Apple advertisements allow the audience to practice mental simulation. The recent iPhone commercials show the physical motions

that it takes to use an iPhone, tapping on applications of all sorts, answering calls, and playing games from the phone. For example, one commercial titled “Calamari” displays the screen of an iPhone and shows a person using its many features to eventually call the nearest seafood restaurant. By being shown the exact touch and applications it takes to get to a certain destination on the iPhone, the audience is being invited to simulate using it themselves (Chokshi, 2010). By simulating the motions created when using the phone, the advertisements allow the audience to mentally simulate using an iPhone, thus enhancing memorization of the Apple brand. Along with reminding people of the brand, mental simulation shows people how an iPhone would be a useful product in their everyday life.

Apple is arguably one of the largest forces of innovative technology in the world today and its need for effective advertising has become ever more clear. From the emotion and simulating adventure that comes with the iPhone commercials, to the comparative decision-making process that comes with the Mac advertisements, Apple ensures that each piece of information implied in an advertisement has a hook or mental simulation process. Other companies have begun to emulate Apple’s advertising techniques in order to sell their own products, such as the current Verizon “There’s a Map For That” commercial, forcing viewers to choose between Verizon and AT&T by showing the coverage each network provides on side-by-side maps. The implications of these memory techniques are profound, allowing for Apple to become an increasingly powerful and dominant business. With a future filled with popularity and power, everyone’s going to want to take a bite out of this Apple.

#### References

- Aakers, Batra, & Myers (2006). *Advertising Management*. Delhi, India: Dorling Kindersley Ltd.
- Cahill & McGaugh (1995). *A Novel Demonstration of Enhanced Memory Associated with Emotional Arousal*. Irvine, California: Academic Press.
- Chokshi (2010). Apple Tugs at Heartstrings in New iPhone Ads. *The Atlantic Monthly Group*.
- Driskell, Cooper, & Moran (1994). *Does Mental Practice Enhance Performance?* American Psychological Association, Inc.

Forrester Research (2006). www.forrester.com.

Heath & Heath (2007). *Made to Stick*. New York: Random House Publishing Group.

Rhoads, K (2007). *Get-a-Mac Campaign Analysis*. www.workingpsychology.com.

Ricciardi, Bonini, Gentili, Sani, Pietrini, & Vecchi (2006). *Neural Correlates of Spatial Working Memory in Humans: A Functional Magnetic Resonance Imaging Study Comparing Visual and Tactile Processes*. Pisa, Italy.

Rivkin & Taylor (1998). *The Effects of Mental Simulation on Coping with Controllable Stressful Events*. Sage Publications.

Zwaan, Magliano, & Graesser (1995). Dimensions of situation model construction in narrative comprehension. *Journal of Experimental Psychology*.

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## Kelly Zafman

### Don't Flick the Chick Flick

When accepting the Women in Film 2001 Crystal Award, Amy Pascal, chairman of Columbia Pictures, remarked, “It is often said that I make chick flicks. This is not a compliment...” (Adelman 2). By definition, chick flicks are simply movies that appeal to a primarily female audience and can range from lighthearted musicals to heart-breaking love stories (Adelman 4). *Clueless*, a chick flick released in 1995, was truly a monumental film for this genre as it was one of the first movies that featured a female protagonist who was generally portrayed in a positive light. It is unfortunate, however, that chick flicks have developed such a social stigma, one that is demonstrated by Pascal’s outlook, because in reality, these films make up such a significant, prolific, and popular genre. As made apparent by *Clueless*, chick flicks deserve greater recognition as a legitimate genre of film in terms of their characteristics.

Though chick flicks have transformed over the course of history, many of the essential elements have withstood the test of time. While screenwriters have become increasingly creative since the conception of the chick flick in the mid-1950s, the same story line of “Boy meets girl, girl and boy fall in love, boy finds her again just in time for the credits to roll...” is one that has proven infallible (Gardner). What has changed over the decades, however, is the portrayal of these females. Prior to the 1990s, chick flicks provided a highly sexualized and poor representation of the girls featured in the films, as in movies like *Smooth Talk* of 1986 and *Heathers* of 1989 (Orenstein). The problem was that “conventional wisdom held that female protagonists were a bad bet.... the thinking went, boys do not identify with a female hero,” so producers were hesitant to make movies that depicted females very positively (Orenstein). In the 1990s, the movie industry realized that teenage girls were establishing their buying power in the market, a phenomenon that

the box office could use to its advantage (Shary 111). As a result, chick flicks finally began to portray women as strong, independent protagonists, characters that a female audience could identify with and admire. The genre gained a new wave of popularity and sales skyrocketed, but the discredit to chick flicks still remains today.

These chick flicks are so noteworthy in terms of film because the genre is so complex. By combining many elements from other genres, chick flicks demonstrate their flexible and diverse nature that makes these movies so captivating. In fact, "...chick flicks can run the gamut from sunny Disney movies to melodramatic tearjerkers..." and everything in between (Adelman 1). While an infinite number of chick flicks demonstrate this concept, *Clueless* is the perfect depiction of the complexity and versatility of these films. It must first be proven, however, that *Clueless* is, in fact, a chick flick. But with the "sympathetic heroine," "love-worthy hero," "best friend," "impediments to the romance," "dancing scene," and "ultimate happy ending" all present, it seems that *Clueless* included all of the possible elements of this genre (Adelman 8-17). Beyond these basic essentials of a chick flick, the movie also incorporated key features from other genres. In his comprehensive analysis of teen films, Timothy Shary subdivides the genre and categorizes an immense collection of films based on these groupings, commonly citing *Clueless* as an example. Interestingly enough, Shary includes this movie in the chapter on "school films." He explains that the examination of popularity, particularly in terms of teen girls, is a common feature of "school films" and is a concept that is found throughout *Clueless*, since this film revolves around the lives of the queen bee Cher and all of her equally popular friends. This movie is also examined in the section on "youth in love and having sex." Shary explains that *Clueless's* assessments of familial relationships with respect to love as well as the idea of virginity are actually elements of this subgenre of teen film (Shary 222-223). A new dimension of depth is added to *Clueless* because the storyline is actually a loose adaptation of Jane Austen's novel *Emma*. While the movie is by no means Victorian or reminiscent of the early 1800s, *Clueless* does feature elements that are comparable to the components found in Austen's classic piece of literature. A parallel can be drawn between *Clueless's* Cher, a strong-willed protagonist who searches for self-identity while still subscribing

to social norms, and Emma, the vivacious heroine of Austen's novel (Mazmanian). As members of the social elite, the two characters also demonstrate the importance of wealth and reputation in their respective cultures, a concept that is emphasized by the use of first person narrative in both pieces (Ferris). Both the novel and the film are made from the viewpoints of the protagonists, allowing the audience to truly understand the attitudes of the "rich girls" in their highly stratified societies. Although these comparisons may not necessarily be immediately identified, they do give viewers a new angle from which to analyze and interpret this multifaceted chick flick.

Furthermore, chick flicks are a legitimate genre of film because the movies possess certain artistic qualities. While all chick flicks certainly prescribe to a standard set of basic elements, the moviemakers can reveal their creativity through inventive story lines, acting, cinematography, costuming, lights, and editing. *Clueless* is a film that actually "clued in" to the use of these artistic factors which not only made it a popular film among "young female teenagers who were its primary target audience," but also caused it to "attract[ed] generally high critical regard in the mainstream and independent film press..." (Wald 103). Both the storyline and the acting in *Clueless* were actually award-winning. Amy Heckerling, the director and writer of the film, won Best Screen Play in the 1995 National Society of Film Critics award and was nominated by the Writers Guild of America for Best Screenplay Written Directly for the Screen in 1996 (Green, 88). What was so original about this film was the use of voiceovers, as "Cher's first-person voice-over neatly captures the contradiction between actual events and her perceptions...the voice-over illustrates the disjunction between Cher's perceptions and reality..." (Ferris). It was this technique that highlighted the irony, humor, and cleverness of the movie. Alicia Silverstone's inspired performance as Cher both jumpstarted her acting career and won her the Blockbuster Entertainment Award for Favorite Female Newcomer and the American Comedy Award for Funniest Actress in a Motion Picture (Green 89). Even the little details in *Clueless* like costuming were truly demonstrative of the artistic nature of this film. The costume designer actually spent time studying fashion in Europe just to develop the wardrobe for the film and created sixty complete outfits for Alicia Silverstone's character alone; quite deservedly, the



film was called the “fashion movie of the year” by Women’s Wear Daily (“Clueless! The Hit Film”).

As alluded to, chick flicks are an important genre of film as they address some realistic and significant issues. While some of these movies may appear to just be mindless “shopping montages,” chick flicks actually develop cohesive themes and, “before the curtain falls, the audience is presented with a message-filled scenario that we can either accept or reject as we see fit” (Adelman 35). Just as chick flicks can be so diverse in characters and plotlines, so do they display a wide range of conflicts. The messages presented may be very diverse, ranging from concepts like adolescent sexuality to class relations. Though *Clueless* may seem to be a film simply fraught with stereotypes, the movie actually addresses some serious topics. In fact, the protagonist Cher is deliberately portrayed as such a superficial girl because she is a prime example of the “consumer elite,” a class that is the product of the capitalist ideology of the late-twentieth century and is defined by its overly consumptive tendencies (Wald 105). As a result, the film may be considered a social commentary on the “super-spending” and consumerism of the United States, and even Cher’s “buyer’s remorse” throughout the film demonstrates the unfortunate tie between ethics and money that existed in the economic condition of the 1990s (Wald 106). Furthermore, *Clueless* “assumes its audience knows all about malls and, moreover, that life in this particular fast lane is both titillating and ridiculous, that reality—what counts, fashion and morality options—is a matter of media images” (Fuchs). With this in mind, this chick flick is almost a satirical depiction of the lives of upper-class teenagers, warning viewers from leading their lives according to such images. By utilizing the stereotypical characters like Cher, *Clueless* develops an “anti-media” message and illustrates that popular culture can profoundly influence teenagers, leading them to become simple, superficial consumerists.

Beyond the actual characteristics of chick flicks, the economic significance of these movies makes this genre so legitimate. In 2009, the Motion Picture Association of America released the figures that out of 217 million movie goers throughout the year, 113 million were females, making women the majority of ticket buyers (Silverstein). As a result, chick flicks, movies intended for a female audience, have been extremely successful in the box office over the last couple of decades. The film

*Clueless* was released in 1995 and was one of the first movies that really exemplified this phenomenon. *Clueless* was “An unexpected hit [that] took in \$57 million at the box office...” (Weinraub B4). Since the movie portrays rich Beverly Hills schoolgirls, the author comically points out that the movie “...earn[ed] nearly as much at the box office as its heroine spends in a week at the mall.” Since the success of *Clueless*, chick flicks have only continued to triumph at the box office. *Titanic*, released just two years after *Clueless*, raked in over \$1.8 billion across the globe. Julia Roberts’s films, on the other hand, have alone grossed \$2.5 billion worldwide, and since chick flicks “rule at the box office,” it should come as no surprise that the chick flick *My Big Fat Greek Wedding* is the second most successful independent movie ever made, only second to *The Passion of the Christ* (Adelman 3). Since then, the 21<sup>st</sup> century has produced chick flicks that even rival “man movies” in the box office, and the chick flick genre has become an economic entity of its own (York 5).

Perhaps the legitimacy and significance of today’s chick flick is really indicative of something greater: the importance of women in modern culture. As explained earlier, it was not until the 1990s, and perhaps not even until the release of *Clueless*, that the females featured in the movies were portrayed as true heroines. It is quite logical, therefore, that societal views on women improved significantly during the 1990s. In fact, 1992 was given the title “The Year of Women,” as the number of females in Congress doubled during this year (Office of History). This power of modern women and increasingly positive outlook on the female gender was directly reflected in chick flicks, coinciding with the blockbuster status of this genre. Though it is clear that chick flicks are influenced by history, in some ways, the films may be influential as well. It is impressive that movies intended for a primarily female audience can have such a huge bearing on the film industry and on society as a whole. Like all other genres, chick flicks are a source of “media that define the [young adults of tomorrow] and will be largely responsible for their roles in the world” (Shary 264). As a result, the depiction of the daily struggles of women on the big screen serves as an important inspiration and a reminder to females that they should continue to demand equality, assert their independence, and strive for success.

## References

- Adelman, Kim. *The Ultimate Guide to Chick Flicks*. New York: Random House, 2005.
- “Clueless! The Hit Film Shines a Spotlight on Young Hollywood’s Style.” *People* 18 Sept. 1995: 155-156. 11 Nov. 2010 <<http://www.people.com/people/archive/article/0,,20101614,00.html>>.
- Ferris, Suzanne. “Emma Becomes Clueless.” *Jane Austen Society of Australia*. 16 Feb. 2004. 29 Nov. 2010. <<http://www.jasa.net.au/study/ferriss.htm>>.
- Fuchs, Cynthia. “Clueless.” *University of Maryland Women’s Studies*. 30 Aug. 2005. 15 Nov. 2010 <<http://www.mith2.umd.edu/WomensStudies/FilmReviews/clueless-fuchs>>.
- Gardner, Leahannah. “History of Chick Flicks.” *Evansville Chick Flicks Examiner*. 11 Oct. 2009. 15 Nov. 2010 <<http://www.examiner.com/chick-flicks-in-evansville/history-of-chick-flicks>>.
- Green, Lindsay. *Emma and Clueless*. Sydney: Pascal Press, 2001.
- Mazmanian, Melissa. “Reviving Emma in a Clueless World: The Current Attraction to a Classic Structure.” *Persuasions On-Line*. Oct. 1999. 15 Nov. 2010 <<http://www.jasna.org/persuasions/on-line/opno3/mazmanian.html>>.
- Office of History and Preservation, Office of the Clerk, Women in Congress, 1917–2006. Washington, D.C.: U.S. Government Printing Office, 2007. 8 Dec. 2010 <<http://womenincongress.house.gov>>.
- Orenstein, Peggy. “The Movies Discover the Teen-Age Girl,” *New York Times*, Aug. 11, 1996, sec. 2, 1.
- Silverstein, Melissa. “Guess What? Women Buy More Movie Tickets than Men.” *News Portal*. 11 March 2010. 29 Nov. 2010 <<http://worldnews.hometips4u.com/melissa-silverstein-guess-what-women-buy-more-movie-tickets-than-men>>.
- Shary, Timothy. *Generation Multiplex: The Image of Youth in Contemporary American Cinema*. Austin: University of Texas Press, 2002.
- Wald, Gayle. “Clueless in the Neocolonial World Order.” *Sugar, Spice, and Everything Nice: Cinemas of Girlhood*. Ed. Murray Pomerance and Frances Gateward. Detroit: Wayne State University Press, 2002, 103-123. Print.
- Weinraub, Bernard. “Who’s Lining Up at Box Office? Lots and Lots of Girls.” *New York Times*, Feb. 23, 1998, B4.
- York, Shelley. “From Chick Flicks to Millennial Blockbusters: Spinning Female-Driven Narratives into Franchises.” *Journal of Popular Culture*. 43 (2010): 3-24.
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## Elizabeth Feeney

### Friend Request Accepted: Lessons in Social Media Marketing

Martin Lindstrom (2008) explains that a growing trend in marketing is consumer-generated advertising, which allows ordinary people to participate in a campaign (p. 188). Companies have taken advantage of this concept on social media websites to engage their current customers and attract new ones. This is termed social media marketing, which is defined by Tuten (2008) as “a form of online advertising that uses the cultural context of social communities, including social networks (e.g., YouTube, Myspace, and Facebook), virtual worlds, social news sites, and social opinion sharing sites to meet branding and communication objectives” (p. 19). In a place where information can be streamed virally at little cost, social media marketing can be an asset; however, it can also incur risks. When cultivating brand loyalty and sustaining a brand on these websites, what exactly is the best strategy? As an emerging field, there is not a tremendous amount of research on how to effectively utilize social media marketing. Examining social media marketing thus far has shown it is most effective for companies to adhere to a certain etiquette and exercise an evolving strategy. There are general guidelines that companies can follow to make the most of social media marketing.

Primarily, it is best for companies to avoid one-sided communication to build a meaningful relationship with consumers. Writers such as Rotolo (2010) in the journal *Public Relations Tactics*, Gentry (2009) in the trade publication *Accounting Today*, and LaDuque (2010) in the business magazine *Franchising World* agree that site users will only be uninterested if companies engage in what Gentry (2009) calls a “monologue” or “broadcast media.” This includes things like ignoring other users’ comments and constantly posting information that comes across as an advertisement. On a social media site, people expect

reciprocal and respectful communication. To illustrate this idea, Gentry (2009) uses a metaphor that compares a company to a partygoer that interrupts a conversation among a group of people by shoving a business card in their faces and launching into a sales pitch. LaDuque (2010) adds that users, i.e., potential consumers, “feel slighted when large companies appear to ignore their opinion.” If a company does not act social, they will experience negative repercussions. Rotolo (2010) emphasizes that if users are bored or annoyed by a company, they can easily “unfollow” them or hide their content. The purpose of social media marketing is to interact with consumers and build a relationship with them. If a company fails to do so, then they fail to gain exposure and consumers’ loyalty.

With that said, companies can optimize social media marketing by providing valuable information to site users. The aforementioned authors, Gentry (2009), LaDuque (2010), and Rotolo (2010), agree that this is the best tactic for gaining users’ trust and acceptance. As Rotolo (2010) advises, “act more like a well-informed friend than an advertisement.” But what exactly constitutes being a friend on social media sites? Rotolo (2010) suggests that companies “phrase updates as questions and rework news headlines as calls to action.” Similarly, LaDuque (2010) and Gentry (2009) add that companies should keep up with newsfeeds, post videos and comments, and offer exclusive deals and sneak-peeks to users. This creates a mutually beneficial relationship between a company and its followers. LaDuque (2010) highlights fast food restaurants such as Taco Bell and Tasti D-Lite’s for executing successful social media marketing campaigns; Taco Bell, which has over one million followers on Twitter, engages users by asking them to post pictures of their favorite items and restaurant locations, and it also posts stories and pictures from events they have sponsored like the X-games, new deals, and store openings. Tasti D-Lite offers point-based rewards in the form of free food to its loyal fans and followers on social media sites. As this example illustrates, for users, companies’ social media sites provide interesting ways to connect with others and the company, and even discounts. In return, companies gain exposure and develop a bond with consumers that will lead to more business (LaDuque 2010, Rotolo 2010).

Additionally, listening and responding appropriately to what is being said on social media sites allows companies to gain useful

consumer insight and facilitate customer service. Paul Dunay (2011), a leading figure in social media marketing, Ramsay (2010) in the *Journal of Database Marketing & Customer Strategy Management*, and April Joyner (2010) in *Inc.* magazine agree that this is most important, especially when the criticism from other users is negative. Failure to respond on social media sites can create a disconnection between users and a company. Ramsay (2010) emphasizes that companies need to listen to others’ concerns and address them as though they are “mini business meetings.” Dunay (2011) claims that social media marketing has led customer service to be the new public relations. Ramsay (2010) illustrates this point by discussing a notorious failure of a company to address concerns brought up on social media sites: Toyota. In 2010, the company had to recall many of their vehicles because they were experiencing serious problems with the accelerator pedal. However, concerns about this issue were raised as early as 2009 on message boards. Still, “it was equally apparent that Toyota was neither listening nor responding to the conversation through these channels and didn’t act on this critical and freely available information about one of their flagship models” (Ramsay 2010). Ramsay concedes, “while an issue such as a design defect cannot be fixed through social media, failing to listen or adequately respond to customer complaints in these channels can make the negative impact of such a crisis significantly worse.” Here, Toyota lost its reputation and many faithful customers who felt they could no longer trust the brand. In contrast, April Joyner (2010) cites a triumph of social media sites helping customers:

Andy Carlson, owner of an Ace Hardware store in Denver, once came across an angry Twitter update from a customer who had bought a tool that broke after one use. He resolved the issue in a matter of minutes by referring the customer to an area store and notified him of Ace’s lifetime guarantee. Best of all, he was able to catch the complaint after store hours—and prevent negative word of mouth.

It is made evident through these examples that addressing users’ comments on social media sites is an effective way to connect with consumers, which thereby benefits the company.

Social media marketing is certainly an evolving form of

marketing that is expected to increase dramatically in the future. And as it develops, so will the tactics for how to use it. The common point among the previously noted pieces of advice is that if companies venture to put themselves on the site and desire to be successful, it is best to act, in short, socially. By responding to users and sharing business-related affairs, users can transform from fans into friends. Social media sites enable even the largest corporations to interact with customers in a personal way expected of mom and pop stores. At the same time, this advice is very general and social media marketing policy has the possibility to adapt and specialize to company type. The etiquette of a less serious company such as a toy store should differ in some aspects from a more serious group like the F.D.A., because they appeal to completely different audiences and have very different missions.

#### References

- Gentry, K. (2009). The social networking revolution. *Accounting Today*, 23(16), 42. Retrieved from EBSCOhost.
- Joyner, April. 30 tips for using social media in your business. Inc. 25 Jan. 2010: n. pag. inc.com. Web. 2 Apr. 2011.
- LaDuque, J. (2010). Get more leads, engage customers with social media. *Franchising World*, 42(7), 23-25. Retrieved from EBSCOhost.
- Lindstrom, M. (2008). *Buyology: Truth and lies about why we buy*. New York: Doubleday.
- Ramsay, M. (2010). Social media etiquette: A guide and checklist to the benefits and perils of social marketing. *Journal of Database Marketing & Customer Strategy Management*, 17(3/4), 257-261. doi:10.1057/dbm.2010.24
- Rotolo, A. (2010). Beyond friends and followers: Next steps for social media. *Public Relations Tactics*, 17(5), 9. Retrieved from EBSCOhost.
- Dunay, Paul. Interview by R. Tehrani. (2011, February). Making social media your business. *Customer Inter@ction Solutions*, 29(9), 1. Retrieved April 12, 2011, from ABI/INFORM Global. (Document ID: 2310273481).
- Tuten, T. L. (2008). *Advertising 2.0: Social media marketing in a Web 2.0 world*. Westport, Conn.: Praeger.

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## Sabrina Mills

### Muybridge, Motion Photography, and the Birth of Modern Art

The year is 1873 and photographer Eadweard Muybridge stands naked in his studio at the University of Pennsylvania. He begins to traverse a line of strings that he connected to a row of equally spaced cameras. Each time he passes one of the strings, the shutter of the corresponding camera is detonated and his movement is captured. This ingenious contraption allowed Muybridge to create his series *Human and Animal Locomotion*. Commissioned by the University, Muybridge was given all access to photo facilities and the veterinary school. Although a committee of professors of the sciences eagerly awaited Muybridge's results at Penn, the lasting reverberations of his work were to be felt in the city of Paris, where artists were profoundly inspired by the new approach to perspective his photos offered. Artists took such a great interest in Muybridge's series because they offered insight into the very mechanisms of movement. Although Eadweard Muybridge was a scientist in his practice, his photos ultimately gave birth to Modernism in art.

Muybridge worked to answer scientific questions but was aware of the interest artists had in his work. On January 24, 1891, Muybridge gave a lecture entitled "Science of Animal Locomotion in Relation to Design in Art" at the Hotel de la Société de Géographie in Paris. At this talk and others, he encouraged many artists to buy prints from *Human and Animal Locomotion*. Many did, and his photos offered artists detailed models of how to capture movement in each of its stages. Art historian Aaron Scharf, who wrote retrospectively on the period during the 1960s, reflects that the series "became a comprehensive source book of biological articulation; the nineteenth-century equivalent of the medieval pattern book" (191). More than presenting artists with

models to accurately depict a moving form, the photos offered the greater suggestion that images did not have to appear stagnant. Artist Philip Pearlstein goes as far as to stake the claim that Muybridge's motion photographs marked the end of single point perspective that had been the status quo since the Italian Renaissance.

In line with Pearlstein's argument, the influence of Muybridge can be found in the works of Impressionist artists such as Edgar Degas and Georges Seurat. Paul Valéry, a friend of Degas, said the artist "was among the first to see what photography could teach the painter—and what the painter must be careful not to learn from it" (Scharf, 190). Degas sketched horses based off of Muybridge's Animal Locomotion series and was interested in the nuances of movement. Georges Seurat mastered his own unique style known as Pointillism. With this technique, he created paintings made entirely of dots and was interested in the ways colors come together to create forms. Of Seurat's work, Vincent van Gogh said, "Seurat is showing a very curious picture...in which he has made an effort to express things by means of the directions of the lines. He certainly gives the impression of motion" (Scharf, 195). Perhaps this interest in representing motion was inspired by Muybridge's works. In his 1889 painting *La Chahut*, Seurat painted such "lines" to show the synchronized movements of his dancers' feet. Similarly, the influence of Muybridge is evident in the repeated forms of the dancers' bodies.

The influence of Muybridge on Parisian artists extended even to the domain of sculpture. His aesthetic and approach of multiple forms is particularly evident in the works of Auguste Rodin and again, Degas. Pearlstein notes that Rodin's *St. John the Baptist* bears a striking resemblance to Muybridge's own self-portrait of himself walking. Degas went as far as to have Marey take a series of photos for him in the style of Muybridge. With these photographs, Degas made studies in wax of his famous *Little Dancer* sculpture. These two examples demonstrate the broad-reaching influence Muybridge's photos had: in his own lifetime, artists were translating his two-dimensional photos into three-dimensional forms.

Muybridge's work did not exist in a vacuum: he was one of many pioneering photographers exploring the limits of the camera and shared his ideas with his contemporaries. In his book *Einstein, Picasso: Space,*

*Time, and the Beauty that Causes Havoc*, Arthur I. Miller mentions Muybridge in the same breath as filmmaker George Méliès and photographer Étienne-Jules Marey. Méliès was a revolutionary filmmaker whose signature was a form of special effects that created the illusion that bodies were being deconstructed. Marey used multiple exposures on a single frame to capture a moving figure. When describing his famous series on horse locomotion, Muybridge offered credit to Marey, saying, "being much interested with the experiment of Professor Marey in 1877, I invented a method for the employment of a number of photographic cameras" (Muybridge, 183). Thus, perhaps Miller's notion that the works of Muybridge, Melies, and Marey were in dialogue with one another is not so far off. Another important colleague of Muybridge was Thomas Eakins, who worked with him at the University of Pennsylvania. While there, Eakins created a camera that could take multiple exposures in a fixed position, which differed from Muybridge's series of cameras. Though both artists fractured motion into serial stages, Eakins offered a condensed view of motion by presenting his series on one frame. However, the University decided to reject Eakins's photos and only published Muybridge's. Thus, Eakins's oeuvre largely looms in the backdrop of Muybridge's work.

Ultimately, Pablo Picasso was the first to look towards Muybridge's photographs and, as a result, entirely abandon single point perspective. His innovation of Cubism was so revolutionary because, for the first time since the Renaissance, paintings were not a window into reality, but rather created a new reality. In his book *Einstein and Picasso*, Miller weaves Muybridge into his discussion of the many sources that inspired Pablo Picasso to paint his seminal image *Les Femmes d'Alger (O. J. R. Version O)*. This image depicts five prostitutes in a bordello, and is considered by many to be the first Cubist painting because their bodies are so abstracted. Miller claims that Muybridge gave Picasso "the idea of a 'motion picture sequence' of five women with the 'plot' of increased geometrization" (118). The language of this description again creates an association between Muybridge's work and motion cinema, a connection that Picasso likely would have made himself. Miller argues that Muybridge's influence is most manifest in the figure of the squatting woman in the bottom right hand corner, who is depicted from many different angles to create a "four-dimensional quality" (119). By



depicting her from various angles, Picasso suggests that the figure is moving on the two-dimensional picture plane, just as Muybridge's figures appear to leap across the page. *Les Femmes d'Alger* was the first of Picasso's paintings to use a Muybridge-inspired approach to the human form, and the rest of his oeuvre resonates this theme.

Marcel Duchamp took Muybridge's proposition a step further than Picasso with his revolutionary painting *Nude Descending a Staircase* in 1912. In this image, the human form is reduced to geometric shapes that are repeated to create the effect that the figure is moving down the stairs through time. Art historian Christopher Townsend describes that "Duchamp, then, shows us the interval between images, the split-seconds that Muybridge and Étienne-Jules Marey leave out" (341-342). Indeed, Muybridge's images separated motion into stages and if you look at each image out of the serial context, the figures are frozen still. Duchamp, however, was able to essentially overlay these images and use shadow and line to capture the chaotic movement of his figure. The painting appeared in the famous 1913 Armory Show in New York, and Duchamp's moving figure created a stir that would usher in the century of art to come. The image faced great praise and harsh criticisms, and the show has been called "a comforting dogma to the prophets of change and a Pandora's box to the doctors of the old faith" (Trapp, 129). Thus, Muybridge's work had a key influence on another one of the twentieth century's most provocative masterpieces.

One of Duchamp's major propositions was that "art should emanate from the mind" rather than merely please the eye (Morgan, 129). He planted the seeds for the more conceptually natured art that would follow him, and parallels can be drawn from these artists back to Muybridge. Pearlstein notes that there was a layered effect in Muybridge's photos, with "the cream color of the paper, the pale earth green of the background panel, and the black-and-white pattern of the grid with its photographs." He proceeds to suggest that this aesthetic inspired the paintings of Josef Albers, such as the *Homage to the Square* series in which he created over a thousand images of overlapping squares. Albers was interested in the exploration of color and also used a mathematic formula to determine the squares. Thus, his work represents a similar marriage between art and science found in Muybridge's approach. Pearlstein also found that the grids of Muybridge's photos

seem to resemble those of Mondrian's famous *Compositions in Red, Blue, and Yellow* drawn in the 1930s. In 1964, the famed conceptual artist Sol LeWitt mounted photos of Muybridge's nudes on painted wood with flashing lights. Sol LeWitt reflected, "I've long had a strong affinity toward Muybridge. A lot of his ideas appear in my work" (Ulaby).

Thus, a photographer who set out in 1870 to study the movement of animals would go on to shape the practices of the twentieth century's most revolutionary artists. Muybridge himself probably could never have fathomed that his photographs of leaping buffalos would emerge as pivotal sources of inspiration for artists a century later. The artists of the Impressionist era were the first to be inspired by his aesthetic and incorporate suggestions of movement in their work. It was ultimately Picasso and Duchamp who would use Muybridge's approach to subvert the standards of Western art, creating a luminous moment when the worlds of science and art collided

#### References

- Buchloh, Benjamin H. D. "Conceptual Art 1962-1969: From the Aesthetic of Administration to the Critique of Institutions." *October* 55 (Winter 1990): 105-143. Print.
- Christie, John. "Origins of Inspiration: A Four-Dimensional View of Two Twentieth-century Icons." *Nature* 410 (Apr. 2001): 743-744. *Nature*. Web. 4 Apr. 2011. <<http://www.nature.com/nature/journal/v410/n6830/full/410743a0.html>>.
- Clegg, Brian. *The Man Who Stopped Time: The Illuminating Story of Eadweard Muybridge—Pioneer Photographer, Father of the Motion Picture, Murderer*. Washington, DC: Joseph Henry Press, 2007. Print.
- Hendrick, Gordon. *Eadweard Muybridge*. New York: Grossman Publishers, 1975. Print.
- MacDonnell, Kevin. *Eadweard Muybridge: The Man Who Invented the Moving Picture*. Boston: Little, Brown and Company, 1972. Print.
- Miller, Arthur I. *Einstein, Picasso: Space, Time, and the Beauty That Causes Havoc*. New York: Basic Books, 2001. Print.
- Morgan, Ann Lee. *The Oxford Dictionary of American Art and Artists*. New York: Oxford University Press, 2007. Print.
- Muybridge, Eadweard. "Classics of Science: Muybridge on Attitudes of Animals." *The Science Newsletter* 16.441 (1929): JSTOR. Web. 15 Mar. 2011.
- Pearlstein, Philip. "Moving Targets." *ARTnews* 109.11 (2010): 92-97. Print.
- Scharf, Aaron. "Painting, Photography, and the Image of Movement." *The Burlington Magazine* 104.710 (1962): 186-195. Print.

Townsend, Christopher. "Time & Motion." *Art Monthly* 341 (2010): 1-4. EBSCOhost. Web. 15 Mar. 2011.

Trapp, Frank Anderson. "The 1913 Armory Show in Retrospect." *College Art Journal* 17.3 (1958): 294-296. Print.

Ulaby, Neda. "Sol LeWitt: Conceptual Art Pioneer Dies at 78." *National Public Radio*. N.p., 9 Apr. 2007. Web. <<http://www.npr.org/templates/story/story.php?storyId=9481440>>.

*Instructor: Jo Ann Caplin, Critical Writing Seminar in Cultural Studies and Criticism: Einstein & Picasso*

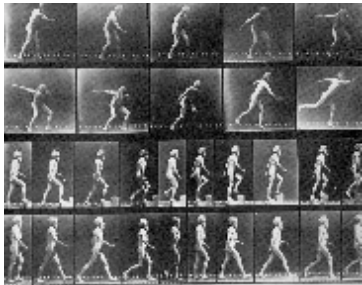


Figure 1: Eadweard Muybridge, *Nude Self Portrait*, approximately 1873. <[http://commons.wikimedia.org/wiki/File:Muybridge\\_disk\\_step\\_walk.jpg](http://commons.wikimedia.org/wiki/File:Muybridge_disk_step_walk.jpg)> PD-1923



Figure 2: Georges Seurat, *La Chahut* (detail), 1889-1890. Kröller Müller Museum, Otterlo, Netherlands.



Figure 3: Pablo Picasso, *Les Femmes d'Alger (O. J. R. Version O)*, 1907. Museum of Modern Art, New York.

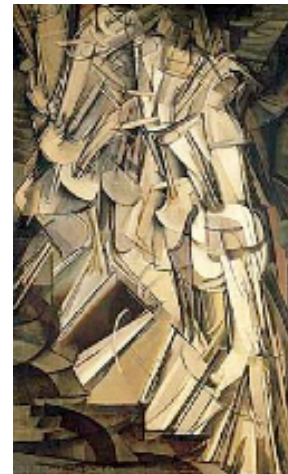


Figure 4: Marcel Duchamp, *Nude Descending a Staircase*, 1912. Philadelphia Museum of Art: The Louise and Walter Arensberg Collection.

## Brittany Arditi

### ABC, Not Easy as 1-2-3: The Importance of *Lau vs. Nichols* in Achieving Equality for Minority Children

Imagine being in a classroom where you do not understand the language in which material is being taught. You desperately search for a word or gesture that is familiar, but to no avail. Finally, you tune out, resigning yourself to the fact that whatever knowledge you are meant to be acquiring is simply beyond your grasp. Unfortunately, this hypothetical situation was a stark reality for students only a few decades ago, specifically, those whose parents had recently immigrated from foreign countries and did not speak English. Though the right to an adequate public education has been an important part of every state's constitution since 1900, language minority children were often not afforded this right and were left to maneuver their own way through an education system that was not designed with their needs in mind (Eastman 32). After years of neglect at the hands of the public school system, a group of such students finally demanded their rights in a court case argued in front of the Supreme Court. This case, *Lau vs. Nichols*, was an important triumph in the fight for equality for minority children.

*Lau vs. Nichols* was argued in 1971 on behalf of a group of students who maintained that the San Francisco public school system was denying them the right to an adequate education (Van Geel 864). The students, mainly the children of recent Chinese immigrants, did not speak English and were being offered no supplemental instruction to help them learn the language (Moran 2). As a result, they were not able to understand the majority of what was being taught to them in school. They argued that this reality was unconstitutional in that they were not being extended equal educational opportunity. Though the district court and

court of appeals denied their complaint, the Supreme Court validated the children's requests and ruled in their favor (*Lau vs. Nichols*, U.S. Supreme Court, 414 U.S. 563).

The case, brought on behalf of 1,800 Chinese students, had immediate and significant impacts for the education of all minority children in San Francisco. Sugarman and Widess, two legal experts who analyzed the case during the time in which it was argued, commented that "a result favorable to the plaintiffs" would "require a substantial change in the way school districts customarily treat non-English speaking students" (157). Once left to fend for themselves, students who did not speak English now would have to be provided with a unique curriculum to suit their needs. Fundamentally, the Supreme Court ruling stipulated that minority children could no longer be treated as inferior to their white counterparts, and that specific and targeted measures had to be put into place to ensure that the education they received was comparable in quality. The court noted "there is no equality of treatment merely by providing students with the same facilities, textbooks, and curriculum, for students who do not understand English are effectively foreclosed from any meaningful education" (U.S. Supreme Court, 414 U.S. 563). As such, *Lau vs. Nichols* not only provided the foundation for the instruction of English as a second language (ESL), but also signaled the abandonment of the "sink or swim" attitude towards non-English speaking students. It has been suggested that "the Lau decision can be seen as the most important and enduring legal symbol" for "the civil rights of language-minorities" (Ovando 9).

As the first case to argue for the rights of children who were not fluent in English, *Lau vs. Nichols* provided the impetus required to make satisfactory education available to language minority students not only in San Francisco, but also on a national level. Following the ruling, the plight of non-English minority students was more widely acknowledged, and as such, became a focus of federal legislation. The Equal Opportunities Act of 1974 was a particularly noteworthy corollary of the case. It was significant in that it effectively extended the Lau ruling to all students and school districts, not just those receiving federal funds, which was a clause of the initial case (Stewner-Manzanares 3). Similarly, in 1974, amendments were made to the Bilingual Education Act that greatly improved the quality of education afforded to minority

students. The reforms mandated that programs for non-English speakers be provided both in English and in the native language of the student in order to allow him or her to progress effectively through the educational system and not be hindered by language barriers (Stewner-Manzanares 4).

The number of ESL programs grew exponentially following the Lau ruling, as bilingual education became an integral part of all public school districts (Ovando 8). Unsurprisingly, this was soon followed by an increase in graduation rates for language minorities, most clearly evidenced by the fact that Asian Americans in U.S. undergraduate education more than doubled between 1975 and 1984, from 1.5 percent to 3.2 percent. This figure reached 5.6 percent in 1996 (Smith, 143). To put this statistic in context, this number represented 55.1 % of all Asian Americans between the ages of 18 and 24 at the time (Smith, 144). Similar increases in educational attainment were observed for all language speaking minorities during this period. Universal educational opportunity is a powerful tool to create social equality and promote social mobility. It is a means through which it is possible to break generational cycles of deprivation, poverty, and disenfranchisement, and thus *Lau vs. Nichols* represented an advancement towards equality for minorities as a whole.

It should also be noted that the direct implications of *Lau vs. Nichols* in achieving equality are not confined to the realm of education. The case was also particularly pivotal in that it amplified the scope of civil rights protections afforded to minorities (Moran 1). Previously, only purposeful wrongs and targeted discrimination were considered unconstitutional. In ruling that by not explicitly accommodating minority students, public schools were violating the law, the Supreme Court implied that passive bigotry should also be considered unconstitutional (Mank 582). As such, the implications of this ruling went beyond the realm of education and were relevant to diverse issues of discrimination. Such anti-discrimination protections remain relevant, and to a large extent, have not been replicated by any other ruling (Moran 4).

The significance of *Lau vs. Nichols* is evident; however, it must be acknowledged that the American public school system still has a long way to go to achieve universally acceptable education. Most scholars agree that the current disparities in the educational system of the United States are manifestations of socioeconomic divide. They maintain that this divide is the fundamental cause of the gap in educational

achievement as it remains today. Low-income students are simply not offered equal educational opportunity: their schools are in disrepair, their teachers are substandard, and their classrooms are too crowded. These harsh realities are apparent in the fact that high school dropout rates are twice as high in low income communities and that a low income student is three times less likely to receive a university degree (U.S. Department of Education). The essence of *Lau vs. Nichols* was to ensure equal educational opportunity was offered to all students, and evidently, this goal has yet to be attained. Just as a good education should not be ruled out by race or language, it should not be ruled out by poverty, and the US has both a legal and moral obligation to ensure that this is not the case.

#### References

- Eastman, John. "When Did Education Become a Civil Right? An Assessment of State Constitutional Provisions for Education, 1776-1900." *American Journal of Legal History* 42 (1998): 1-34. Print.
- Lau vs. Nichols. No. 72-6520. Supreme Court of the US. 414.563. 21 January 1974. Print.
- Mank, Bradford C. "Are Title VI's Disparate Impact Regulations Valid." *University of Cincinnati Law Review* 71:517 (2002). Print.
- Moran, R. "Undone by Law: The Uncertainty of Lau vs. Nichols." *Berkeley La Raza Law Journal* 16:1 (2005): 1-11. Print.
- Ovando, Carlos J. "Bilingual Education in the US: Historical Development and Current Issues." *Bilingual Research Journal* 27:1 (2003). 1-24. Print.
- Smith, William A. (Ed.). *The Racial Crisis in American Higher Education: Continuing Challenges for the Twenty-first Century*. Albany: State University of New York, 2002. Print.
- Stewner-Manzanares, Gloria. "The Bilingual Education Act: Twenty Years Later." *National Clearinghouse for Bilingual Education*. 6 (1998). Print.
- Sugarman, S. and G. Widess. "Equal Protection for Non-English-Speaking School Children: Lau v. Nichols." *California Law Review* 62:1 (1974): 157-182. Print.
- U.S. Department of Education. *Institute of Education Sciences, National Center for Education Statistics*.
- Van Geel, T. "Right to Be Taught Standard English: Exploring the Implications of Lau vs. Nichols for Black Americans." *Syracuse Law Review* 25 (1974): 863-904. Print.
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## Contributors

**Yasmina Ahmed** recently graduated from Penn with a major in the Biological Basis of Behavior. She plans to pursue a career in medicine, hopefully in a location with warmer weather. Her interests include watching movies and spending time with her friends.

**Brittany Arditi**, a junior in the College, is from Montreal, Quebec. She is majoring in Health and Societies with minors in History and Chemistry. This year, she will be traveling abroad to Switzerland, India, China, and South Africa to pursue her interest in public health.

**Scott Blackburn** is a political science major originally from Cleveland, Ohio. He is honored to be published by 3808. He is currently working for FactCheck.Org, writing about the falsehoods and misstatements of politicians. He is an avid foodie and loves to talk, write and think about food. He thinks you should watch NBC's Parks and Recreation.

**Nina Blalock** is from Philadelphia, PA. She's a proud member of the class of 2014 studying Political Science, Communications, and Modern Middle Eastern Studies. Along with her academics, Nina takes pride in her work as a performing artist. She's studied vocal arts and acting since fifth grade at Girard Academic Music Program and the New Freedom Theatre. At Penn she is in the Inspiration Acapella group and the Society of Prelaw Students of Color.

**Kara Brock** is a junior from Cuyahoga Falls, Ohio and currently majoring in Chemistry. She is part of the academic committee on the CURF undergraduate advisory board and part of UPenn's Circle K Club. She enjoys reading and taking care of box turtles.

**Stacy Burkhalter** thoroughly enjoys the College of Arts and Sciences in which she is a rising sophomore majoring in English and Classical Studies. She spends her days in South Dakota sitting for hours listening to Sufjan Stevens and soaking up all of the potions of Potter, the persuasions of *Pride and Prejudice*, and the plights of the progeny of

Pendragon. She wishes she were a Beth but finds herself to be more like a Jo.

**Brigid Byrnes** is a graduate of the Manlius Pebble Hill School in DeWitt, New York and a proud member of the Rotary Exchange Student Class of '09-'10, spending her entire senior year in Brazil. She is a rising College of Arts and Sciences sophomore majoring in Cognitive Science in the Language and the Mind concentration. She loves Penn and is honored to be included in this publication.

**Rachelle Clark** is a rising sophomore in the Huntsman Program with a target language in Spanish. She is from Huntington Beach, California and has definitely enjoyed her time on the East Coast. Rachelle enjoys traveling, reading, and Latin ballroom dancing.

**Kelly-Ann Corrigan** is from Queens, New York, and a graduate of Saint Francis Preparatory School. She is a pre-med student in the College of Arts and Sciences pursuing an Anthropology major. She currently works as a CHOP research assistant and serves as Vice Chair of Front Row Theatre Company. She would like to thank her high school English teacher, Mr. Paccione, whose insight into Mark Twain's *Huckleberry Finn* inspired her essay.

**Elizabeth Feeney** grew up in Philadelphia until later exiled to South Jersey for ten years. She is happy to be back among the living at Penn studying bioengineering and possibly materials science. She is honored to be published in 3808, and she would like to thank Prof. LeGrand for all his help throughout the Neuromarketing writing seminar.

**Ran Geng** is a rising sophomore studying biology major. She spent her 18 years before college in Beijing, China, where modernity and an over-5000-year-old history live together. The writing seminar inspired her to explore the cultures of her homeland and is willing to share them with her fellows. Now she is even interested in cooking traditional Chinese food.



**Ray Hernandez** was born in Havana, Cuba and raised in Miami, Florida. He is currently a sophomore at the Wharton School where he is pursuing a degree in Economics with a concentration in Finance. During his free time he likes playing sports, fishing, and simply enjoying the outdoors.

**Jacob Himeles** is from Ridgewood, NJ, and a graduate of the Fieldston School in Riverdale, NY. A sophomore in the College, he plans to major in Economics and double minor in Math and Hispanic Studies. He hopes to study abroad in a Spanish-speaking country. In his free time, Jacob enjoys playing basketball, listening to music, and vacationing in Bethany Beach, DE.

**Audrey Hong** hails from sunny San Jose, California. She is currently a rising sophomore with plans to major in Communications and minor in consumer psychology. In her spare time, Audrey loves to attend concerts and explore the hidden corners of cities. She divides her time between two coasts and calls both the Bay Area and Philadelphia home.

**Alex Hosenball** is a sophomore in the College, a vintage product of Fairfax, Virginia and a graduate of W.T. Woodson High School. Although sufficiently decayed, he still has not declared a major, though may lean towards International Relations. In the remnants of his shattered spare time, Alex enjoys reading, cult television, long walks on beaches awash with prehistoric remains, and “getting culture.” Alex currently writes for *34th Street* Magazine’s film and music sections.

**Eric Kim** is from Philadelphia, Pennsylvania and is a rising junior. He is in the bioengineering program as a premed. Because he is also interested in Neuroscience, he chose the writing seminar “Novelist and Neuroscientist,” and would definitely recommend it to anyone with an interest in science. Writing has always been difficult for him, so it was nice to write on a topic he is interested in. Outside of the classroom, he enjoys working out, snowboarding, and playing table tennis.

**Sari Leventhal** is a sophomore student in the School of Nursing. She is from Cleveland, Ohio and is a graduate from Hathaway Brown School.

Prior to coming to Penn, Sari spent a year doing community service with City Year Boston. A member of Alpha Chi Omega sorority, Sari also enjoys sailing, volunteering, cooking and playing tennis.

**Kristin Marra** is from Selden, New York, and is a graduate of Newfield High School. Currently a sophomore in the School of Engineering, she majors in Mechanical Engineering. Kristin is a tour guide in the Kite and Key Society and Flute Section Leader of the Penn Band. She is also an active member of Theta Tau and Club Field Hockey. While she hopes to pursue a career in product design, Kristin loves to write and is excited to be published in *3808*.

**Sabrina Mills** is a rising sophomore in the College and plans to be an art history major. She is from San Francisco and despite her great affection for West Philadelphia, will always call California home. Her favorite author is Michael Cunningham and one Christmas, a friend got her a personally signed copy of *the Hours*. It was the best present ever.

**Emma Mlyniec** is a sophomore in the College of Arts and Sciences. She is originally from Washington, DC and plans on majoring in Modern Middle Eastern Studies and Sociology. She is one of the artistic directors of UPenn’s bellydance and drum troupe, and everyone should come see their show this spring.

**Anthony Murphy** is from Bucks County, PA, and is a graduate of Holy Ghost Prep. He is currently a sophomore in Wharton and is concentrating in Finance and Accounting. Anthony is a member of the professional fraternity Delta Sigma Pi. He enjoys reading about history and philosophy.

**Zaina Naeem** is from Brooklyn, New York, and is a graduate of Brooklyn Technical High School. She is a rising sophomore in the College, and is currently contemplating both history and biology as potential majors. As an individual who has never engaged in a deep discussion of the classical Greek philosophers, she has been fascinated by the analysis and speculation involved in the study of ancient philosophy. Aside from exploring this newfound passion, Zaina likes

to talk about anything and everything, sip variations of every type of Starbucks drink, and watch movies.

**Sean Niznik** is from Mechanicsburg, Pennsylvania, and is a graduate of Cumberland Valley High School. He is currently a sophomore in the Wharton School, intending to concentrate in Finance and Management. Sean is also a member of the Delta Sigma Pi Professional Business Fraternity, and enjoys reading and traveling in his spare time.

**Julie Palomba**, a sophomore from Freehold, New Jersey, is a graduate of Howell High School. She has yet to discover her major, but plans to pursue further writing classes at Penn. She is a member of the Penn Ballet, West Philadelphia Tutoring Project, and Strive for College, and is a 2012 Spring Fling director for SPEC committee. She is thrilled that her writing seminar allowed her to research the Disney Company, where she aspires to someday work.

**Rahul Puranmalka** is a sophomore from Willowbrook, Illinois and a graduate of Hinsdale South High School. In addition to his Chemical Engineering major and Economics minor, Rahul is interested in medicine and is completing Pre-Medical requirements. He is the Chair of Professional Development for eMed and has worked two summers at Children's Memorial Research Center in Chicago. Despite being torn between the prospects of being a doctor or an engineer, he ultimately hopes to draw on both disciplines in the future.

**Jennica Reichert**, a young woman from Garnet Valley, Pennsylvania, is enrolled in the Wharton School of Business, where she hopes to concentrate in Marketing and Communications. Her academic interests have led her to pursue a Spanish minor and potentially a biology minor as well. One day, she hopes to travel throughout Europe as a public relations specialist. In the meantime, however, she enjoys dancing with various performing arts groups on campus, cooking, and spending time with all of the wonderful people she has met throughout her first year at Penn.

**Alex Rosner** is entering his sophomore year in the College of Arts and Sciences. Born in New York, he spent ten years living in Paris, France where he graduated with an International Baccalaureate from École Active Bilingue. Alex has a wide variety of interests including debating, public speaking, skiing and tennis. He enjoys traveling and discovering different cultures and to date has visited over 40 countries.

**Emily Savin** is a Philadelphia native. She began her undergraduate studies at Brown University, from which she took a short leave of absence to work on a congressional campaign in Pennsylvania's 8th District. The short leave grew considerably longer than planned. Emily has returned to the collegiate fold at last as a part-time student at Penn's College of Liberal and Professional Studies.

**Kevin Shia** is a rising sophomore from Basking Ridge, New Jersey and is studying economics and computer science. On campus, Kevin is a member of SCUE and enjoys a number of activities including traveling, reading, playing soccer, and playing pool.

**Alan Sostek** is from Dallas, Texas and is a graduate of Greenhill School. He is currently a sophomore in Wharton with plans to concentrate in Finance and Real Estate. Alan's inspiration for his writing piece comes from his passion for collecting music of all varieties. In his free time, Alan enjoys running, trying new coffee shops and restaurants, and falling into spontaneous conversations with friends.

**Sawyer Waugh** is from Southampton, Pennsylvania, and is a graduate of William Tennent High School. A freshman in the School of Engineering and Applied Sciences, Sawyer intends to major in either electrical or mechanical engineering. He is a member of both the Sigma Chi Fraternity and the Men's Rugby team.

**Elissa Wolf** hails from the mystical land of Cleveland, Ohio. Last year she took her talents to Penn to study Digital Media Design. Her favorite things include cooking, the zoo, good books, bad television, and puns.

**Amanda Wolkin** is a sophomore from Atlanta, Georgia. She is currently planning to major in English with a concentration in Creative Writing, although this plan changes from day to day. Aside from drinking sweet tea and eating southern food, Amanda loves to write, read, play soccer, and be with her friends and family. She hopes that one day she can actually make a living as a writer.

**Nicole Woon** is a sophomore pursuing joint business and engineering degrees from the Wharton School and the School of Engineering and Applied Science. A native of Santa Monica, California, she is an avid food enthusiast and cinephile. She enjoys cooking and baking up a storm, photographing her gourmet creations, and enjoying the fruits of her labor with family and friends. Nicole aspires to visit every U.S. state, eventually expanding that goal to every country.

**Lisa Xu** is a Wharton sophomore from West Chester, Pennsylvania. She is often told that she embodies everything about Wharton (is this even a compliment?), except that she loves writing! On campus, Lisa is a Representative in the Undergraduate Assembly, Vice President of Finance for Wharton Business Law Association, a member of the Residential Advisory Board, and most importantly, a Writing Tutor. In her free time, Lisa enjoys playing piano, tennis, snowboarding, talking incessantly, being overdramatic, and telling people how to pronounce her name (“lease a shoe”).

**Jay Yang** is a sophomore in the College of Arts & Sciences and the Wharton School studying statistics and mathematics. Passionate about backpacking and the outdoors, he is also interested in environmental economics and atmospheric sciences. On campus, he is a member of the Samba Ensemble and Penn Sailing Team. Jay’s interest in race and ethnicity in media stems from his involvement in Asian American activism as a board member of the Asian Pacific Student Coalition.

**Kelly Zafman** is a sophomore from Baltimore, Maryland. She is currently Pre-Med, likely majoring in Health and Societies. On campus, Kelly is a member of the Kappa Alpha Theta sorority and Penn Science Across Ages, and is a tour guide with Kite and Key. This is her first

published piece and she would like to thank the 3808 academy and all the little people who helped her along the way. You stay classy, writing seminar!

#### Student Editors

**Becky Bailey**, a senior in the College, is from a small suburb in New Jersey. Ever the right-brainer, she is a Fine Arts major concentrating in Painting, a Creative Writing minor, and an in-shower composer. In her spare time, she enjoys compulsively clicking through adoptable dogs and cats on Petfinder.com, hoping that one day she can give them all “forever homes” on her dream ranch in Colorado.

**Mark Barry**, a junior from Novato, California, is studying Biological Basis of Behavior. In addition to tutoring writing, he is heavily involved in the Medical Emergency Response Team, nicotine addiction research, and a number of other activities. He is spending this fall studying abroad at UNSW just outside of Sydney, Australia, and is loving the weather, the beaches, and the awesome accents. He has enjoyed reading through the many excellent submissions to this journal.

**Melissa Braff** is a recent graduate of the College of Arts and Sciences, currently pursuing a career in hotel management. A Philadelphia native, she enjoys bike rides along the Schuylkill River, long lunches at Reading Terminal Market, and a cappella shows by her beloved UPenn group, Dischord.

**Sophie Jeewon Choi** is a Communication major in the College. She enjoys writing about things she loves and reading about new things to love, which is why she she’s thrilled to have been involved in the publication of 3808.

**Molly Dee** is a junior currently working towards her bachelor’s degree in Mechanical Engineering and Applied Mechanics with a minor in Fine Arts. She loves the practicality of engineering mixed with the creativity of art and design, and hopes to be accepted into the Integrated Product Design master’s program at Penn. In addition to her studies, Molly is a

brother of the Theta Tau Professional Engineering Fraternity, and is a left wing forward for the Penn Women's Hockey team. Molly will be abroad next semester in Edinburgh, Scotland, and looks forward to any new adventures life may bring.

**Sanchit Kumar** is a senior in the M&T program. Born in India, Sanchit experienced the biggest culture shock ever when he moved from a farming village in the middle of nowhere to the center of perhaps the world's busiest city, Hong Kong, where he has lived for over 15 years. Sanchit has a passion for philanthropic endeavors, volunteering at organizations like UNICEF and Kiva.

**Elena Madan** is a junior in the Roy and Diana Vagelos Program for Life Sciences and Management studying Biology in the College and Finance in Wharton. She serves as the President of the Penn Pre-Medical Association. She is currently conducting research at Penn School of Medicine. She enjoys running, volunteering as an EMT, and dancing with her team Penn Raas.

**Jason Magnes** is a junior from Short Hills, New Jersey. He is pursuing a Bachelor's Degree in Communications at the Annenberg School, as well as a Minor in Consumer Psychology. A member of the Varsity Men's Tennis team, Jason is also the current Chairman of the student-run group PATH (Penn Athletes and Allies Tackling Homophobia).

**Wiktor Parysek** is a class of 2011 graduate from Berlin, Germany. At Penn, Wiktor studied English with a concentration in 20th Century Literature. She will be continuing her Modernist education at the University of Edinburgh in Scotland. Wiktor was a columnist for the DP and was lucky enough to be thrice published in Penn's feminist journal, *The F-Word*. Aside from her academic pursuits, Wiktor also spent a lot of her time parading around campus with the Penn Band (and enjoying this thoroughly).

**Amit Patel** is from Salisbury, Maryland. He graduated last May after two years at Penn, during which he served as a peer writing tutor at the Critical Writing Center and a writing T.A. His experiences as part of

the Penn writing community are now serving him well as a specialist at Reed Smith LLP, a Center City law firm. Amit plans to apply to graduate school in the near future. Apart from work, Amit is a practicing bhakti yogi.

**Meg Schneider** is a junior from Long Island majoring in Environmental Studies and minoring in Consumer Psych. On campus, she is a peer advisor to incoming freshmen and an assistant director of SPEC Film. Having conducted a study to improve recycling, she is responsible for the wording of signs in Joe's Cafe, so think of her kindly when you compost your sushi!

**Nicole Scott** is a junior in the College of Arts and Sciences studying Psychology and English. She was born and raised in Philadelphia, and she loves her city. Nicole is highly involved with environmental sustainability on campus, the Vice President and Scholarship Chair of her sorority, Chi Omega, and a proud writing tutor.

**Mallika Vinekar** is a junior in the College from Plainsboro, NJ. She is double majoring in Political Science and Urban Studies, with hopes of eventually pursuing law. On campus, Mallika is co-president of Alternate Spring Break, a member of the Nominations and Elections Committee and a peer tutor at the Writing Center. She enjoys taro bubble tea, *The New York Times* and playing "Scattergories."

**Katie Wynbrandt** is a member of Penn's mock trial team, College Dean's Advisory Board, and Sigma Kappa Sorority. She will be writing her honors thesis in political science and serving as the undergraduate representative on Penn's Board of Trustees Committee on Academic Policy during her senior year. In her spare time, she enjoys playing tennis, going to art museums, and eating Thai food.