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An American Paradox: Thoreau’s Simplification of Emerson



Kane Prestenback
Author



Owen Elmore, Ph.D.
Faculty Mentor

“Simplify, simplify,” says Henry David Thoreau, like a stand-up comic using a well-trod catchphrase to appeal to a wider audience. Like that comedian, Thoreau is trying to make Ralph Waldo Emerson’s material appeal to a wider audience. Thoreau attempts to simplify Emerson’s philosophy for practical use by an emerging American culture. To do so, he infuses *Walden* with a unique sense of humor. He tries, and possibly fails, to resolve one of Emerson’s most conspicuous contradictions. Thoreau subversively employs a uniquely American sense of humor that deepens the meaning of Emerson’s philosophy for the everyday American, envisioning an inimitably paradoxical American society.

In *Walden*, Thoreau establishes a practical template for practicing Emersonian philosophy to an emerging America. Thoreau introduces himself as a “chanticleer,” an awakener reflecting his readers’ circumstances to gain their trust then subvert their expectations (Anderson 197). Thoreau encourages an upstart America to confront its perception of society. At times, Thoreau contradicts Emerson’s viewpoint (Railton 52). “The universe is wider than our views of it,” Thoreau says in *Walden’s* “Conclusion”, countering Emerson’s thesis in “Self-Reliance”: “What I must do is all that concerns me, not what the people think.” Where Emerson proclaimed, “Whoso would be a man, must be a nonconformist,” Thoreau counters with a warning against embracing nonconformity just for its own sake (Emerson “Self-Reliance”). Thoreau asks, “Why level downward to our dullest perception always, and praise that as common sense,” encouraging a deeper interpretation of life (Thoreau “Conclusion”).

Emerson demanded unwavering dedication to the “triumph of principles” (Emerson “Self-Reliance”) which Thoreau amends to be accomplished without a “haste to succeed” (Thoreau “Conclusion”). Thoreau instructs the reader to “sell your clothes and keep your thoughts,” challenging a young America to embrace the solitude of nature to get closer to the divine as Emerson edified (Thoreau “Conclusion”). Thoreau provides evidence of Emerson’s belief. Thoreau tells a parable about a king who behaved “incapacitated for hospitality” (Thoreau “Conclusion”). He contrasts this with the man who lives in a hollow tree, whose “manners were truly regal” (Thoreau “Conclusion”). Though some would perceive the king’s royal status as closer to divinity, it is the man who embraces his connection to nature that is truly worthy of the divine. Emerson has set the conditions for the American enterprise to be awakened spiritually,

and Thoreau makes Emerson's conditions accessible by providing a practical guide to a waking America.

To make Emerson's philosophy more accessible to the common American, Thoreau intentionally infuses *Walden* with subversive wit, humorous wordplay, and winking metaphors. There is even wordplay right in one of his chapter titles: "Where I Lived, and What I Lived For". The repetition of the word "lived" suggests that Thoreau is endowing a deeper definition to the word "live." Thoreau employs this rhetoric to "expose cultural complacency... [and] puncture conventionalism" (West 218). Thoreau wavers between definitions of the word, sometimes meaning the literal act of residing in a location, and other times meaning the fullness with which a person's entire soul can occupy space and time through maximum effort and consideration. Within one sentence, Thoreau cunningly tempts his reader to a deeper examination of his intentions: "Well, there I might live, I said; and there I did live, for an hour, a summer and a winter life" (Thoreau "Where I Lived, and What I Lived For"). Cunningham notes that "[Thoreau] larded his lines with puns and submerged secondary meanings that frequently aimed for laughs" (18). Thoreau recognized his tendency to jest, counting "paradoxes... playing with words... [and] using current phrases and maxims" as a few of his personal faults (Cunningham 20). This internalized acknowledgment of his faults appears in *Walden* as self-deprecating asides.

Though he expounds the virtues of simplifying, which presumably includes minimizing unnecessary conversation, he admits that he "dearly [loves] to talk" (Thoreau "Where I Lived, and What I Lived For"). He ruthlessly mocks the breathless pace of an "unwieldy and overgrown establishment" with an undulating rhythm that comes to a halt with the stinging attack of a punchline, stating, "Men think that it is essential that the Nation have commerce, and export ice, and talk through a telegraph, and ride thirty miles an hour, without a doubt, whether they do or not; but whether we should live like baboons or like men, is a little uncertain" (Thoreau "Where I Lived, and What I Lived For"). The reader is charmed into Thoreau's perspective, seeing many of the activities of civilized life as "external and superficial" (Thoreau "Where I Lived, and What I Lived For"). The punchline's attack compels the reader to deeply consider what he deems essential.

Elsewhere, Thoreau lets the reader believe that he is speaking about farming and seeds in a literal sense, stating that he has "always cultivated a garden" and "had [his] seeds ready", while subversively painting a metaphor for the determined exploration and preparation that he believes will lead to fulfillment in life (Thoreau "Where I Lived, and What I Lived For"). Thoreau winkingly claims to have made his move "by accident" on the Fourth of July, no doubt hoping for his reader to connect his endeavor with that most American quality, independence (Thoreau "Where I Lived, and What I Lived For"). In this independence, he

paints a humorous picture of his humble abode, claiming to have "more substantial shelter" than when he lived in a tent, even though his new abode merely provides shelter from the rain and amounts to little more than a glorified tent (Thoreau "Where I Lived, and What I Lived For"). While reminiscing about his tent and boat, he lets slip a pun about his boat having "gone down the stream of time", toying with the concept of a boat on a literal and metaphorical stream (Thoreau "Where I Lived, and What I Lived For"). These musings show the reader that Thoreau shares a uniquely American wit and can acknowledge his flaws and contradictions.

Thoreau possesses an ability to contradict even his own thesis, suggesting that he understands a paradox present in Emerson's philosophy. Emerson insists that "imitation is suicide," but in doing so he has influenced a litany of imitators (Emerson "Self-Reliance"; Keane 152). Using the common wit of the time to lure readers into adopting Emerson's philosophy, Thoreau risks that his reader may miss the main lessons (West 218). Keane notes the potential for Emerson's philosophy of self-reliance to turn "anti-democratic and dangerous" (Keane 150). By permitting his reader to "not keep pace with his companions" if he "hears a different drummer," Thoreau inadvertently deepens the paradox which Emerson created (Thoreau "Conclusion"). He risks creating an army of nonconformists, ironically conforming to the very values he has seeks to instill. Emerson warns of the "discontent of the multitudes" forming into a mob; misunderstanding Thoreau's attempt to clarify Emerson has led to mobs "absorbed by the anarchic individualism of the socially irresponsible Philistine" (Emerson "Self-Reliance"; Keane 150). Thoreau attempts to resolve this by reminding the reader of their life's impact on society, comparing life to a river's ability to shape the land:

The life in us is like the water in the river. It may rise this year higher than man has ever known it, and flood the parched uplands; event his may be the eventful year, which will drown out all our muskrats. It was not always dry land where we dwell. I see far inland the banks which the stream anciently washed, before science began to record its freshets. (Thoreau "Conclusion")

Thoreau knows that he must move on from this solitude in nature to discover more of what life has to offer. He has learned all there is to learn from the experience, recognizing that he has "several more lives to live" (Thoreau "Conclusion"). Thoreau knows that "here is not all the world," implying that he must deepen his relationship with his many outside responsibilities (Thoreau "Conclusion"). If he stays in the woods any longer, he would "fall into a particular route and make a beaten track for [himself]" (Thoreau "Conclusion"). But to fully embrace Emerson's philosophy and reject consistency, he must move on from the

woods, rejecting the “rut of tradition and conformity” (Thoreau “Conclusion”). Emerson asked something similar of

his reader, hoping to “pass again into neutral, godlike independence...[and] thus lose all pledge and having observed, observe again” (Emerson “Self-Reliance”). Leaving the woods is the logical next step for Thoreau’s faithful observance of Emerson’s philosophy. It is both an act of nonconformity for Thoreau to move on from his experiment, and an act of conformity to follow the practical instruction of Emerson’s philosophy. And so, the paradox persists.

This paradox is a defining element of a uniquely American philosophy that came from Thoreau’s simplifying of Emerson’s ideas for the common American, by deepening the meaning of his words and subversively employing an American sense of humor. As if presciently aware of being misunderstood by a modern America, Thoreau suggests that the work is only beginning. The burden that Emerson puts on his readers to succeed in this “triumph of principles” may seem daunting (Emerson “Self-Reliance”). But Thoreau shows us that it can be done. We can begin to try with each new dawn. We just need to wake up.

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Admissions: A Play About Privilege & Ambition



Lisa Hamilton
Author



Mary O'Brien
Author



Ginger Jones, Ph.D.
Faculty Mentor

The bitter taste with which the Joshua Harmon’s *Admissions* opens overshadows the one-woman crusade for equity and inclusion at a private preparatory school in liberal, yet decidedly homogenous, upstate New England. Sherri, one of the play’s six characters, recruits minority students for the school in a manner that can easily be viewed as snobbish and judgmental. A white person’s fight to see more color in any environment is worthwhile and necessary, but that doesn’t excuse the problematic behavior that person exhibits to achieve such a goal. *Admissions* is a one act play broken into three parts, each part contains a series of fast-paced two to three person scenes broken up by a handful of well-crafted monologues that reveal several characters’ heartfelt, though at times deeply problematic, ideas about race.

Admissions tackles the issue of diversity in a white, privileged world. While the play concerns the admission of one student over another to a prestigious university, it also gives a nod to the role an admissions officer plays in that process as they carry their own background and prejudices into their work. The play asks the audience to confront the fact that the road to diversity is complex and painful.

Whip-smart admissions director Sherri Rosen-Mason is tasked with admitting students to Hillcrest, a New Hampshire prep school. Having worked tirelessly over the course of fifteen years to bring Hillcrest’s percentage of students of color from four percent to eighteen percent, Sherri becomes frustrated with the photographs of white students in the school’s admissions catalog and wastes no time making sure her assistant Roberta knows it. Disappointed in Roberta’s efforts to represent the community at Hillcrest in a way that shows off all of Sherri’s hard work, Sherri encourages Roberta to include more photos featuring students of color. In this opening scene alone, Harmon walks a critically important, albeit very tenuous, line. Roberta seems unable to ascertain what Sherri wants. As Sherri looks for examples in the brochure, she is pushed into a corner:

SHERRI: ...three of our boys’ basketball players... again, all white

ROBERTA: No. No! That’s Perry. That’s Perry!

SHERRI: Roberta, please.

ROBERTA: Perry’s Black! His father’s Black! Don is Black!

SHERRI: Don is, is - biracial and Perry...he doesn't always photograph - he looks whiter than my son in this picture.

ROBERTA: But Perry's Black. Isn't he?

SHERRI: Of course he is, but he doesn't read black in this photo. (Part 1, Scene 1, page 11)

And so, Harmon's exploration of what it means to be diverse in modern America begins. Sherri is just forceful enough to make the audience almost dislike her, and Roberta is just weary enough to make the audience sympathize with her. Sherri may be attempting to argue on behalf of greater visibility in representation, but she does so in a way that feels exclusionary toward people of color who do not appear to be people of color. Roberta presses Sherri to admit that Sherri doesn't view Perry as Black enough, while later in the scene Roberta insists that she "doesn't see color" (Part 1, Scene 1, page 13). Clearly, the minority students for whom Sherri is supposedly advocating are little more than trophies for her to collect, while Roberta is so exhausted by the conversation, she would rather do anything else at all than discuss race.

The scene itself is tongue-in-cheek funny on the edge of not quite wanting to fully laugh out loud, yet the women are dealt a serious conundrum. Do they display their range of student diversity in their marketing materials as a method to attract more students of color? Or do they avoid using their admittedly limited number of students of color as tokens, and in turn, risk appearing "too white"? Is the appropriate way forward to disproportionately highlight a marginalized group to achieve greater success, more funding, more accolades? Or is it best to reflect the student body as it is - mostly white, and leave out students of color from the picture entirely? By asking these questions, Harmon's piece forces the audience to examine how they would tackle the same things.

A critically important piece of the play involves Sherri's teenage son Charlie delivering an abundantly overprivileged rant.

CHARLIE: I would really like to meet the person who decides who counts as a person of color and who doesn't ... Cause my mom's dad had to escape before like half his family was murdered by Nazis, but now when we all apply to college, I go in the shit pile ... [because] — shocker! — they found a new way to keep Jews out: They just made us white instead, and the grandsons of Nazis who came to America go in the exact same pile as me, which makes absolutely no sense ... But keep pushing me, keep fucking pushing me ... tell me how white I am and how disgusting I am, I'll just stand in the corner taking it all in until I can't fucking take it anymore...". (Part 1, Scene 3, page 31)

This grossly short-sighted speech is borne of frustration and disappointment following bad news regarding his admission into a well-to-do university that his

mixed-race friend was accepted into. This monologue, when performed, is exhilarating, which makes it more troublesome. It's fun to listen to characters scream their woes at others, and the energy in a space when such a speech is given creates energy.

And yet, what Charlie is saying is awful. He goes on to address the trials of getting passed over as Editor-in-Chief of the school newspaper in favor of the first female ever selected for the role, and he comes dangerously close to sneering at a Chilean classmate who looks "white" but wishes for more books of color in the school curriculum. Is this student really that Latino, Charlie wonders, if his "ancestors were colonizers, not the colonized?" (Part 1, Scene 3, page 31). The monologue is a gut punch, devastating to anyone who has ever encountered racist oppression. This wildly out of touch 17-year-old has no concept of the need to craft an equal playing field by giving opportunities to others who have been too-long overlooked. Harmon shows us that too many corners of the world, particularly school admissions offices, have much further to go in addressing how minorities are discussed, represented in publications, admitted to institutions, and taken seriously as scholars.

Following this rant from her son, Sherri's tune changes. She is no longer interested in pushing Black students to the forefront of Hillcrest's printed materials, and her sudden backpedaling leaves Roberta confused as to how to proceed. Charlie, understanding the weight of his internalized racism, makes a decision that infuriates his mother and puts his abundant privilege on glaring display.

It is additionally worth noting that every face the audience sees in *Admissions'* cast is white. On the surface, this looks like a huge oversight on Harmon's part. How can any kind of thoughtful conversation be had about racism without the voices of Black characters? However, racism was not created and is not perpetuated by Black people. It is a societal issue created by white people that needs to be addressed by white people. The fact that Harmon creates an atmosphere where white characters are given the opportunity to do just that and seem to flail in confusion is a perfectly placed commentary on reality.

Admissions tackles necessary and difficult topics that are crucial in the quest for equality, and the way these characters react to those topics is exceptionally telling. As Gary Orfield writes in the forward to *The Salience of Racial Isolation*, "Real diversity enriches education, reduces stereotypes, enables more students to know each other as individuals, and better prepares students for successful life in a diverse society. On the other hand, token diversity on campus makes things uncomfortable for the student who feels like a token and provides very little opportunity for white students to interact with students of color, weakening the potential educational impact at both ends" (2).

Harmon's characters are intelligent, kind people with ethical standards, but they are insulated in their white, middle-class academic bubble. Throughout the

course of the play, they wrestle with each other and with themselves about what they really want: Orfield’s “real diversity” or “token diversity”. Finally, Sherri is confronted by her friend Ginny with just such a question.

GINNY: You want things to look different but I’m not sure you want them to be different. Cause if they were, you wouldn’t be at the center of it all and I think that would scare you. (Part 3, Scene 2, page 64)

While recording a virtual performance of *Admissions* for Louisiana State University at Alexandria, students in the *Major African American Writers* class felt that conflict deeply. Every character seemed to be so afraid of losing something that they became almost caricatures of themselves. There is no moral reckoning for the characters in this play. In the end, Charlie goes on to a liberal college in Vermont, and Sherri views the new brochure that she fought to improve in scene one. When it finally shows the precise number of dark faces she wanted, she is pleased, but seems to slip right back into business as usual – a dangerous status quo. Harmon’s refusal to give his characters a new stasis at the end of this play is a masterful stroke. If Sherri had made any kind of significant change, it would be all too easy for the audience to smile and applaud and go home feeling good about themselves. By leaving Sherri with this small victory that is now clearly hollow, the playwright leaves space for the audience to feel dissatisfied – they are missing some sense of closure or the natural narrative fix that many plays provide at their conclusion. Instead, Harmon sends his audience to search for it.

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**Inspiring or Discouraging:
 The Impact of Fitness Influencers on Body Image**



Cheney Scull
 Author



Mark LaCour, Ph.D.
 Faculty Member



Sandra Gilliland,
 Ph.D.
 Faculty Mentor

Abstract

In the current study, individual body image scores were examined based on viewing fitness influencers on a manipulated social media feed. Fitness influencers have become extremely prevalent on television and social media platforms and are viewed by people across the world. In this study, a survey using the Body Esteem Scale for Adolescents and Adults or BE (Mendelson et al. 2001) was administered following two groups of participants viewing two different manipulated social media feeds. Group 1 viewed a manipulated feed that included images of fitness influencers, while Group 2 viewed a feed that did not include fitness influencer images. The results of the survey were then analyzed using a t-test. Results showed Group 1 had a statistically significantly lower Body Esteem Score (M=2.61, SD=.717) compared to Group 2, who did not view the images of fitness influencers (M=3.26, SD=.685), $t(58) = -3.59, p < .01$. The findings are discussed below.

Keywords: Fitness influencers, Body Esteem Scale

The use of social media has become a prevalent phenomenon around the world. The Pew Research Center states 84% of adults within the ages of 18-29 years old use social media (2021). Social media platforms have given people opportunities to share whatever they desire across the world. With the rise of social media use, there has been a social recognition of individuals being labeled as influencers. An influencer has a large audience and often uses their fame to promote products or businesses. There are different types of influencers creating and sharing on social media. A type of influencer who receives an abundant amount of attention and praise is a fitness influencer. Fitness influencers share workout plans, meal-prep plans, and pictures of themselves in effort to inspire those who follow them or keep up with their posts. Influencers also make money by promoting brands and selling merchandise.

While influencers might have positive impacts such as inspiring healthy lifestyle choices, there is also a potential for a negative influence for people struggling with comparison or body image issues. There is a term that people use to define the way a person perceives their body when they look in the mirror: body

image. Body image can also refer to the way someone feels in their body (U.S. Department of Health and Human Services 2019). Body image can be positive or negative. Positive body image exists when someone perceives their body accurately when looking in the mirror and does not judge their own physical appearance. People who have a positive view of their physical appearance usually understand that their worth is not determined by the way their body looks. A negative body image exists when someone has a distorted view of their body. When people have the belief that their body is flawed, and they are not satisfied with the way they look, feelings of anxiety and shame can arise. Almost 80% of teenage girls report fears of gaining weight (Kearney-Cooke & Tieger, 2015). However, women are not the only ones who struggle with negative body image. In 2015, approximately 25% of male youths expressed an intense desire to be muscular and have a toned body (Calzo et al., 2015).

The popularity of fitness influencers could raise the risk of negative BE for boys and girls struggling with body image. When people spend a significant amount of time on social media platforms and see these fitness influencers daily, there is a high chance that they will begin to compare themselves to the influencers. A graduate student from California State University wrote in her journal article, “there is a common theme in fitness magazines that men should naturally be bigger than women and strive for a more muscular look, while women should essentially decrease the size of their bodies,” (Norton 2017). Seeing several people with a certain physique, along with immense praise for their physical appearance, can cause people to feel pressure to look different in order to meet social standards of attractiveness and acceptance.

Fitness influencers do not intend to harm, but there is a distinct possibility that their online presence does just that. Researching the possibility of negative effects from their platforms could further educate them and allow them to be aware and careful of the issues that can arise.

Research Question

Research Question

Does viewing fitness influencers on social media impact an individual's body image?

Hypothesis

Viewing images of fitness influencers will negatively impact an individual's body image.

Definition of Terms

Fitness influencer. Fitness influencers are influential in online fitness circles. They are known, liked, and trusted by fitness consumers, which means their opinion carries weight. They use their credibility to influence others and often promote products and services on behalf of brands.

Body Image. Body image is the subjective picture or mental image of one's own body, (U.S. Department of Health and Human Services).

Literature Review

The impact of social media has been the topic of numerous research studies in the past twenty years. Fully investigating this research is beyond the scope of this study. To examine the impact of social media on body image, six articles published in the past 5 years were reviewed.

As the use of social media continues to increase, the study of fitness influencers' impact on individual body images is becoming more prevalent. Norton (2016) developed a survey of twenty questions and had 188 participants take it. The participants were between the ages of 24 and 41 years old; 140 of them were female and 48 of them were male. The survey asked the participants questions about their social media consumption and their ideas of body image. The results show that more females agreed rather than disagreed that their body image had been negatively affected by viewing fitness models on social media.

Vella and Lim (2015) conducted a 112-question online survey that included questions involving demographics, social media use, and general mental and sexual health. The participants were also asked if they purchased or used products advertised by fitness influencers in hope of looking more like the influencers. The survey was available on a website for 6 weeks between February and March 2015. 1001 people participated in the survey and the mean age was 21 years old. The results showed that most participants who follow fitness accounts on social media have developed negative views of their own bodies and have purchased products in hope of becoming more like the influencer. Seventy percent of those who stated that they purchased these products also admitted to misusing them because of trusting the information they obtained from social media.

Goldstraw and Keegan (2016) conducted short, qualitative interviews with 12 women between the ages of 18-24 years old. In the interview, the women were asked how viewing fitness influencers makes them feel about their own appearances. The results showed that 6 of the participants answered that their body image is negatively affected by viewing posts from fitness accounts, while the other 6 claimed that it did not negatively affect them.

Hefner (2016) conducted a survey to research the impact of social media on disordered eating and compulsive exercise. There were 262 participants between the ages of 18-27 years old. The survey measured the participants' behavior relating to compulsive exercise, disordered eating, and social media use. The study showed that there was a positive relationship between social media use and disordered eating and compulsive exercise.

Haliwell and colleagues (2015) also gathered similar data in their study. One hundred twelve female participants were randomly assigned to spend 10 min

browsing either their social media accounts or a control website with no images of people or information on diets and exercise. Afterward, the participants completed state measures of mood, body dissatisfaction, and appearance discrepancies. Participants also completed a trait measure of appearance comparison tendency. Participants who spent time on Facebook reported being in a more negative mood than those who spent time on the control website.

In another study (Slater et al., 2017) participants were assigned a social media feed to view that was either full of fitness posts or a controlled feed without fitness posts. The participants were asked to respond to a verbal questionnaire before and after on the topics of body satisfaction, body appreciation, self-compassion, mood, and appearance comparison. The results showed no difference in mood between participants who viewed one feed over the other. However, the results showed a significant difference in the other topics. Women who viewed the fitness posts had significantly less body satisfaction and body appreciation. The women who viewed the fitness posts also claimed to compare themselves to others compared to the women who viewed the other feed.

The articles summarized above all, in some way, concluded that their results showed a direct correlation between viewing fitness influencers and impacts on body image. Most of the results in these articles pointed towards the idea that the impact on body image is negative.

Method

Participants

This study included 60 participants who are college students above the age of eighteen. All participation in this study was voluntary. Some participants were recruited via email and by convenience sampling.

Materials

In the current study the following materials were used:

Informed consent. Participants were given an informed consent (see Appendix A). The informed consent included information about the purpose, procedures, costs and benefits, potential risks, availability of counseling services, voluntary participation, and contact information of the researcher and supervisor of the study.

Demographic survey. After signing the informed consent, participants were then given a demographic survey (Appendix B) asking for gender, age, and ethnicity. The responses from the demographic survey helped to determine the differences in effect from viewing fitness influencers based on differences in demographics. This also helped to determine if there are target groups in this phenomenon.

Body-Esteem Scale for Adolescents and Adults. Participants then answered the Body-Esteem Scale for Adolescents and Adults (Mendelson, B. K., White,

D. R. & Mendelson, M. J., 1997—see Appendix C) after viewing a manipulated Instagram feed. The Body-Esteem Scale for Adolescents and Adults is a Likert scale containing 23 questions with the options of answering 1-5 which include the answer options: never, seldom, sometimes, often, and always.

Manipulated visuals. There were two visuals created that resemble an Instagram feed. One Instagram feed contained photos of a puppy, a football field, and a landscape. The other feed contained the same photos in addition to two images of different fitness influencers, one male and one female.

Procedure

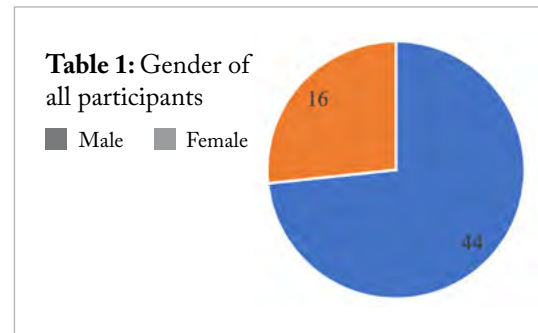
The following study was experimental as it examined participants under two different conditions. Participants first read and signed an informed consent. The control group, chosen randomly, viewed an Instagram feed containing pictures that did not include images of fitness influencers. The experimental group of participants viewed the same Instagram feed that also contained two images of fitness influencers. Next, all participants completed a demographics survey. Then, participants completed the Body-Esteem Scale for Adolescents and Adults. This study measured the different responses involving body image between the group that viewed the fitness influencers and the group that did not.

Results

In this study, the following research question was examined (RQ): Does viewing fitness influencers on social media impact individual body image? The study proposed the following hypothesis (HY): Viewing images of fitness influencers will negatively impact individual body image. The null hypothesis (H0): Viewing images of fitness influencers will not impact individual body image.

Descriptive Statistics

In this study, there were (n=60) participants. The sample included females (n=44) and males (n=16) (see table 1).

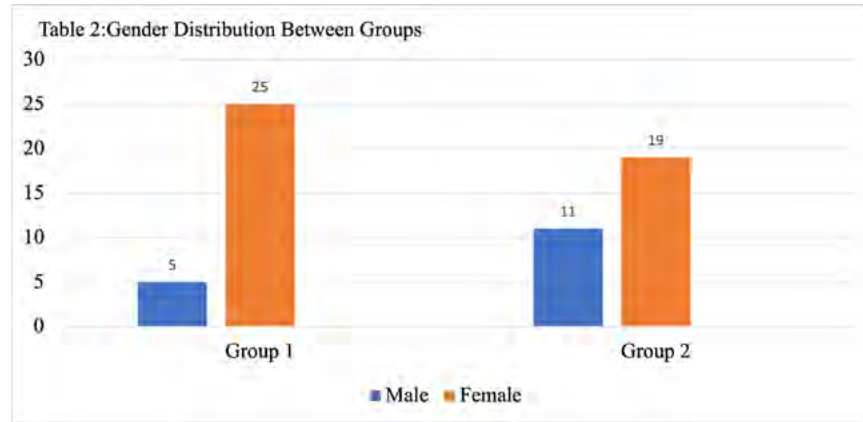


The participants were organized into two groups. The control group was the 30 participants that viewed the images of fitness influencers before taking the survey. The experimental group was the 30 participants that did not view fitness influencers before taking the survey.

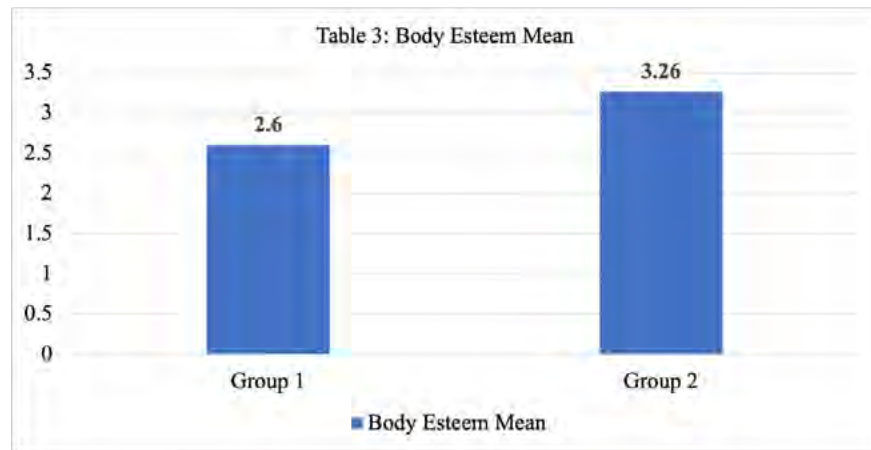
The control group contained females (n=25) and males (n=5), while the experimental group contained females (n=19) and males (n=11) (see table 2).

The ages of the participants are categorized into two ranges: 18-21 (n=45), and 22+ (n=15). The sample included college freshmen (n=25), sophomores (n=7), juniors (n=19), and seniors (n=9). The participants were Black/African (n=7), Asian (n=1), Black/White/Asian (n=1), Caucasian/White (n=50), and (n=1) person preferred not to say.

Analysis of Research Question



To determine if viewing the images of fitness influencers had an impact on a participant's body image, a t-test: two samples assuming equal variance was used for the two groups. The chart in (table 3) shows a visual for the data gathered.



The control group, who viewed the images of fitness influencers, had a significantly lower body esteem score (M=2.61, SD=.717) compared to the experimental group, who did not view the images of fitness influencers (M=3.26, SD=.685), $t(58) = -3.59, p < .01$ (see table 4). These results support the hypothesis. The null hypothesis was rejected.

Table 4: Mean and t score of both groups

	Control Group	Experimental Group
Mean	2.610145	3.26087
Variance	0.51411	0.469591
Observations	30	30
t Stat	-3.59357	
P(T<=t) one-tail	0.000337	
t Critical one-tail	1.671553	

Additional Analysis

Additional analysis was conducted to examine the differences between males (n=16) and females (n=44) within the two groups. The control group, which contained participants who viewed the images of fitness influencers, demonstrated a statistically significant difference between the males' (n=5) and females' (n=25) Body Esteem Scores. The females' scores were significantly lower (M=2.47, SD=.699) than the males' (M=3.29, SD=.327), $t(28) = 2.51, p < .01$. However, the experimental had no statistical significance in the difference between the males' and females' scores. The implications of these results are discussed.

Discussion

In this study, the differences in body esteem scores between the two groups were evaluated. The results supported the hypothesis that viewing images of fitness influencers would negatively impact body image. Additional data comparing males and females from the two groups further demonstrated that females who viewed the fitness influencers had a statistically significant difference in scores but the females in the control group did not demonstrate a difference in their Body Esteem Scores. These results suggest that there is an immediate and recognizable impact on Body Esteem for individuals who are viewing images from body influences are social media feeds.

These results are like those found by Goldstraw and Keegan (2016) and Vella and Lim (2015), which also studied the relationship between fitness influencers and body image. Their results, through surveys or interviews, also showed a negative impact on body image from viewing fitness images. However, unlike this current study, there were not a comparison of two control groups. The findings of this research, along

with Goldstraw and Keegan's, emphasize to importance of limiting the amount of content on the Internet that includes images of fit and sometimes unrealistic bodies.

Limitations

This study had several limitations. Due to the amount of time given for data collection, it was difficult to get participants to take the survey in person rather than through a device. Thus, there was not a way to control where or when an individual took the survey. The environment in which the participant found him or herself could have impacted the response to the study. Also, many participants who began the survey did not finish because they did not have the time. In addition, controls were not put in place to measure the amount of time each participant spent looking at each image.

Future Research

To further the current research, researchers could follow the same design, but instead have two groups in a room to attend an informative speech. One room would have Group 1 and two fit people, wearing fitness clothes, giving a presentation about a piece of gym equipment or health product for sell. The other room, for Group 2, would have two people, dressed regularly, giving a presentation of something different (ex. Driver's Safety). After the presentations, these two groups could be scored on their body image just as done in this current study.

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Appendix A Informed Consent

Study Title: Body Image

Experimenter: Cheney Scull (phone number; email)

This study is part of a course requirement for PSYC 4017 at Louisiana State University of Alexandria. To participate in this research study, it is necessary that you give your informed consent. By signing this statement, you are indicating that you understand the nature of the research study and your role in that research and that you agree to participate in the research. Please consider the following points before signing:

- I understand that I am participating in psychological research
- I understand that the purpose of this research is to measure data on individual's body image after viewing a social media feed (in this case, Instagram)
- I understand that my identity will not be linked with my data, and that all information I provide will remain confidential.
- I understand that this study is associated with these risks: psychological harm due to viewing certain images and/or answering certain questions.
- I understand that I may not expect to receive any benefits from participating in this study.
- I understand that my participation in this research project is voluntary, that my refusal to participate will involve no penalty or loss of benefits to which I am otherwise entitled, and that I may discontinue participation at any time without penalty or loss of benefits to which I am otherwise entitled.
- I understand that I will be provided with an explanation of the research in which I participated and be given the name and contact information of an individual to contact if I have questions about the research. In addition, I understand that I may contact Dr. Sandra Gilliland at Email if I have questions concerning my rights as a participant in psychological research or to report a research-related injury.

By checking this box, I am stating that I am 18 years of age or older, that I understand the above information, and that I consent to participate in this study being conducted at Louisiana State University of Alexandria.

I have read the informed consent and agree to participate in this study.

**Appendix B
Demographics**

Gender:

- Female
- Male
- Other
- Prefer not to answer

Age:

- 18-20
- 21-23
- 24-26
- 27-29
- 30-32
- 33-36

Ethnicity:

- Asian
- Black/African
- Caucasian/White
- Hispanic/Latinx
- Native American
- Pacific Islander
- Prefer not to answer
- Other: _____

**Appendix C
Body-Esteem Scale for Adolescents and Adults**

Instructions: Indicate how often you agree with the following statements ranging from “never” (1) to “always” (5). Select the appropriate number beside each statement.

- | | | | | | |
|---|---|---|---|---|---|
| 1. I like what I look like in pictures. | 1 | 2 | 3 | 4 | 5 |
| 2. Other people consider me good looking. | 1 | 2 | 3 | 4 | 5 |
| 3. I'm proud of my body. | 1 | 2 | 3 | 4 | 5 |
| 4. I am preoccupied with trying to change my body weight. | 1 | 2 | 3 | 4 | 5 |
| 5. I think my appearance would help me get a job. | 1 | 2 | 3 | 4 | 5 |
| 6. I like what I see when I look in the mirror. | 1 | 2 | 3 | 4 | 5 |
| 7. There are lots of things I'd like to change about my looks if I could. | 1 | 2 | 3 | 4 | 5 |
| 8. I am satisfied with my weight. | 1 | 2 | 3 | 4 | 5 |
| 9. I wish I looked better. | 1 | 2 | 3 | 4 | 5 |
| 10. I really like what I weigh. | 1 | 2 | 3 | 4 | 5 |
| 11. I really wish I looked like someone else. | 1 | 2 | 3 | 4 | 5 |
| 12. People my own age like my looks. | 1 | 2 | 3 | 4 | 5 |
| 13. My looks upset me. | 1 | 2 | 3 | 4 | 5 |
| 14. I'm as nice looking as most people. | 1 | 2 | 3 | 4 | 5 |
| 15. I'm pretty happy about the way I look. | 1 | 2 | 3 | 4 | 5 |
| 16. I feel I weigh the right amount for my height. | 1 | 2 | 3 | 4 | 5 |
| 17. I feel ashamed of how I look. | 1 | 2 | 3 | 4 | 5 |
| 18. Weighing myself depresses me. | 1 | 2 | 3 | 4 | 5 |
| 19. My weight makes me unhappy. | 1 | 2 | 3 | 4 | 5 |
| 20. My looks help me to get dates. | 1 | 2 | 3 | 4 | 5 |
| 21. I worry about the way I look. | 1 | 2 | 3 | 4 | 5 |
| 22. I think I have a good body. | 1 | 2 | 3 | 4 | 5 |
| 23. I'm looking as nice as I'd like to. | 1 | 2 | 3 | 4 | 5 |

Mendelson, B. K., White, D. R. & Mendelson, M. J., 1997

Toward a Regenerate Artistry: Early Great, Failed Faulkner



Owen Elmore, Ph.D.

Abstract

In Japan in 1955, William Faulkner said that he used characters “as implements, instruments, to tell a story, which I was trying to tell, which I hoped showed that injustice must exist and you can’t just accept it, you got to do something about it” (Meriwether and Millgate 125). In another one of his open question/answer sessions in Japan, Faulkner responded this way to a question about Rousseau’s longing for the condition of pre-civilization: “[O]nce the advancement stops then it (sic) dies. [...] [W]e mustn’t go back to a condition, an idyllic condition, in which the dream [made us think] we were happy, we were free of trouble and sin. We must take the trouble and sin along with us, and we must cure that trouble and sin as we go” (Meriwether and Millgate 131). These are the words and ideas of a writer who believed in art as a force for social regeneration – but where did this voice come from? How was it born? This paper explores answers to this question.

In the South after the Civil War, so scarred as it was by fire and defeat, full two generations passed before even the artists began to attain any objective distance from the events of seventy years previous. Finally, in William Faulkner’s *The Unvanquished*, for instance, an old-age courage is retained by the son and brought forward into the new age. The father’s outmoded honor code—the code that required death and a selfish intractability which had caused the destruction of the South—must pass away. The irony, of course, is that it is only an older Faulkner who felt he could honestly create a younger Bayard capable of revising southern community; the young are as static as older generations in his early books, and in all his books Faulkner finds the latter to be “too old to have to stick to principle in the face of blood and raising and background ... only the young could do that” (Faulkner *Unvanquished* 467). The temporal space of nearly a decade it took for Faulkner to regenerate the unregenerate old Bayard of *Flags in the Dust* (1929) into the dynamic young Bayard of *The Unvanquished* (1938) is the liminal zone within which Faulkner grew into a fully regenerative artist, the re-creator of the three young men of his three planter-class families: Quentin Compson, Bayard Sartoris, and Isaac McCaslin.

During the years 1931 and 1932, after four years of creating at white-hot pace four unquestionably great yet unregenerate books¹, Faulkner underwent a cooling/reheating period with his writing owing to several maturational life-events coming in immediate succession: the death of his father, the birth of his

daughter, and the fulfillment of a dream by procuring and regularly piloting his own airplane. Each of these near-Freudian events combined to set alight the kindling that was hard-earned mastery of his craft, starting a new kind of fire inside him. He was already having some thoughts of returning to and reworking past material or even a past character during 1931 and 1932, for (possibly as an initial experiment in the successful reanimation of Quentin Compson in *Absalom, Absalom!*) Faulkner had taken up Temple Drake again from *Sanctuary*, a book he had completed two years before. The ideas he had for the new Temple he communicated in letters (see Blotner) – ideas that would later result in *Requiem for a Nun*, which presented a matured Temple who is finally, as David Dowling observed, working to convert the facts of her own difficult past into some conciliatory truth:

[D]uring the play we see Temple accepting the past and, what is more difficult, taking it into the future with her, keeping it pliable and alive. She sees that her aim is not to save Nancy [the play’s criminally accused black woman] but to live more aware, and indeed her behavior with Red’s brother [the sibling of the man Popeye had shot out of jealousy for Temple] shows that she is one of the few characters to have acted true to themselves throughout. [...] Temple [wrestles] with the raveled ends of unfinished stories, recognizing not justice but the necessity of taking responsibility for one’s actions. For her it means suffering. Gavin Stevens sneeringly describes it as “an orgasm of abjectness and moderation” but Temple does learn to say it all, to accept the existential uncertainties. [...] Even in her misery she will not “yet quite relinquish” a sustaining belief in those rare moments of love. (Dowling 75-6)

These ideas for Temple Drake’s re-creation, the significant experiences in his personal life all coming simultaneously, and, most importantly, the regenerate artist’s experience he had developed out of the frank and grueling work he had accomplished with his early novels— these things Faulkner tilled together in his artist’s heart, composting a seedbed of creation richer than perhaps any in America, resulting in the great *Absalom, Absalom!* This is the book where Faulkner remade himself into an artist whose primary concern was the resolution of community—his community: the South. The books that came after *Absalom* would see Faulkner seeking to fulfill this role as regenerate artist. But first he had to regenerate his own self-conception.

Faulkner spent most of his life hiding behind various romantic personas, walling himself off from intricate personal psychoses as well as from simple social expectation and intrusion. He never toppled those walls (most of us never do completely), but in his writing Faulkner found ways to circumvent them, to immolate scrupulously various defenses and so face an honest reckoning with his self and his socialization. Consequently, his writing is art and not further

¹ *The Sound and the Fury*, *Sanctuary*, *As I Lay Dying*, and *Light in August*

rationalization because it transcends the self-destruction of self-protection, that making of unregenerate romances by which the principled are too often made impotent. In his art Faulkner reclaims the regenerate “verities of the heart” (which are also our bequest but from whence originally I cannot tell), the “love and honor and pity and pride and compassion and sacrifice” Faulkner spoke of in his Nobel acceptance speech which are so crucial for us if we are to, as he believed, not merely endure but to prevail as a species so gifted. Faulkner’s earliest poetry and novels, however, were sometimes as conspicuously guilty of romantic stereotyping in character, technique, and theme as, say, *Gone With the Wind*. But then, in what I will call his early-middle period (the years 1928 through 1931), Faulkner began to dig beneath the rationalized barriers, to move deeper with his art toward an honesty that he could or would not face in actual life in a kind of self-psychoanalysis through autointertextual composition and re-composition.

In the South after the Civil War, so scarred as it was by fire and defeat, full two generations passed before even the artists began to attain any objective distance from the events of seventy years previous. Finally, in William Faulkner’s *The Unvanquished*, for instance, an old-age courage is retained by the son and brought forward into the new age. The father’s outmoded honor code—the code that required death and a selfish intractability which had caused the destruction of the South—must pass away. The irony, of course, is that it is only an older Faulkner who felt he could honestly create a younger Bayard capable of revising southern community; the young are as static as older generations in his early books, and in all his books Faulkner finds the latter to be “too old to have to stick to principle in the face of blood and raising and background ... only the young could do that” (Faulkner *Unvanquished* 467). The temporal space of nearly a decade it took for Faulkner to regenerate the unregenerate old Bayard of *Flags in the Dust* (1929) into the dynamic young Bayard of *The Unvanquished* (1938) is the liminal zone within which Faulkner grew into a fully regenerative artist, the re-creator of the three young men of his three planter-class families: Quentin Compson, Bayard Sartoris, and Isaac McCaslin.

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William Faulkner was a product of the South, torn between a personal loyalty to classical art and a socialization that didn’t consciously recognize the function of art. In *The Sound and the Fury*, Quentin Compson ends up dead by his own hand, feeling he must choose a side in a false binary: If “tragedy is second-hand” (116), as his father says, if virginity is not Virginity but only a word made to mean, then there must be no essential Rightness at all, and in his avoidance of choosing the one or the other – that is, to avoid losing Caddy to either the ideal of the Pure Woman or to the non-ideal of there being any such thing as Pure at all – Quentin kills himself, sacrifices himself to his socially constructed Self so he’ll never get over Caddy’s “Fall” and the ideal of Southern womanhood will never be Lost. And Quentin is not alone, for Southerners have not been good at letting go of lost ideals. Faulkner, too, as is often reflected in characters like Quentin who speak most closely for him, has not at this point in his creative career transcended mutually exclusionary binaries. Although there is evidence in *The Sound and the Fury* that he knew such transcendence was closer to the actual nature of Nature, closer to some kind of difficult reality, so far he’s keeping himself and his characters and, most important, the South out of the tradition of transformative literature; in the early-middle books covered in this section the South is a barren place, past rehabilitation in its desperate clinging to the lie of a romantic past too simplistic to have been. *The Sound and the Fury* is not a regenerative book, but it is a more focused step in that direction than he had yet taken.

As noted by David Minter, a clue as to what led Faulkner to taking this purposeful step toward regenerate artistry may be found in a comment by Phil Stone in 1931 regarding influences on his friend’s writing. Stone mentions a book called *The Creative Will* by Willard Huntington Wright, which he knew Faulkner had read. In that book appears a concise statement (more to the point than Conrad’s) defining the artist as one who “takes the essence of his special world, color, or document, and creates a new world of them” (William Faulkner 78). The reason *The Sound and the Fury* still only amounts to a step and not a leap, however, is because it does not discover any regenerable material, hence failing in the “creation of a new world” through either its characterization or its subject

matter. But Faulkner was on the scent, certainly, making the book not merely a failure but a “splendid failure,” as he deemed it: splendid because its “essence” for the first time was excavated from the heart, drawn up from what would prove to be a richer vein than he had yet managed to tap, and yet still a failure because it is that too-personal book all authors must write out of their systems before their discerning eye can back them off some (but not too much, which may have been the case with the next two books). It is a book in between, peopled with characters composed partly of “the world [Faulkner] could never wholly accept yet dreaded to lose” and partly of “what they should have been and were not” (Minter, William Faulkner 77). It is a book that, every time one reads it, wants to tell a story it cannot tell.

If Shakespeare feared a cruel, disinterested, or absent God, if he feared his own irrational human nature or the nature of others, if he feared a meaningless universe – all or any of which would make human life an inconsequential “sound and fury” – then there is no stronger acceptance or indictment of the truth of all or any of it than Macbeth’s courage in the face of it. The first sin of Macbeth is his susceptibility to the witches of human desire, the false god of a non-existent Super-nature, and this same lack of trust, of hope, of the longing required to shape a viable life: this is Quentin’s sin, born of a mother of vacuous soul and a father of diseased spirit. The second sin of Macbeth is born of the same parents, and it is the de-conservative lack within Jason Compson – for, really, what is more dissipative than hoarding for yourself the rightful due of others? Jason’s libertine waste of his female relatives – including Dilsey – is de-conservationist, like the actions of the lumber companies in “The Bear.” But Nature and the oneness of Being within her inform all, and rejection of her is the rejection and waste of life itself. So both Quentin and Jason lose her due to their own lack, not because of anything Caddy does or does not do. Dilsey seems to stand even further than Caddy outside the cycles of temporal events, but she is a present Center. However, unlike an artist riding the edge of time and not-time, Dilsey stands far outside and untouched by it, unreachable to the author or his characters. Benjy, too, is beyond being hurt by Nature and Time; Dilsey knows this about him, pointing out to Quentin (who is certainly one stuck on Time’s treadmill) that even luckless-ness “cant do [Benjy] no hurt” (89). Faulkner uses Dilsey and Benjy to end the book just as Shakespeare used his title character’s new-found courage to end his play. But unlike Macbeth, neither Caddy nor Dilsey nor Benjy can make *The Sound and the Fury* a regenerate book, for Faulkner does not give them the power to make anything; rather than being self-willed characters, they represent universals (toward which, incidentally and as we’ve seen, none of the willed characters can move). This then, the first significant Faulkner book, is literally nothing but the sound and fury of impotent wills and will-less statuary, signifying nothing of regenerate purpose.

The books written from 1928-1931 “form a veritable spider web of intimate connections” (Polk 43), particularly regarding Faulkner’s wavering trust in the social viability of his art. While *The Sound and the Fury* was a major personal revelation for Faulkner’s perception of himself as an artist, *Sanctuary* begins a more important analysis regarding the social function of art. Noel Polk believed that Faulkner was never far from psychological biography in the early books (45), and such a reading of *Sanctuary* exposes much more than a bitter debasement of society: it reveals an experiment in representation. The opening scene at the forest spring is a static imagining of static people; Horace is as blind as Popeye because he was raised on Southern romance and myth, a provider as bereft of honest sustenance as the razed sanctuary of the latter’s syphilitic mother. Horace’s book compensates for his impotent imagination just as Popeye’s gun compensates for his impotent body. Horace is a first attempt at resurrecting Quentin Compson, just as the earlier Horace from *Flags in the Dust* is a Quentin analogue. Or, if not exactly a resurrection of Quentin, at least the character is an attempt at aging him and placing him in the state of dry self-delusion that the early Quentin Faulkner had drawn would have had to attain in order to escape suicide. Darl Bundren in *As I Lay Dying* will be Faulkner’s try at another kind of center of consciousness. A proto-artist of a new kind, Darl is potent but driven crazy by this potency: his ability to see beyond the field of time and to question temporal habits of mind. Darl (from Darrell, an Old English name meaning “from the hidden place”) is much like Quentin without the staticity of Horace. Darl ends up in the asylum at Jackson, but he at least survives and his insane act (if it can be deemed insane since cremating Addie has as much logic as taking her on to Jefferson) is at least action, which is more than can be said for how Horace uses his essence.

Horace is essence-less, and he cannot regenerate more. His substance has been dribbled away, measured out not with coffee spoons but in a trail of years spotted on the pavement leading to the indifferent door of the safely unarousable feminine. He is the very picture of ever-static potential; like a favorite dead pet freeze-dried and politely quaffed forever, he will never hunger again so as long as he is kept carefully from any reanimating moisture, moisture as essence he so long ago leached from himself; Horace vomits back out what dampness he does inadvertently soak up, protecting his fragile ego by reducing women to “dumb mammals” whose mental changes are ruled by the seasons. But “seeing the world as a surface only [...] may mean seeing it as a reflection of a projected self” (Dowling 68), a mistake Horace commits as surely as Popeye. Horace and Popeye are juxtaposed in the book’s opening tableau; as Robert Dale Parker observed, they are opposite reflections of impotence yet impotence nonetheless, each version as crippling as the next (75). In that opening scene Popeye is

pictured flat like a two-dimensional figure stamped from tin. This is the opposite of the stereoptic image, which adds depth to imitate movement and thus life. Faulkner’s flat imagery in this book reflects the way Popeye’s own vision works, reducing life to lifelessness, to a world where there is much sex but no procreation. Popeye is an emotional astigmatic; in fact, “the word ‘Popeye’ is a slang term for a one-eyed person and for an automobile with one headlight” (Rousselle 4). Popeye has both his physical eyes, but his emotional vision is limited – limited by a psychologically crippling childhood, we learn at book’s end.

Faulkner’s purposefully blind and motionless telling here mirrors the unseeing and motionless world he is telling into being. It is a monocular view of a dimensionally challenged society. The tale the book represents – Temple’s tale – is veiled by half-blindness again and again, with each telling more detail is revealed but the whole is never seen. In fact, the whole is complicated by additional details, as is the case when Temple “tells” in court; her telling only provokes more questions. Faulkner is testing the hypothesis that life as it is can never be told, at least not by him or at least not Southern life, and that the representation on the Grecian urn is nothing more than a still-life representation of a dead temporal moment. The similarity between the urn and the womb must be remembered here; the urn or art object, for Faulkner at this point in his writing career, is merely the imitative, lifeless “perfection” of an idealized feminine creativity – the same unmoving one Quentin had in his head and wrestled unsuccessfully with. Noel Polk suggests that Horace is Quentin if he had been allowed to age (42), and this seems correct. Horace is Faulkner’s center of consciousness here; whereas Quentin was the youthful poet-Faulkner who could not disbelieve in the male womb-perfection of art as symbolized by the inviolable virginity of his sister, Horace is the middle-aged self Faulkner feared becoming, one paralyzed by a flower that bites, paralyzed by the fear of any actual woman behind the romantic curtain of Southern Belle-dom – a Narcissa-Nature in all her savagery, a Caddy transmogrified into a Jason.

Faulkner knew change must come and part of him feared losing all he knew, though he hated much of it. Mostly he feared what would take its place; would Narcissa Benbow replace Caddy Compson? Despite these fears, there is a creative maturity developing here that can go unnoticed behind *Sanctuary*’s horrors, a backing off of the overtly personal since *The Sound and the Fury*. Bleikasten makes the opposite point that this allowed Faulkner to “escape the lure of an overly self-centered relationship to writing which, had it lasted too long, might have become fatal to the pursuit of his enterprise as a novelist” (215). And although *Sanctuary* exposes the staticity of not only the society it portrays but the pessimism of the author painting the portrait, recall that the corrupt community imaged in the book was more than a reflection of Faulkner’s pessimism:

as Albert J. Guerard points out, Memphis was known as the murder capital in the 1920s, and there actually was a lynching in Oxford just a few years after the book was published (155). In *Sanctuary*, the town boys hate the college boys and the bootleggers hate everybody, especially a privileged girl who dances along the outside of her protective social ring, playing nearer and nearer the fire that consumes the lives of those unfortunate enough to be born into it. (Rank blacks merely the worst victims of these class wars, for Faulkner is still not ready to enter the arena of race relations to any serious degree, neither with this book nor with *As I Lay Dying*.) Memphis is a Waste Land of iniquity, certainly, but the waste has swelled southward like a distended tumor into the counties of northern Mississippi. Shockingly, Jefferson's communal values are inferior even to those in Miss Reba's whorehouse, represented as they are by the severe Narcissa Benbow, the self-serving district attorney, and the vigilante ladies of the Church, who are like pitiless steamrollers when Ruby breaks through their town's kept-flat facade of fruitless tranquility.

The desiccated, desiccating corn cob is a lifeless, life-draining weapon Faulkner uses as a literary tool in much the same manner Popeye uses it for violence. It is perhaps the most blatant instance in a book that was an intentionally exaggerated throttling of his readers meant to take things one attention-getting-step beyond the realistic in order to rouse the author's actual community, the one he watched already auto-asphyxiating by degrees. Nevertheless, pessimism however factually true is different from honesty, and in the end, it is only a self-protection device. Despite the value of a mirror thrust into the collective face of society, Faulkner found in *Sanctuary* little or no chance or reason to risk himself as he had done in *The Sound and the Fury*; though an inward dialogue had been opened and he had accomplished much with it, his outward art was still a self-protective monologue, still unmoving toward regenerative purpose, flat in function and scope.

The art Faulkner makes in *As I Lay Dying* is changed, just as *The Sound and the Fury* was different art from that written before it; however, *As I Lay Dying*, too, is still not regenerate art. For various reasons, critics have sometimes wholly palliated *Sanctuary*, which is ignoring its importance in Faulkner's development as an artist. At other times, commentators have been divided on the book's import, unable to discern the psychological underpinnings of its author regarding women. Some male scholars have branded Faulkner a misogynist, but female scholars have often deemed him disturbingly honest – meaning that the men probably are not being honest, merely using Faulkner to count themselves among the most right-feeling and best forward-thinking. Women have been quick to acknowledge the outrageous authenticity of Faulkner's vision of the patriarchy both in this book and in his next. Indeed, although Dewey Dell in *As I Lay Dying* is certainly more sympathetic than Temple Drake, she is still a razed

sanctuary: a vessel out of which men gather their dog-like self-esteem and into whom they relinquish their instinct-sublimated wills.

Addie Bundren has the ability to describe her own emptiness, which she is conscious of: a blank space where Anse had been and where Nature propelling Anse and her too had done its thieving. Faulkner's vision of Addie's place in relation to the community combined with her self-described feeling of emptiness is a breakthrough for him as a regenerate artist. Hers is the hard disenchantment of the rural wife of one hundred years ago who buys into a girl's dream, a conspirator's reverie devised by the long dead in acquiescence to Nature to lure the young and alive into sacrificing themselves for community. "Love, [Anse] called it. But I had been used to words for a long time. I knew that that word was like the others: just a shape to fill a lack," but "the same word had tricked Anse too" (116).

From one perspective, Addie, like Ruby Goodwin, is a long-suffering saint; both are loyal and enduring though they've lived lives of outrage acted upon them. But whereas Ruby was a marginalized moon kept revolving outside the boundaries of the Jefferson community, Addie is the central sun around whom the community turns: her family are burned up in closest orbit while the Tulls, the Armstids, and others circle farther out; family are pulled in as if by gravity (the clichéd metaphor "family ties" is exacting here) while neighbors are bound by the age-old duty to survivors of a death. That there is a lack posthumously attested to by the center (Addie) has obvious deconstructive possibilities, but other critics have been there. Rather, although Addie's personification as the hub of all communal bonds is archetypal, the lack she feels and speaks for herself about personalizes her in a way Faulkner had not figured out how to do for Caddie or Dilsey. Temple, too, was all lack without dignity: the archetypal whore, and though Ruby was more than an archetype but not much more than a stereotype (the prostitute with the heart of gold), she was at all only in relation to Lee or Horace or Popeye or Jefferson or even Temple. Conversely, in *As I Lay Dying* nobody "is" except in relation to Addie, who very much is despite being dead – though certainly her "dead" aspect is a more effective device to represent a missing feminine power center than a desecrated temple. In fact, that she is dead is why the communal chain of relationships is failing.²

This "failure of familial bonds" that is a theme of *As I Lay Dying* may originate with the tragic stories told by the ancient Greeks about the House of Atreus (Luce 2), but there is also human nature's instigating force that Faulkner is continuing to wrestle with for the third book in a row. By the fourth book (*Light in August*) he would call that instigator the Player and salvage some measure of

² The dark comedy of Anse's new wife and teeth is both dark and comic because it mocks the clichéd regeneration that family represents; in this view we are locked into Fortuna's non-progressive cyclings, and any view of Southern family as progressively viable is an illusion of wish fulfillment, a projection based on a bias concocted by the predilections of what some psychologists call the reptile brain.

human will in the face of the games being played with our lives – but not yet. Here the questions are: how far can the Bundrens be blamed for their familial failures? and what is it to be “luckless” as Anse says he is? It is certainly not akin to Benjy’s lack of need for luck, for Anse needs it. Some have admired the Bundrens for their persistence in the face of all that would thwart them; nevertheless, in this book Faulkner’s vision is an obsessive one of the universe as impersonal foil. Hope does not come, not even from Cash (as some critics have suggested) who, like Horace, may be decent but makes himself safely impotent of action outside his controlled world of carpentry. And since the Player here is Faulkner himself building his own play of impotence, Cash may be closer to his center of consciousness in this book than Darl, the regenerate artist, who eludes him again.

Also, in *As I Lay Dying* as in *Sanctuary*, there recurs the technique of reducing characters to two dimensions; however, even beyond this flatness things have a fading substancelessness: rain doesn’t regenerate, it obliterates, even so far as to have a corrosive effect on the skin. Moreover, André Bleikasten observes that in *As I Lay Dying* “[n]othing ever altogether vanishes [and nothing] is ever fully present, here and now. [...] Sounds and sights hang in perpetual suspension, vacillating between receding absence and nearby presence” (185). These effects have gone further into the experimental Modern than Conrad did in his time, but the flat descriptions of three-dimensional bodies to represent incompleteness of personality comes straight from Conrad, from *The Nigger of the “Narcissus”* in particular. This and other evidences in Faulkner’s work from this period (as Dianne L. Cox has so well shown) constitute further proof that Conrad was much on Faulkner’s reading and writing mind, and recurring similarities between each of the four early-middle, pre-*Absalom* books reflect the fact that Faulkner was approaching similar problems of representation from four different directions, applying what he had learned with the previous book to solve the problem of the current one; from slashed throats to muddy drawers to indifferent suns in a blank universe to the cornflower eyes of the innocent and the dark, depthless knobs of the villainous to racism and anti-Semitism to misogyny and self-hatred, there is the ever-present goal to transcend it all and discover the regenerate artist and his living art. Since it stands in the way of the self-transcendent artistry Melville and Conrad managed, Faulkner burns away his ego a little more with each succeeding book, gradually like the sun slowly sears through a morning fog. Always, Faulkner is focusing and refocusing his model stereopticon, trying to see whether the socially regenerative function of art was within his power.

Necessarily, there have always been weak points in the West’s divisionary walls where the stagnating binaries can be transcended so that regeneration can occur, and new cultural paradigms can be born. In the West, only the conven-

tion of art has held the authority and had the means necessary to accomplish such transcendence. In fact, if we continue tracing the dominant line of Western culture back before Aristotle, into that ninety-eight percent of our human (pre) history we know so little of, we come to art on the walls of vast caves, grotesque paintings where binaries are merged. As near as archaeologists can tell, these caves served the purpose of magical teaching zones for rituals of social passage and growth. What Faulkner was seeking with his early-middle books was this mythic urn in which living art could be made. This motif shows up in *As I Lay Dying* as pervasive Ovidian metamorphosis imagery (Bleikasten 166-68), but the grotto was never reached. In *Light in August*, however, the journey into liminal space develops like a connect-the-dots picture: the book’s climactic thematic image becomes steadily clearer as the complexity of the interrelations between the characters increases, and by the time we get to book’s end something like a map of the cave wall of creation has been divined. Geoffrey Harpham delineates the ancient art-cave’s (or grotto’s) vigorous survival well into European “grotesque” traditions in art and literature. The historical “grotto-esque,” as Harpham phrases it, represented an “invocation of some other phase of being, of a mythological culture that was permanently lost” (51). Grotesque art symbolized confusions between the older, occulted margins and the current power center, confusions “between mythological and historical ways of thinking. The grotesque,” explains Harpham, “consists of the manifest, visible, or unmediated presence of mythic or primitive elements in a non-mythic or modern context” (51). Aristotle, Harpham writes, in order to perceive typological multiplicity, rejected the mythic idea of Being as one; myth, however, knows no such literal/non-literal differentiation: “Myth [...] knows only reality [while] our kind of logic is on the avoidance of contradiction. [...] [Myth] not only tolerate[s] contradiction, [...] it seeks it out and mediates it through narrative” (52-53). For example, in myth the unclean is part and parcel of the sacred, just as literature can be debasive and regenerative at the same time. “The modern mind finds it especially difficult to see what qualifies filth to be sacred because we have lost the sense of participation in a living cosmos that renews itself in an organic pattern” (Harpham 56). Even today modern grotesqueries, symbolic as they are of the unclean/sacred (debasive/regenerative) union, are rationally interpreted as attacks on the structural integrity of all “right”-categorizing human beings (read: Western) and their attendant taxonomies of opposition.

Faulkner’s *Light in August* is a rarified atmosphere, distinguishable from the normally invisible daylight by a special summer’s-end effulgence, conceiving a ritual space outside time but simultaneously connected to all time. Faulkner’s August light makes us aware of the interconnectedness of the book’s characters, illuminating an invisibility so we can see that it touches and is touched, enters

and is taken in by otherwise seemingly discrete individual characters. In fact, Faulkner is doing here with Lena Grove and the August light what he had seen Conrad do with James Wait and the special air: make visible the latent oneness of all things. This storytelling in liminal space is a ritual act and the storyteller becomes the shaman of the cave, preparing it for our entrance with unusual fires and smokes which will blur and abandon the everyday senses and set this piece of time and experience off for lasting effect on aural, oral, and especially visual memories. In elementary social groupings, community members enter these marginalized caves periodically throughout their lives, during seasonal rituals, rites of passage, and at other such distinctive moments in the lives of the community and the individual. Some never come out of liminality again, resulting in new doctors and magicians (for there is often no separation between this binary) and artists and teachers (nor this one), shamens who become constant physical reminders of Otherness within the community: physical representations of the metaphysical bridges between flowing patterns of ambiguity in the world. In *Light in August*, Gail Hightower is, literally, a non-working artist, and metaphorically he is a disregarded shaman; no one cares to enlist his artistic services just as no one cared for his self-gratifying sermons when he was allowed to preach. His art is impeded by romantic perceptions about ... well, most everything, but particularly his familial/communal past. Once again, he, like the South, is living the life of a zombie, the walking dead dreaming glorious dreams of a past that had never been. “[I]t’s the dead folks that do him the damage,” Byron Bunch muses about Hightower. “It’s the dead ones that lay quiet in one place and dont try to hold him that he cant escape from” (453). Gail must escape the dead if he is to create again, and this is what he finally comes to know: “[F]or fifty years I have not even been clay: I have been a single instant of darkness in which a horse galloped, and a gun crashed. And if I am my dead grandfather on the instant of his death, then my wife, his grandson’s wife the debaucher and murderer of my grandson’s wife, since I could neither let my grandson live or die [...]” (762). Being a zombie leads to dragging the present and the future into the grave with the past.

Much as Darl Bundren did, Joe Christmas lives in a liminal limbo, but for sociological rather than metaphysical reasons. Joe hates himself because society hates him, for he is a walking limen: a chaotic mix of black and white (as everyone else thinks of him and as he thinks of himself – a perfect case of “nothing is but thinking makes it so”). Such a fusion in Western culture is an impossibility; to be it is at worst demonic, and so Joe becomes what he is created to be by his community: a self-hater. In a bit of Freudian imagery: at his worst moments of inner turmoil Joe sees images of urns, flawed and oozing. In extreme contrast, Gail Hightower (who shares Faulkner’s consciousness here: another

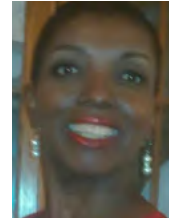
Quentin/Horace/Cash) sees the image of the urn, too, but this time it is “on all sides complete and inviolable, like a classic and serene vase, where the spirit could be born anew [...]” (753). Both perceptions, the positive and the negative, are incomplete in separation; Gail is as wrong as Joe because Joe is right, too. Together, both views of life reveal a binocular wholeness; in opposition, they are distant and veiled half-truths. These two voices are Faulkner identifying his own warring binaries, the ones we’ve seen deadlocking the regenerative mechanisms of his previous three books. Here, Christmas is the self-hating quintessence of the author’s contradicting socialization: the hypocritical, romanticizing South. Hightower is the good man wasting away in passive self-involvement. This time, however, in this book, Faulkner will break the stalemate and bring the two together, stumbling down and into his first representation of the regenerate artist. Before Christmas bashes him on the head, Hightower was feeling self-satisfied for having taken part in bringing Lena’s baby into the world – but he had not yet come awake. Joe Christmas’s last act was to do him this kindness. The easy symbol of resurrection is the baby and Lena, and they are resurrection, but the other, grief-laden symbol of Joe’s grotesque death in Hightower’s house is happy resurrection, too. The opposite poles of the Joe/Gail binary come violently together – and William Faulkner the regenerate artist is conceived, born in a depicted act of violence.

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The Afterlife – Common Beliefs in Christianity and Islam



Gardenia K. Evans
Author



Holly Wilson, Ph.D.
Faculty Mentor

From ancient times, human beings have been consumed with thoughts of the beyond. This curiosity is likely to be based in the realization that this earthly existence is not an immortal reality. Additionally, human beings are inherently encoded with the knowledge of being a created life form and as such, there is an ultimate desire for unification with their creator. The monotheistic religions of Christianity and Islam provide a pathway for mankind's unification with his creator God. This final reunion is destined to occur in what is commonly referred to as the afterlife. Ghayas maintains that "belief in an afterlife is considered a fundamental belief of many religious belief systems, which assign meaning to the life on earth and the life after death" (861). A comparison of the key eschatological beliefs of death, resurrection, judgement, heaven, and hell, in the Christian and Muslim religions reveal foundational commonalities.

The status of one's afterlife is heavily dependent upon status of one's earthly existence. In Christianity, one of the earliest dictates for right living can be found in the Old Testament book of Exodus. These Holy directives are commonly referred to as the Ten Commandments. This original set of laws is given directly to Moses by God on Mt. Sinai to be communicated to the people of Israel. In the New Testament, Jesus commences His ministry by declaring that He did not come to abolish the laws of Moses. The purpose of his appearance was to fulfill those laws. In Matthew's Gospel, as a requirement to receive eternal life, Jesus tells a rich young ruler that he must keep the commandments. This is confirmatory evidence of Jesus' acknowledgement of the law.

Further, Jesus issues two new commandments of love, which encapsulates the original ten. These commandments dictate love for God and love for others. Should persons commit to the adherence of these two commandments, they would in fact ensure the adherence to the original laws of Moses.

For the Christian, loving God and loving others would be considered the path to righteous living and the path to securing an afterlife of eternal bliss. In Christianity, there may exist conflicting views on Jesus' idea of salvation and Pauline soteriology. Jesus and Paul ministered to different audiences; Jesus to the Jewish community and Paul to the Gentiles; hence, the appearance of variation in the delivery of the salvation message. Pauline soteriology espouses faith without works, while works may be ascribed as a condition of Jesus' soteriology. In the story of the rich young ruler noted in the paragraph above, Jesus also directs

him to sell his possessions and give to the poor. This dictate can be viewed as a condition of works. Wright submits that “good works are simply gratitude and demonstrate that one is faithful to the covenant” (71). Further, any good deeds/works can be construed to be as a natural extension of one’s love for God as opposed to an inference of a lifestyle bounded by legalistic works.

As is the case with Christians, there is a direct correlation between the state of a Muslim’s life on earth and the state of his afterlife. The Qur’an is Islam’s irrefutable source of right living for the Muslim believer. As the prophet Moses receives direct guidance for his people, so too does the prophet Muhammed receive inspired words of the Qur’an for Muslims. Holy scriptures of the Qur’an are the revealed words of God, delivered to the prophet Muhammad by the angel Gabriel. The term “orthopraxy” is generally attributed to Islam which is supported by teaching of the Qur’an. The Qur’an provides an all-encompassing source of guidance for correct living. Additionally, further codes of conduct are provided in the examination of the way in which Muhammad lived his life. The Prophet’s sayings and actions are documented in the hadiths. Should one follow the ways of God, through the revealed word in the Qur’an, supplemented by the teachings of the hadiths, the joys of Paradise will ensue.

In Christianity, transition of the body into the realm of the afterlife is marked by the unavoidable qualifying event of death. Again, a believer’s outlook on death is predicated upon the type of life lived. Salvation is freely offered to the Christian believer and simply requires belief in the Lord, Jesus Christ. In this biblical context belief in God reaches beyond a mere belief in his existence as scripture tells us that even Satan believes in God’s existence. A more comprehensive position might show belief in God as “trusting God, accepting God [and] committing one’s life to him” (Platinga and Wolterstroff 7). The Bible admonishes a person to believe in the Lord to be saved. The person accepting salvation has nothing to fear in death as “death, according to the biblical faith, does not mean the big question mark, but the comma – leading to a life in eternity in the presence of God” (Schirrmacher 264). Further, this would mean that a death should be an event to which the believer looks towards with great anticipation. The apostle Paul succinctly refers to the state of death as being absent from the body but present with the Lord.

Similarly, the Muslim’s position on death is relative to his lifestyle prior to death. This believer must live life under the continual guidance of God. If he is living according to the teachings of the Qur’an, then it follows that he is obeying God’s commands. Wasilewska maintains that “Muslims have no reason to fear death” as Evans Qur’an sets out that “death is like a deep sleep, a dream during which Allah takes human souls and then withholds those on whom He passed the decree of death and sends the others back until an appointed time” (2).

Additionally, Muslims need not fear death because unlike Christianity, in Islam there is no reference to mankind being born into sin; hence, there is no offer and required acceptance of salvation. Islam by no means presupposes the perfected man. The Qur’an acknowledges that mankind is weak, volatile, faint of heart, and is prone to act in haste. Further the Qur’an acknowledges mankind’s capability of committing evil deeds, especially when propelled by pride and arrogance. It is accepted, however, that through free will mankind possesses the ability to recognize any deviation from the right path and subsequently, is fully able to return to God’s instructions and guidance.

After death, both Christianity and Islam acknowledge an impending day of resurrection followed by the judgement for all humanity. These two concepts are inseparable. In Christianity, the resurrection of the body is heralded by the return of Christ, on a date which has not been made known to anyone. In the biblical account of this event, the apostle Paul reveals that Jesus will descend to earth through the clouds. There is much commotion associated with his descent. There will be a loud shout made by the archangel, which will be accompanied by a blast of the trumpet. It goes on to recount how all mankind will bear witness to his return and the dead in Christ will rise. The Qur’an sets out a similar version of the day of judgement, which is scheduled to occur on a date undisclosed to anyone. This eventful day is signalled by a single blast of the trumpet. With this initial blast, those who are dead will rise from their graves and move towards their Lord.

Both religions maintain that after the resurrection comes the judgement. The Christian Apostles’ Creed makes a declaration of the belief that Christ will return to pass judgement on both those who are living as well as those who are dead. The book of Revelation speaks to what is meant to take place on this particular day. It recounts the Lord being seated on his throne and all those who are dead are standing before Him. He is in possession of a book, referred to as the book of life, in which a record of what each person has done while alive is retained. This documentation is how each person is judged by God. It determines the eternal fate of each individual. Should the name of a person not appear in the book, the eventuality is that of the person being thrown into the fiery lake. In Islam, much the same as in Christianity, each person is called into account for his deeds while on earth. Schirrmacher points out that, “in Islam, belief in a final judgement belongs to the most basic articles of faith” (261). Islamic tradition also sets out that the acts of the dead are recorded, by angels, in a book. Descent into the fires of hell is the unfortunate outcome for the non-believer, even if it is only a temporary habitat.

After the judgement, based on God’s determination, a person’s final abode is either the eternal joys of heaven or paradise or the eternal misery of hell. In Christianity, for those who have not availed themselves of God’s salvation, hell

awaits. The book of Revelation provides the most vivid imagery for this place of utter damnation. Williamson states that, “the metaphors clearly convey agony without respite. It is a terrifying image, surely as it is intended to be” (159). The senses are fully engaged in hell’s description as a place with a fiery lake of burning sulphur. The smoke emanating from those in hell, will remain forever. This is a place of perpetual torment, where there is no escape for its dwellers.

Hell in Islam is described as a fiery pit as well. Anything that is thrown into hell is crushed and broken into pieces. There are seven gates in hell relating to seven levels of differing severity in punishment. Coulter-Harris asserts that “according to the Qur’an, hell is the ultimate place of loss and degradation” (127). A key concept of hell, which is divergent from Christianity is that of duration. There is existing debate over the eternity of hell. There are verses in the Qur’an which clearly state that hell is eternal for those who oppose Allah and the prophet Muhammad. The more common thought in Islamic eschatology, however, is that of the temporary nature of hell, as there are also Quranic verses which speak to one’s stay being at the will of Allah; thereby, providing hope of eventual escape. Generally, the Islamic hell is meant to be a temporary place of punishment. Angels exist in hell to purify those who have engaged in spiritual misconduct. These are persons who believe in God and in the prophet Muhammad and who are subsequently repentant. For non-believers and those who worship other gods, hell is a permanent dwelling place.

Heaven is the Christian reward for persons who have accepted God’s gift of salvation. The attainment of entrance into heaven is the desired goal of every Christian believer. Jesus promises, just prior to His ascension, that He is returning to His father to prepare a place, of many mansions, for the redeemed. There is a beautiful description of heaven in the book of Revelation. There are twelve gates, each of which is inscribed with the name of a tribe of Israel, and each made of a single pearl. The walls are constructed of jasper, glass, and gold and each bears the name of one of the twelve apostles. The foundations of the walls are beautifully bejeweled. The streets are made of pure gold. No sun or moon is required, as God illuminates the heavenly realm. For the residents, there is no death or destruction neither is there marriage or specific genders.

In Islam, heaven is preserved for those who perform good deeds and believe in God and the prophet Muhammed, with entry according to the will of Allah. The Qur’an’s description of heaven is every bit as stunning as that of the Biblical description of the Christian heaven. Those deemed worthy of admittance, “will have everything they ever desired” (Williamson 132). In heaven, there are four gardens, filled with fruit trees. Fruits in two of the gardens are low hanging for easy access. There are four rivers beside which the believers recline on silk covered beds. There is no hatred or tiredness in existence here. The believers live

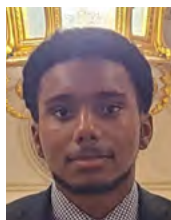
among angels, prophets from the Hebrew scriptures, and God. The Islamic heaven differs from the biblical heaven as relates to corporeal pleasures. The biblical heaven refers to many mansions with inhabitants in new bodies. There is no mention; however, of further copulation among the celestial dwellers. In comparison, the heaven of Islam is a sensual place. There are beautiful virgins awaiting courtship in heaven. Muslims are permitted to marry and enjoy sexual intercourse.

Belief in the afterlife, is central to the monotheistic religions of Christianity and Islam. Examination of these beliefs unfolds many shared doctrinal truths in the religions. There is the common belief that mankind’s physical death is followed by the resurrection. After the resurrection, man stands in judgement before God. On the day of judgement, a record of one’s earthly existence is maintained in a book and recounted by God. For those who follow God’s commands, heaven is their eternal dwelling place. In the Christian faith, damnation in the fiery pits of hell awaits those who have not availed themselves of God’s salvation. In Islam, eternal hell awaits transgressors who have not been deemed worthy of ascendance to the Garden, by Allah. Ultimately, belief in the afterlife exists because of the intense longing of the created to be reconciled with the creator.

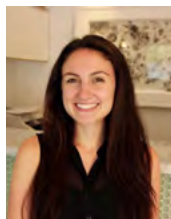
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Identification of Compounds with Biological Activities from Gas Chromatographic Analysis of Propolis Extracts from Greece



Lawrence Phillips
Author



Josephine Farshi
Author
†Corresponding author



Elmer-Rico E. Mojica, Ph.D.†
Faculty Mentor

Abstract

Propolis, also known as bee glue, is a complex mixture produced by honeybees to protect their hives in which they live. Propolis has been utilized due to its beneficial properties to the human immune system. A vast amount of literature reported the different biological activities of propolis that include antibacterial, antimycotic, antiviral, cytotoxic, anti-oxidant, anti-inflammatory, and immunomodulating. These biological activities vary depending on the vegetation, bee species, and collection area. In this study, propolis samples from an apiary in Greece were collected and extracted with chloroform and methanol. The components present in the extracts were analyzed using gas chromatography with a mass selective detector (GC-MS), and the compounds reported in the literature with biological activities were identified. Among the compounds identified in the extracts are nonadecane, tricosane, hexadecane, chalcone, and heneicosane.

Keywords: propolis, GC-MS, biological activities

Introduction

Honeybees produce propolis, a resinous substance made from the buds and exudates of plants, to protect their hives from numerous external threats. This includes but is not limited to diseases, predators, or the different seasons (summer or winter) in their surrounding area. To do so, bees gather propolis from diverse resinous parts of living plants and in different phytogeographic regions. Bees then use the propolis to seal holes appearing in their hives, smooth out the internal walls, and protect the entrance against intruders.

Similarly, the substance can be used by humans to help the immune system. Propolis is found as a health food supplement in medical and retail establishments. Specifically in Europe and Asia, it is used by some elderly who believe that it slows the effects of aging on the body (Graikou et al., 2011; E. Melliou & Chinou, 2004). Therapeutic properties come from propolis' unique composition, which varies immensely due to its environment and the specificity of the local flora.

The composition of propolis quantitatively and qualitatively differs between seasons, regions, and countries, thus making propolis from each region a unique

substance (Petri, Lemberkovics, & Foldvari, 1988). This is especially prevalent in Greek propolis because its propolis has a different botanical origin due to the distinctive vegetation of Greece (E. Melliou & Chinou, 2004). The basic components of propolis are resin, wax, pollen, and essential oils. Furthermore, the substance's proposed medical properties come from its variety of organic compounds. A study on the subject concluded that it has beneficial properties as an antimicrobial, antioxidant, antibacterial, and anti-inflammatory agent due to the various phenolic compounds found within its composition (Pasupuleti, Sammugam, Ramesh, & Gan, 2017). The variation of compounds in different regions can be analyzed and identified using mass spectrometry.

The objective of this study is to determine the chemical composition of the propolis extracts from Greece using GC-MS and compare them with those reported in the literature exhibiting biological activities (Kalogeropoulos, Konteles, Troullidou, Mourtzinos, & Karathanos, 2009; Shashikala, Harini, & Reddy, 2016).

Materials and Method

Sample Collection

Propolis was sampled at an apiary in Kavala, Greece (Figure 1). The sample was transported by mail and stored in a freezer at 0°C with limited exposure to natural light until analyzed.

Propolis Extraction

A propolis sample weighing ~500 mg was crushed and dissolved with 10.0 mL of methanol (Sigma Aldrich, St. Louis, MO) in a 20.0 mL glass vial. The resulting solution was stored at room temperature for 24 hours to obtain liquid extracts. The same procedure was repeated for another sample, using chloroform as the solvent instead. The extracted samples were then filtered using a Whatman® UNIFLO® syringe filter (Whatman, United Kingdom) with 0.45 µm pore size and analyzed using gas chromatography with a mass selective detector (GC-MS).

GC-MS Analysis

The GC-MS analysis of the propolis samples was performed with a Hewlett-Packard gas chromatograph 6890 series linked to a Hewlett-Packard 5973 mass selective detector (Company, address) with a 30 µm x 250 µm x 0.28 µm HP5-MS column. The temperature was programmed from 110°C to 280°C at a rate of 10°C/min and a 15-minute hold at 280°C. Helium was used as a carrier gas with a 1.5 mL/min flow rate. The injector temperature was 110°C with a 2 min hold. The total run time was 34 minutes, with 5.0 µL used as sample volume.

Compound Identification

Upon completion of the GC-MS run, the individual component in each peak was determined by spectral matches that could be found in the Wiley and National Bureau of Standards (NBS) mass spectral library (McLafferty et al, 1989).

Results and Discussion

The methanolic extract of propolis analyzed with GC-MS yielded 13 major peaks (Figure 2). Their components were identified using the NIST library (McLafferty et al, 1989) upon comparison with standard mass spectra. The major compounds identified based on the quality of mass spectra were 3-phenyl, 2-propen-1-ol, alpha-eudesmol, n-hexadecanoic acid, 9-octadecenoic acid, totarol, (Z) 9-octadecenamides, 7-oxodehydroabiatic acid, pinocembrin, chalcone, 1-eicosanol, and 17-pentatriacontene. The active principles with retention time (RT) and biological activities are listed in Table 1.

The propolis sample yielded 18 major peaks in the chloroform extract analyzed with GC-MS (Figure 3). After comparing their mass spectra, the active components of the samples were evaluated with the NIST library. Some of the peaks were also found in the methanol extract, despite chloroform retaining nonpolar compounds such as n-hexanoic acid and 1-eicosanol. Unique components of this extract were tricosane, 10-heneicosene, 1-tricosanol, and ethylene glycol monoethyl ether. The active principles with their retention time (RT) and biological activities are listed in Table 2.

Comparing the list of compounds from two extracts showed the following common compounds: b-eudesmol, n-hexadecanoic acid, tetradecanoic acid, pentadecanoic acid, 12-epinamanool, oleic acid, totarol, chalcone, 2',6'-dihydroxy-4'-methoxy, 1-phenanthrenecarboxylic acid derivative, 17-pentatriacontene, and 1-eicosanol. It is expected that there are differences in retention time due to the nature of the solvent. However, it is surprising that compounds have close retention time in both extracts except for 1-phenanthrenecarboxylic acid derivative and 17-pentatriacontene.

There are numerous studies on the presence of various phenolic compounds found in propolis. Results from GC-MS showed more than 100 compounds identified in the Greek propolis samples from both extracts (Tables 1 and 2). These samples contained phenolic compounds, such as aromatic acids and flavonoids, that act as bioactive principles for beneficial effects, including antimicrobial, antioxidant, or anti-inflammatory activity (Savka et al., 2015). The methanol extract was found to be rich in a variety of bioactive compounds, ranging from aromatic rings to alkanic acids. In contrast, the chloroform extract was rich in long-chain alkanes and alkanic acids with smaller phenolic compounds.

The methanolic extract exhibited several compounds that contained bioactive compounds reported in other studies. Among them are the following: totarol (a terpenophenolic), pinocembrin (a flavanone), n-hexadecanoic acid (an alkanic acid) and

octadecanoic acid. Totarol has been reported to display effective antimicrobial activity against gram-positive bacteria (Jaiswal, Beuria, Mohan, Mahajan, & Panda, 2007). This bioactive compound was also discovered in other research studies on Greek propolis (Kalogeropoulos et al., 2009; E. Melliou & Chinou, 2004). Octadecanoic acid has been reported to assist in preventing cancer and found to exhibit anti-inflammatory activity (Shashikala et al., 2016). Both n-hexadecanoic acid and the flavanoid pinocembrin were also found in Greek propolis, and a DPPH assay showed that pinocembrin displayed antioxidant properties (Kalogeropoulos et al., 2009).

The chloroform extract also contained compounds found in other Greek propolis studies. Aliphatic hydrocarbons such as tricosane and heneicosane were reported to be present in Greek bee propolis, and both alkanes are most commonly found in the Preveza region of Greece (E. Melliou & Chinou, 2004; Eleni Melliou, Stratis, & Chinou, 2007). Tricosane does not display any biological activity, while heneicosane exhibits antimicrobial activity when treated against pathogenic microorganisms (Vanitha et al., 2020). Oleic acid, an aliphatic acid with biological activities, was also found in propolis extracts from Greece and Cyprus (Kalogeropoulos et al., 2009). A study on the possible biological activity of the compound found that it had antibacterial activity against Gram-positive bacteria (Dilika, Bremner, & Meyer, 2000). Even though these compounds are not phenolic compounds, they are bioactive and can still be further assessed for future biological applications.

The various bioactive compounds in the propolis samples indicate its potential as a chemical with biological activities for the purpose of treating diseases. These results show that GC-MS is a useful instrument for analyzing the composition of propolis in different extracts. Despite different extracts, propolis samples can be like each other if they are from the same origin, as shown in this and multiple other studies. The differences in composition among the propolis samples analyzed can be observed by taking their location of origin into account, especially the surrounding environment where bees gather their materials. Differences may come from differences in vegetation, and seasonal differences. Regardless of propolis collection area or time



Figure 1. Propolis from Greece used in the experiment.

of collection, it appears that these minor differences do play a role in the varying compounds that make up the resinous material. Despite this, these findings indicate that the bioactive compounds found in the propolis samples may be beneficial to human health. Further research can be conducted on bacterial strains with the Greek propolis samples.

Figure 2. Total ion chromatogram of methanol extract of propolis from Greece.

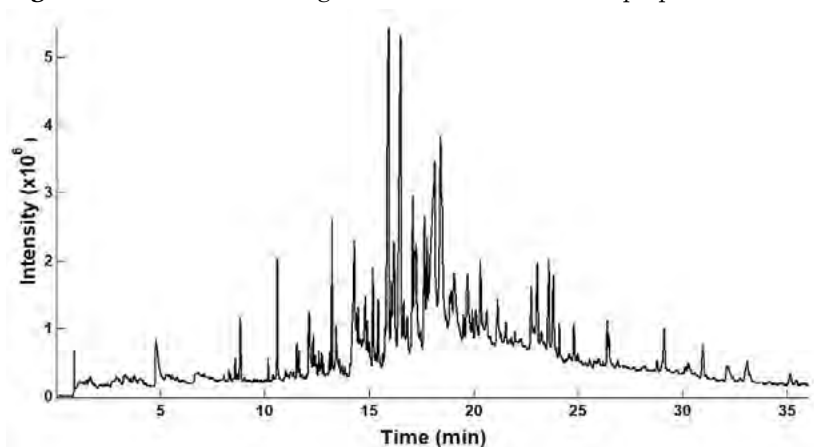


Figure 3. Total ion chromatogram of chloroform extract of propolis from Greece

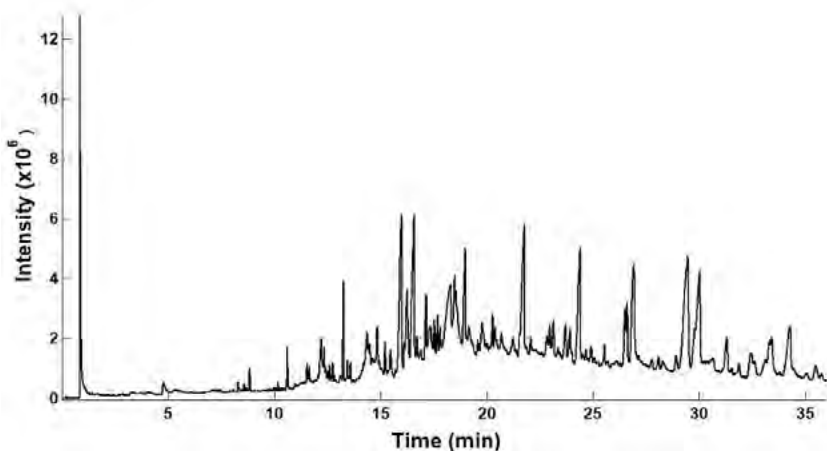


Table 1. Phytocomponents identified in the methanol extract of propolis sample from Greece by GC-MS with reported biological activities.

Retention Time	Name of Compound	Reported Biological Activity
4.839	(Z)-cinnamyl alcohol	antimicrobial (Guzman, 2014)
8.843	a-eudesmol	antimicrobial (Noriega, Balles-teros, De la Cruz, & Veloz, 2020)
8.843	-eudesmol	antimicrobial (Noriega et al., 2020)
8.843	(3E)-3-ethylidene-3a-methyl-2,4,5,6,7,7a-hexahydro-1H-indene	no activity
12.164	n-hexadecanoic acid	Antioxidant
12.164	tetradecanoic acid	antibacterial (Mohy El-Din & El-Ahwany, 2016)
12.164	pentadecanoic acid	anti-inflammatory (Venn-Watson, Lumpkin, & Dennis, 2020)
13.227	13-epimanool	antibacterial ¹
14.187	oleic acid	Antibacterial (Dilika et al., 2000)
16.480	Totarol	Antimicrobial
17.200	Oleamide	anti-inflammatory (Moon et al., 2018)
17.710	chalcone, 2',6'-dihydroxy-4'-methoxy	anti-inflammatory, antimicrobial, antifungal, antioxidant, antitumor (Rozmer & Perjési, 2016)
18.434	dehydroabietic acid bis (2-chloroethyl)amine	anti-aging (Cui et al., 2016)
18.434	1-Phenanthrenecarboxylic acid,1,2,3,4,4a,9,10,10a-octahydro-9-hydroxy-1,4a-dimethyl-7-(1-methylethyl)-, (1S,9R)-	no activity
19.051	(R)-pinocembrin	antioxidant (Kalogeropoulos et al., 2009)
20.349	Tectochrysin	antioxidant (Lee, Kim, Park, Shin, & Kim, 2003)
22.025	Chrysin	antioxidant, anti-inflammatory, anticancer, and antiviral (Mani & Natesan, 2018)
26.413	17-pentatriacontene	antiinflammatory, anticancer, antibacterial, antiarthritic (Kumar, 2018)
26.413	1-eicosanol	antitumor (Figueiredo et al., 2014)
29.122	Cyclotetrasiloxane	anti-diabetic (Tundis et al., 2012)
29.122	1-docosanethiol	no activity
29.187	1-docosene	no activity

Table 2. Phytochemicals identified by GC-MS in the chloroform extract of propolis sample from Greece, some with reported biological activity.

Retention Time	Name of Compound	Reported Biological Activity
4.842	2-methoxy-4-vinylphenol	antimicrobial (Mastelić, Blažević, & Kosalec, 2010)
8.845	-eudesmol	antimicrobial (Noriega et al., 2020)
12.199	n-hexadecanoic acid	antioxidant (Shashikala et al., 2016)
12.199	tetradecanoic acid	antibacterial (Mohy El-Din & El-Ahwany, 2016)
12.199	heptadecanoic acid	antitumor (Xu et al., 2019)
12.199	pentadecanoic acid	anti-inflammatory (Venn-Watson et al., 2020)
13.263	13-epimanool	antibacterial (Ali et al., 2015)
14.354	9-octadecanoic acid	anti-inflammatory
14.354	oleic acid	antibacterial (Kalogeropoulos et al., 2009)
14.354	oxacyclohexadecan-2-one	no activity
14.834	nonadecane, 1-chloro	no activity
16.309	Isocyclocitral	no activity
16.443	Totarol	antimicrobial (E. Melliou & Chinou, 2004; Eleni Melliou et al., 2007)
17.166	2-methylene-2,8,8-trimethyl-2-vinyl-bicyclo[5.2.0]nonane	no activity
17.675	chalcone, 2',6'-dihydroxy-4'-methoxy	anti-inflammatory, antimicrobial, antifungal, antioxidant, antitumor (Rozmer & Perjési, 2016)
19.102	1-phenanthrenecarboxylic acid, 1,2,3,4,4a,9,10,10a-octahydro-9-hydroxy-1,4a-dimethyl-7-(1-methylethyl)-, (1S,9R)-	no activity
21.784	Tricosane	no activity
21.784	Heptacosane	antibacterial (Mihailovj et al., 2011)
22.950	Tetracosane	cytotoxic (Paudel, Chand, Pant, & Pant, 2019)
24.459	cyclodocosane, ethyl	no activity
24.459	1-hexosanol	antimicrobial, anticarcinogenic (Figueiredo et al., 2014)
26.614	1-eicosanol	antitumor (Figueiredo et al., 2014)
26.957	Cyclooctacosane	no activity
28.123	tetrapentacontane, 1-54-dibromo-	no activity

29.426	17-pentatriacontene	anti-inflammatory, anticancer, antibacterial, antiarthritic (Kumar, 2018)
30.003	10-heneicosene	Antimicrobial (Vanitha et al., 2020)
32.472	lanosterol acetate	no activity
34.284	1-triacontanol	anti-neoplastic, anti-tumor (Lu et al., 2019; Zhou et al., 2018)

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Grace Unbound in Milton's *Paradise Lost*



Harriet Pfeegor
Author



Alice Blackwell, Ph.D.
Faculty Mentor

When Milton's theological treatise, *De Doctrina Christiana*, was revealed after his death in 1823, it changed the way many people interpreted the theological concepts reflected in his greatest work, *Paradise Lost*. Owing to his apparent Arminianism in *De Doctrina*, *Paradise Lost* has been largely accepted as supporting a similar Arminian view of grace. Jason A. Kerr explains that "by 1823, *Paradise Lost* had long since secured [Milton] a heroic place in the literary pantheon, which made his treatise more or less canonical by default." He states that "it is hardly surprising that the treatise's primary interest has predominantly lain in what it can tell readers about what Milton thought on various theological subjects... that figure prominently in *Paradise Lost*" (347-348). Yet, by divorcing Milton's epic from the theological biases present in his treatise, we unearth a less stringent and perhaps more accurate interpretation of the grace evident in *Paradise Lost* and may indeed find that Milton endeavors not to show simply the prevenient grace of Arminius but an all-encompassing grace which knows no such conformity.

That Milton was influenced by the Arminian perspective is a well-supported certainty, and one that Stephen M. Fallon has carefully documented in his close analysis of *De Doctrina Christiana* and other supplemental works from Milton. Indeed, Milton's treatise seems to reflect many of the doctrinal points submitted by Arminius himself. Perhaps most extreme and convincing is the belief that Calvin's irresistible grace (which insists upon the selection of both the elect and reprobate) makes God, not man, responsible for sin. Arminius argues that the Calvinist God "withholds the grace necessary to choose the good" and thus "moves to sin by an act that is unavoidable, and according to his own purpose and primary intention" (qtd. in Fallon 108). This belief is similarly proposed in Milton's treatise: "If God decreed unconditionally that some people must be condemned, and there is no scriptural authority for such a belief, it follows from this theory of unconditionally decreed reprobation that God also decided upon the means without which he could not fulfill his decree." He argues that "it is no use evading the issue in the conventional way by saying that God did not decree sin but decreed that he would permit sin." Instead, he proposes a convincingly Arminian perspective in stating that "God has predestined men only on condition that they believe and persist in their belief" (qtd. in Fallon 115). This, of course, reflects the proposition by Arminius that "God has elected for salvation those whom he foresees believing and persevering with the aid of grace" (qtd. in Fallon 111).

Yet, that Milton sympathizes with the Arminian doctrine is not enough to conclude that his *Paradise Lost* is solely Arminian in its own respect. Miriam Joseph, for instance, argues that *Paradise Lost* is "capable of being read as a poem embodying theological doctrines in conformity with those of the Catholic Church," regardless of the evident nature of Milton's own theology, suggesting that "Milton may have changed his views" or that "he may have put into the poem theological views that he did not personally accept" (249). While it is perhaps a stretch to presume that the theology proposed in *Paradise Lost* can be anything but Puritan in nature, or that Milton would purposely insert views he found "unacceptable," Joseph nevertheless exposes an interesting and important possibility in suggesting that the theology of *Paradise Lost* and that of its author can in some way be divorced from one another, and that the reader can thus extract entirely different doctrinal conclusions from each. Joseph correctly advocates that "the intelligent general reader commonly reads poetry for what it means to him rather than for precisely what the author meant by it" (250). In accordance with this conviction, it is not altogether unreasonable to propose that *Paradise Lost* may be read as much Calvinist as Arminian, despite the evident bias of Milton himself.

A contentious and potentially illuminating portion of the poem begins with the following statement by God the Father: "Some I have chosen of peculiar grace / Elect above the rest; so is my will" (lines 183-184). The Longman anthology footnotes suggest that, given Milton's Arminian stance revealed in *De Doctrina*, elect here likely "means no more than 'whoever believes and continues in the faith'" (1777 n1). Yet, divorced from the context of Milton's own theology, an "intelligent reader" (as Miriam Joseph suggests) may conclude differently. If, as Milton argued in *De Doctrina*, "the elect" are the same as "believers" (qtd. in Fallon 115), why would there be a need for the Father to choose some "above the rest"? Of course, the concept of election is not exclusive to Calvin. Arminius accepted the reality of predestination on the condition that it was dependent only "on God's foreknowledge" of who would make the "choice to believe" and "of the individual's free persistence or perseverance in that choice" (Fallon 114). Yet even Milton seems to break from his usual Arminianism on this point, insisting in *De Doctrina* that "if God be said to have predestined men only on condition that they believe and continue in the faith, predestination will not be altogether of grace, but must depend on the will and belief of mankind, which is derogatory to the exclusive efficacy of divine grace" (qtd. in Boswell 85).

Of course, returning to his Arminianism, Milton also suggests in *De Doctrina* that "no man believes because God has prescience about it, but rather God had prescience about it because the man was going to believe" (qtd. in Fallon 113). In *Paradise Lost*, however, the reader is convinced of man's inherent inability to do

any such thing. Milton's God the Father proclaims that "Man shall not quite be lost, but sav'd who will, / Yet not of will in him, but grace in me / Freely voutsaf't . . . that he may know how frail / His fall'n condition is, and to me owe / All his deliv'rance, and to none but me" (lines 173-182). An Arminian may focus on the first line, "sav'd who will," yet a closer look lends a curiously Calvinist perspective owing to the clarification "not of will in him." This suggests quite convincingly to the reader that man has no will of his own to believe; and that, in fact, his "fall'n condition" makes such an act impossible. Of course, the Arminian thought is that the ability for man to believe is still accomplished through grace lent by God, yet the condition that this grace is lent only to those who would have believed already seems paradoxical here. Of course, Arminianism would suggest that all have the ability to believe: Fallon summarizes the Arminian position of "conditional" predestination by the belief that "God decrees that those who freely accept universally offered grace will be saved" (103). Yet according to *Paradise Lost* it is clear none have such ability without God's interference. Thus, the only plausible conclusion the reader can arrive at is that God is the one choosing who to bestow grace to (and, with it, the ability to believe). This, though, is directly at odds with Milton's view (in parallel with Arminius') that God becomes the sinner if he has any part in choosing "that some people must be condemned" (qtd. in Fallon 115).

If the reader were to insist that grace is given to all, he would have to direct back to the Father's proclamation of the elect who are offered "peculiar grace . . . above the rest" (lines 183-184). He explains that "the rest" here will be offered a type of grace, as well, although evidently not the same (and certainly of a lesser value, as indicated by the former's position "above" the latter's). This second type of grace is defined by the softening of their hearts and the clearing of their senses "what may suffice" (lines 185-191). Yet we conclude here that this grace (unlike the "peculiar" kind given to the elect) is limited; and that, however sufficient, it is not enough to make the fallen man willing to believe, just as Adam was sufficient to resist temptation before the fall and still was tempted: "So will fall / Hee and his faithless Progeny: whose fault? / Whose but his own? ingrate, he had of mee / All he could have; I made him just and right, / Sufficient to have stood, though free to fall" (lines 95-99). Then, again, we are presented with the dilemma of God's choice in who will receive the "peculiar grace" and who "the rest" will be. As it stands, the Father's proclamation here would seem to reflect Calvin's belief, according to Fallon, "that Christ died for all, but that Christ intercedes (and thus makes the atonement effective) for the elect only" (109).

We as readers may then assume that "the rest," those apart from the elect, will fail in faith just as Adam failed, owing to the frailty of man's "fall'n condition" emphasized in lines 181-182. Furthermore, this group, according to the Father,

is excluded from mercy: "This my long sufferance and my day of grace / They who neglect and scorn, shall never taste; / But hard be hard'n'd, blind be blinded more, / That they may stumble on, and deeper fall; And none but such from mercy I exclude" (lines 199-202). As Milton would later express in *Paradise Regained*, "the door of grace turns upon smooth hinges, wide opening to send out, but soon shutting to recall the precious offers of mercy" (qtd. In Boswell 88). The Father claims in lines 189-190 that he will clear the dark senses of man "what may suffice," yet it is not unreasonable to draw the conclusion that only those elected with "peculiar grace" will truly accept this offered clarity; The rest, having presumably remained blinded (owing to their free will to "neglect and scorn"), will be "blinded more." The implications here are not so far off from the idea of the reprobate in Calvinist theology. If the Father simply foresaw that some would "neglect" and others would believe (as Arminius would suggest), we are back to the paradox of how anyone could believe without his assistance. Jackson Campbell Boswell extracts from Milton's *Christian Doctrine* that "there is no way man can earn grace" because "it is the free gift of God" (86), yet *Paradise Lost* suggests that this gift is not given freely (or, at least, not equally) to all.

We may surmise, then, that a case for a theology in opposition to Milton's own Arminianism can, indeed, be made. Yet if we assume that *Paradise Lost* is neither strictly Arminian (as evidenced in the text) nor Calvinist (as evidenced by Milton's own doctrine), what evidence of Milton's influence survives? In Jackson Campbell Boswell's exploration of grace in *Paradise Lost*, we may find the answer. Boswell here essentially makes a case for Milton's view of grace in *Paradise Lost* being a good deal more ambiguous than his Arminianist tendencies may at first suggest. Boswell explains that "although saints and scholars have written voluminously about the subtle differences between actual and habitual grace . . . Milton made little distinction between them" (83). He emphasizes that "Milton mentions the term 'prevenient grace' only once in *Paradise Lost*, but the theme of grace runs throughout the entire epic" (84).

Thus, we may find that Milton was more concerned with expressing a complete concept of grace in *Paradise Lost* than he was in defending any one doctrinal party's understanding of it. To Milton, this is perhaps a concept that extends beyond the limits of the strict preferences of either theology but borrows from each. On the one hand, it is freely offered to all; yet it empowers only those whom God's will sees fit to elect. It acts despite the will of man and comes "unasked" by him (qtd. in Boswell 90); yet it is evident that only God's select few will accept it. Ultimately, it can be understood as "the unmerited love of God" (Boswell 94) which is offered to all despite being desired by none, and which is accepted "not by any act of the will, but 'by a divine impulse'" (qtd. In Boswell 90) which he in his infinite wisdom selectively imparts. In *Paradise Lost*, one

may assume that grace is grace before it is either prevenient or irresistible, and that indeed it cannot be completely grace if it does not contain aspects of both.

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Forensic Genealogy: Using Family Trees to Solve Criminal Investigations



Celeste Clause
Author



Jennifer Taylor-
Innerarity, Ph.D.
Faculty Mentor

Abstract

When the Golden State Killer's identity was revealed in 2018, nearly 40 years after he terrorized California and eluded investigators, a new method for solving crime took the forensic and criminal justice world by storm. Forensic genetic genealogy has emerged as a new and innovative way for solving active and unsolved investigations and identifying nameless victims. By uploading biological DNA found at a crime scene, genealogists can find potential relatives based on the amount of shared DNA and then reverse engineer a family tree to narrow down a suspect. This paper examines the history, methods, misconceptions, and a few landmark cases of forensic genetic genealogy. Since 2018, countless cold cases and victim identities have been solved by using genealogical methods which may have never been solved otherwise.

Keywords: forensic genetic genealogy, forensic genealogy, genetic genealogy, forensics, cold cases

"Je suis le vainqueur!" This is French for "I am the victor!"

These were the last words that my great-great-great-grandfather exclaimed before he died from wounds that he received in a gunfight in 1909. Simple curiosity about who my ancestors are led to me find a fascinating story in my family history. Every day, around the globe, similar stories are heard; people find fascinating stories or even long-lost family members. Genealogical methods have been used for decades, centuries even, to trace family lineage. In the past this was done through family stories and old documents; however, now with new emerging technology and a growing knowledge of ancestral DNA, we can send off a saliva sample and have results back in the blink of an eye. What if I told you that simple curiosity about ancestry kick-started an idea that led to the capture and conviction of a serial killer? In 2018, the field of forensic genealogy took the criminal investigative world by storm with the capture of The Golden State Killer who had terrorized California and had detectives stumped for nearly 40 years. After this breakthrough, forensic genealogy led to solving dozens of cold cases and became part of a new technique in analyzing DNA from crime scenes. Forensic genealogy has opened the criminal justice world to many new possibilities because it is an innovative technique that takes a suspect's DNA and uses a method that essentially reverse-engineers that suspect's family tree. From that family tree, genetic genealogists can narrow down the list of suspects and, eventually, apprehend that suspect.

Science Behind DNA

To understand how forensic genealogy works, we must first understand two important things: the science and history behind Deoxyribonucleic Acid, or DNA, which is what stores the genetic instructions that make up a person. DNA is unique to each and every individual and determines everything about a person from the color of their hair to how their body will function. Each of these instructions is carried in different sections of DNA called genes. DNA is made up of nucleotides with four types of linked nitrogen bases. These chain-like links form a spiral staircase-like structure called a double helix. The four nitrogen bases are adenine (A), thymine (T), Guanine (G), and Cytosine (C). These bases pair together, A always with T and G always with C, and form the “steps” of that spiral staircase. The nitrogen bases are arranged in a specific order that contains biological instructions for everyone (National Human Genome Research Institution, 2020). For instance, if the nitrogen bases or ordered ATGGCT that might be instructions for someone to have blonde hair, while ATGCC might be instructions for red hair. The sequence of the base pairs is extremely important because it helps the scientist to know what kind of genetic material is carried in that DNA molecule.

History Behind DNA Evidence

DNA was first discovered in the late 1800s by a Swiss chemist named Friedrich Miescher who was studying white blood cells at the time (Your Genome, 2021). However, according to Deakin University (2018), it was not until the structure of DNA was solved in 1953 by Francis Crick and James Watson that the potential of examining a person’s DNA was realized. After the groundbreaking discovery of DNA, techniques for examining DNA have been constantly changing and becoming more advanced. However, prior to the discovery of DNA, the identification of criminals relied upon very different and, sometimes, less reliable methods.

The Bertillon System

One such early method of criminal identification was called the Bertillon System. The Bertillon system was created in 1879 by Alfonso Bertillon and it was a method that used various detailed measurements and photographs of a suspect, recorded the information, and created files and records for each person they brought in (National Institutes of Health, 2014). These records allowed for officials in the criminal justice field to track who inmates were, suspects, and even repeat offenders (Cole, 2002). Eventually, the Bertillon system was proven a faulty method after a man, William West, entered a US prison in 1903 and went through the standard Bertillon system measurements. Once they took his measurements and photos, he was matched to a file they already had on a man with the same name and measurements. However, though they had the same name

and looked alike, they were two different men, both with the name William West. Upon further examination, it was determined that though the men had the same name, looked very similar, and had the same measurements it was their fingerprints that ultimately distinguish them from one another (Asbrey, 2018). This error led to the rise of fingerprinting as a method of identifying suspects.

Fingerprinting

Every person on earth, even identical twins, has a different and unique fingerprint. These fingerprints are found on the tips of our fingers and form a unique swirling pattern. Though no single person has the same fingerprint, the different patterns can be classified under 4 distinct categories: the arch, the loop, the whirl, or the composites. The science of fingerprinting was brought about by Sir Francis Galton in the 1880s; however, it was not until the 1903 case involving the West men that the idea of fingerprinting began to be used for criminal identification (Barnes, n.d.) According to Barnes (n.d.), by 1924 fingerprinting was being used in countless cases and the Federal Bureau of Investigation (FBI) had formed its own identification division under J. Edgar Hoover. Today, we still use fingerprinting in numerous cases, but the discovery of DNA and a process called DNA fingerprinting led to another advancement in investigative and forensic techniques.

DNA Fingerprinting

Though DNA was discovered in the 1800s, it was not until 1984 that a technique called DNA fingerprinting, accidentally discovered by geneticist Alec Jeffreys, emerged, and transformed the way forensic scientists were able to examine crime scenes and cold cases. Jeffrey’s technique included identifying repeating sequences found in human DNA that are unique to every person (Saad, 2005). This opened the possibility for investigators to not only solve current cases, but also cold cases. That is exactly what happened in 1986, when Alec Jeffreys, with the help of police, was able to solve a cold case using his DNA fingerprinting technique (Saad, 2005). The case involving the murder of Lynda Mann and Dawn Ashworth became the first solved using the examination and analysis of DNA. Ever since this landmark discovery and application by Alec Jeffreys, forensic science has never been the same. As a result of the newfound technique, the FBI set up the Combined DNA Index System (CODIS) which is a database that houses the DNA profiles of existing offenders and DNA found at crime scenes. CODIS uses computer technology and forensic science that allows forensic labs at federal, state, and local levels to compare DNA found at crime scenes with the DNA profiles of existing offenders (FBI, 2002). Over the years, emerging technologies and different DNA testing techniques have emerged and have opened the world to so many different possibilities, especially in recent years.

The Rise of Forensic Genealogy

Early ways of identifying suspects have led to the utilization of one of the most recent and innovative strategies for analyzing biological DNA found at crime scenes. This is a method called forensic genealogy. The U.S. Department of Health and Human Services (2021) explains that genetics is the study of how genes are inherited and passed down from parents to children. When people have children, their genes pass on traits to their kids. Individuals inherit half of their DNA from their mother and the other half from their father (National Human Genome Research Institution, 2020). As a result, humans have 46 chromosomes that pair off, half are inherited from the mother and the other half from the father. Thus, humans have 23 pairs of chromosomes, the last pair of which are the sex chromosomes (XX for females and XY for males).

Genetic genealogy utilizes different types of DNA testing to see how much DNA a person shares with potential relatives and ancestors, and it uses traditional methods of genealogy to build family trees based on the results of those tests. Forensic genealogy, also called investigative genetic genealogy or forensic genetic genealogy, is the use of genetic genealogy approaches to identify victims or pinpoint a suspect by linking their DNA from a crime scene to a relative who has willingly submitted their DNA to a public website. The birth and history of forensic genealogy follow closely with the discovery of DNA and DNA fingerprinting. In the criminal justice world, DNA fingerprinting was a huge breakthrough in terms of evidence; however, in a completely unrelated field, the discovery of DNA was leading to a new way to discover family histories.

The History of Genetic Genealogy

In 1994 a mitochondrial DNA (mtDNA) test was used by scientists and historians to identify skeletal remains found in a shallow grave in 1991. DNA testing using mtDNA is the examination of the X sex chromosome passed down from a mother to her child, and allows for tracking all the way up the mother's line, meaning the test will tell about a person's mother, grandmother, grandmother's mother, and so on. Through these tests, scientists were able to identify the remains as those of the Romanov family who were killed and buried in 1918 (Bettinger, 2019). A Y-DNA test is used for males to examine and trace their father's line. So, a Y-DNA test would tell about a person's father, grandfather, grandfather's father, and so on. Because females get two X chromosomes, they are unable to undergo a Y-DNA test. According to Bettinger (2019), Y-DNA testing was used in 1998 to examine descendants of Sally Hemming, a slave of Jefferson's and DFNA testing determined that Jefferson fathered several children with her. At this point, the power of genetics was becoming overwhelmingly clear. By the early 2000s, direct-to-consumer (DTC) companies began to offer Y-DNA and mtDNA testing for a genealogist to use to find out more about

family histories. In 2009, autosomal DNA (atDNA) testing was introduced by the company 23andMe, which was a major turning point in this field (Bettinger, 2019). Now, instead of using Y-DNA testing (which only males could take) or mtDNA testing (which only traced up the maternal side), atDNA testing allowed genealogists to trace a person's DNA and lineage on both their maternal and paternal sides. A person has 23 pairs of chromosomes, the last of which are the sex chromosomes for which are tested using mtDNA tests or Y-DNA tests. The rest of those chromosomes are what make up autosomal DNA, which became the main type of genetic DNA testing used by consumer companies and social media made it possible for people to connect with their newfound family (TodayinDNA, 2018).

Collision of Criminal Justice and Genealogy: The Golden State Killer

In 2018, the criminal justice world and the genetic genealogy world collided. Genetic genealogical practices were used to identify and apprehend a serial killer. During the 1970s and 80s, an unknown assailant went on a murdering spree in California. This assailant was labeled The Golden State Killer and eluded capture for decades. Before the trail went cold, authorities had linked this suspect to thirteen murders and over 50 rapes (Kolata & Murphy, 2018). From one of the crime scenes, detectives had a well-preserved DNA sample (semen) from the Golden State Killer on file. However, at the time they could find no match in the CODIS database and scientists did not have the technology, nor the knowledge, to properly analyze the sample. That all changed by 2018. Forensic technology has advanced rapidly and innovative thinking led someone to realize they could use unconventional methods to analyze this DNA and find a match.

Genetic genealogists Cece Moore and Barbrea Rae-Venter are family history experts who help people build family trees and understand genetic genealogy through different DNA tests. Their methods have been extremely beneficial in helping adopted people track down their birth parents by using their DNA to find potential relatives. When approached by law enforcement, Rae-Venter agreed to help a detective in analyzing a sample of DNA from an old cold case which she later discovered was the Golden State Killer case (Murphy, 2018). Due to legal reasons, it was not possible for Rae-Venter to upload the DNA sample to a site like 23andMe or Ancestry without a court order; however, she knew of a loophole. She was able to use GEDmatch.com to upload the DNA sample, which had a looser customer agreement (Murphy, 2018). Once the Golden State Killer's sample was uploaded, Rae-Venter and Cece Moore got a hit on a potential relative. From there, these genetic genealogists were able to narrow down who the suspect might be, but they could not be completely sure without a recent DNA sample from the person-of-interest in comparison. Eventually, authorities obtained a discarded DNA sample from the suspect, and

they were able to match it and identify Joseph James DeAngelo as the infamous Golden State Killer (Murphy, 2018).

Figure 1 below demonstrates the basic steps involved when an investigation utilizes forensic genetic genealogy. A standard criminal investigation that uses DNA starts off two different ways depending on whether they have a suspect. If they have a DNA sample, investigators will try and match that to a known DNA profile in the FBI's CODIS database. Only once all suspects are ruled out do investigators turn to forensic genetic genealogy for assistance. The use of genetic genealogy serves as another tool for investigators to get a lead on the identity of a suspect. Moving through figure 1, we can trace the steps of the investigation and see where forensic genealogy comes into play.

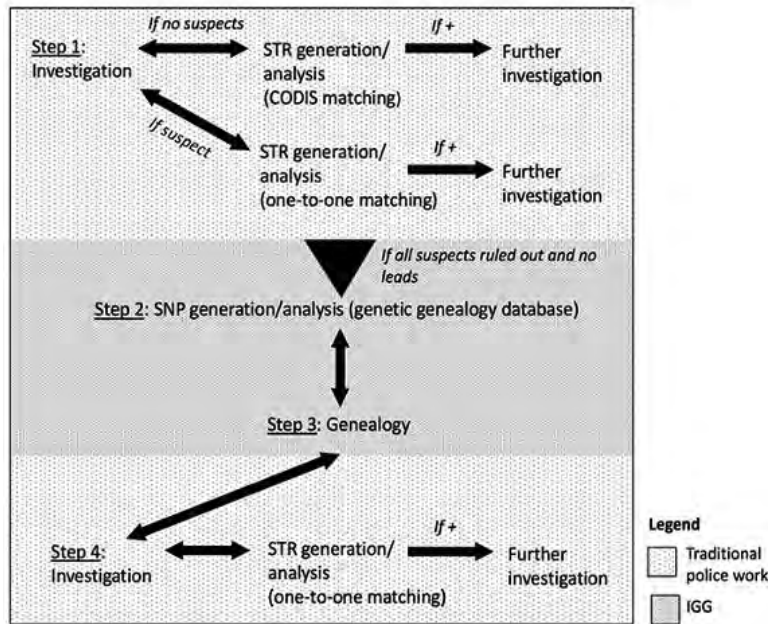


Fig. 1. Chart demonstrating the steps of investigations that use forensic genetic genealogy (Oxford University Press, 2021).

Forensic Genealogy Process

How exactly were genetic genealogists able to track down a killer and what are they looking at to make familial connections? When someone sends their DNA to a consumer company, like 23andMe or Ancestry, an autosomal DNA (atDNA) test is done on that sample, unless another type of test (mtDNA or Y-DNA) is requested. This test is used in genetic genealogy to trace ancestors

and relatives on the maternal side and paternal side, which also allows genealogists to compare how closely related two individuals are by looking at the amount of shared DNA two people have; DNA that they have is most likely inherited from a common ancestor. These genetic genealogists are looking at what is called atDNA single nucleotide polymorphisms (SNPs) to determine that close relation (Parbon NanoLabs, 2021). The segments of shared DNA that indicate a relationship between two individuals are analyzed by looking for long segments of identical DNA. It is unlikely that people who are unrelated would share long stretches of DNA, therefore only segments above a certain length are counted and measured in what is called centimorgans (cM) (Parbon NanoLabs, 2021). The centimorgans are a measure of genetic distance and work like a tape measure to determine how closely individuals are related. In general, about fifty percent of DNA is shared between parents and children. Therefore, the cM measurements of a parent-child relationship will be higher here than between that same individual and their second cousin. Once someone pays for a DNA test through companies like Ancestry and 23andMe, they will run these tests and give potential familial matches based on other people who have submitted their DNA. From this, a genealogist has a starting point and can begin the process of building a family tree. Table 1 below demonstrates the possible relationships between two individuals based on the range of cM that is shared. When it comes to using this genetic genealogy method to analyze DNA found at a crime scene, these genealogists are looking for the same information within that DNA sample, which is what Moore and Rae-Venter did when they received The Golden State killer's DNA.

Table 1. Chart for determining relationship based on the average percent of shared DNA and the range of centimorgan measurements.

cM Range	Average % of Shared DNA	Relationship
Around 3,600 cM	50%	Parent/Child
2300 cM - 3600 cM	37% - 50%	Full Sibling
1300 cM - 2300 cM	25%	Half sibling Grandparents Aunt/Uncle/Niece/Nephew
575 cM - 1330 cM	12.5%	Great-grandparent Great Aunt/Uncle Half Aunt/Uncle First cousin
215 cM - 650 cM	6.25%	First cousin once removed Half first cousin Half Great Aunt/Uncle/Niece/Nephew

75 cM - 360 cM	3.125%	Second Cousin
30 cM - 215 cM	1.56%	Second Cousin Once Removed
0 cM - 109 cM	0.78%	Third Cousin
0 cM - 75 cM	0.4%	Other distant cousins

This chart was composed using different sources both from the DNADetectives Facebook Group and from a chart found in *The Family Tree Guide to DNA Testing and Genetic Genealogy* (Bettinger, 2019). Additionally, this information is just averages and estimates of what has been seen in multiple different people who have tested with DTC companies. This means it is likely that a person will share 12.5% of DNA with a first cousin; however, it is also very possible that a person could share less or more DNA. It is not a full-proof chart and there are always exceptions because of the unpredictability of inheritance and genetic recombination. Genetic recombination is what happens when genes are passed down from parents to offspring, and it is the reason that children have a different arrangement of genes than their parents.

How Forensic Genealogy Differs from Traditional DNA Analysis

The use of genetic genealogy and traditional forensic DNA analysis is very different. For one, traditional forensic DNA only examines a small portion of DNA and they look at what is called Short Tandem Repeats (STR) (Greytak, Moore, & Armentrout, 2019), an examination that allows forensic scientists to generate a DNA profile of the suspect. The analysis looks at a small number of markers within a person's DNA. On the other hand, genetic genealogy analyzes and uses thousands of SNPs spread throughout an individual's atDNA (Greytak et al., 2019). Crime labs do not currently go through the process of analyzing SNPs (U.S. Department of Justice, 2019). Another major difference between Traditional DNA analysis and genetic genealogy is the size of the samples. Since genetic tests are willingly submitted, genetic genealogists often have a well-preserved sample to work with. Furthermore, the submitted sample, often in the form of a saliva tube or a cheek swab, is significantly larger than what is found at a crime scene. Biological DNA found at crime scenes is often found in small amounts that may be degraded, contaminated, or mixed between multiple individuals. This makes it hard for the DNA to be analyzed by both forensic scientists and genetic genealogists.

Legal and Privacy Concerns

When the Golden State Killer case was solved in 2018, legal and ethical questions were raised about the methods used to catch him. Genetic genealogists did not directly go through a DTC company (ancestry, 23andMe, FTDNA,

etc.) to find a potential relative, nor could they without a court order. Instead, they went through the third-party website GEDmatch. At the time, GEDmatch had a looser customer agreement that provided a loophole for genealogists to upload the Golden State Killer's DNA and find a potential relative. Greytak et al. (2019) explain that GEDmatch is a public database that was created in 2010 that allows users to upload their DNA results from regular DTC companies and make it possible for anyone to search and compare their DNA to other users on the site. After the identification and apprehension of the Golden State Killer, people began to question if the methodologies were ethical. Could law enforcement legally go into GEDmatch, upload DNA from a crime scene, use someone else's DNA to form a familial match, and identify a suspect? They were in uncharted waters now. The administrators of GEDmatch had a tough decision to make and in the end, they decided to allow law enforcement usage of their database (Greytak et al., 2019). GEDmatch PRO was then set up as a designated place for law enforcement and forensic teams to submit DNA from crime scenes and compare it to GEDmatch data (Verogen, 2021). There is still some privacy in place for users. Verogen (2021) states that all GEDmatch user data is available to help identify victims; however, only those who have consented to let their DNA be used for law enforcement purposes can be used to identify perpetrators.

Most DTC companies have a very detailed explanation of their security and privacy measures (usually under their privacy policy or privacy statement) used when handling their user's DNA. Therefore, when someone goes through a DTC company, law enforcement will not be able to obtain their DNA without a court order. On the other hand, third-party company's users are warned that other users of the site and even investigators have access to their data and can perform comparisons to their DNA. A survey done in 2018 by Guerrini et al. (2018), assess the public's opinion on whether they feel that the police should be allowed to access the genetic genealogy databases to catch a lead on an investigation. The results of this survey revealed that most of the people who responded supported the idea of police having access to genealogical databases for investigative purposes (Guerrini et al., 2019). It is worth mentioning that similarly, genetic genealogists do not have access to the FBI's CODIS database. Access to CODIS is limited to law enforcement use only, meaning a genealogist cannot go into the CODIS database and access the DNA profiles of offenders to do their work.

DNASolves: A New Database

DNASolves is a forensic-focused, third-party website that allows people to submit their DNA data from DTC DNA testing companies or a cheek swab for the company to create a DNA profile. The difference here is that DNASolves was set up with the specific intent to aid law enforcement with identifying individuals for investigation purposes and the public cannot access the records to

search or match against their own DNA (DNASolves, 2021). Additionally, unlike DTC companies, DNASolves is not a genealogical company that provides ancestry, health, or trait testing. Instead, is set up for the sole purpose of housing DNA profiles for investigators and forensic genealogists to build trees and solve the unsolvable cases or cases that would not have been solved otherwise. When a user submits their data or a cheek swab, that user's DNA profile is uploaded to their registry which is a database that houses the qualifying DNA profiles that have been submitted. On their website, DNASolves (2021), states that they assist in solving cold cases involving violent crimes like homicides and sexual assaults. Their website also includes a list of cases that have been solved and a page where people can donate to help fund the investigation of other unsolved crimes.

Misconceptions About Forensic Genealogy

When it comes to forensic genealogy, there are many misconceptions that people hold. One such misconception that people hold about forensic genealogy is that they believe law enforcement will arrest a DTC company's user's relative based on their participation in uploading their own DNA (Guerrini et al., 2021). Many people will look at it in a way that because their DNA led to a relative getting caught, that means they had a part in ratting them out. However, this is not the case. Forensic genetic genealogy serves only to give investigators a lead when the trail goes cold. It is not the basis, nor does it give law enforcement probable cause to arrest an individual. Another common misconception of forensic genealogy is that it leads to the collecting and testing of DNA of a lot of innocent people unlike traditional forensic genealogy (Guerrini et al., 2021). This is not accurate. In traditional investigations not involving forensic genealogy, investigators may collect DNA samples from numerous people to test and they are eventually cleared (Guerrini et al., 2021). In each method, the number of people whose DNA is being tested is not that different. One of the most common misconceptions that people hold is the belief that forensic genealogy will lead to people being wrongly convicted (DavisDNA, 2021). However, the investigation does not lie solely in the hands of forensic genealogy, it serves only to provide a lead for investigators to follow. Cases are being worked from multiple different angles in order to solve it, forensic genealogy by itself is not enough to get an arrest or a conviction.

Number of Cases Solved

Today, forensic genealogy is being used in numerous ways. Both catching people who believe they got away with their crimes years ago and also identifying victims who have been taken from their families too soon. Since this new method entrance to the scene, hundreds of cold cases have been revisited and even solved using forensic genealogy. After the Golden State killer case in 2018,

Cece Moore, one of the most well-known genetic genealogists, and her team have since solved more than 160 cold cases (Dugger, 2021). As of this date, DNASolves (2021) has solved about 44 cases since the database's creation in 2019. All of this, and so much more, has happened in only 3 years and success stories are being published every month. Genetic genealogy is being used to solve cases that might have remained a mystery forever.

The Oldest Cold Case Solved

The possibilities of forensic genealogy are endless. As of June 2021, the oldest cold case has been solved through genetic genealogy. According to Jin (2021), sixty-five years ago in 1965, the bodies of Patricia "Patty" Kalitzke and Duane Bogle were found in Montana. Three boys hiking in the Great Falls had stumbled upon Duane's body with his hands tied behind his back. Next to him was his still running, empty car. Police had learned that the night before, Duane had been out with his girlfriend, Patty, who was now a missing person. A day after the discovery of Duane's body, Patty's body was discovered fully clothed at the bottom of a rocky ravine (Jin, 2021). Since she was found clothed, investigators did not believe that she had been sexually assaulted. Over the course of the investigation, multiple suspects were ruled out leading the case to go cold for decades. In 2001, a detective at Cascade County Sheriff's Office took another look at the case and uncovered new information (Jin, 2021). When Patty's body was found, a vaginal swab was done during her autopsy and in 2001 a lab reexamined that swab. What they found was a single sperm cell that did not belong to Duane which suggested that she was raped that day. With the success of the Golden State Killer case and the groundbreaking application of genetic genealogy, Detectives and forensic scientists began to apply the same methodologies. They uploaded the DNA into genealogical websites and began to reverse engineer the killer's family tree. Eventually, in 2021 investigators were confident they had identified the killer. It was a man named Kenneth Gould; however, they discovered that he passed away in 2007 (Jin, 2021). To prove that Gould was the perpetrator, detectives had to request DNA samples from his children to compare them with the sample from the scene. It was a match. Yet again, forensic genealogy has closed a decades-old case that would have just remained unsolved.

Identifying The Victims

In many cases, investigators know who the victim is and they have to piece together the puzzle to find who the killer is. However, sometimes the opposite is true. They have caught the killer but they cannot identify the victims. Forensic genealogy allows for the identification of victims who would not have been otherwise. As of January 2021, the youngest known victim of Gary Ridgeway, also known as the Green River serial killer, has been identified nearly 37 years after

her remains were found. During the 1980s around the Seattle area, an assailant known as the Green River killer embarked on a murder spree. Later identified as Gary Ridgeway, he has since pleaded guilty to 49 women and girls, some of which had not been identified by the time of his conviction (Wallace, 2021). Ridgeway himself even claimed that he had killed many more people than he was charged with, going so far as to say he had lost count (Wallace, 2021). Based on an article in *The Denver Post*, Wendy Stevens, age fourteen, ran away from home in 1983, and a year later, her remains were found in a wooded area near a baseball field (Hernandez, 2021). Investigators said she had been strangled about a year earlier. For decades, because her identity was unknown, Wendy was referred to as “Bones 10” until Ridgeway admitted to killing her and dumping her body after which she was named “Jane Doe B10” (Kamb, 2021). However, other than knowing she was a victim of Ridgeway, her identity remained unknown. Efforts made by a nonprofit organization made up of volunteers called the DNA Doe project allowed for the genetic genealogical examination of her DNA and the construction of her family tree. Eventually, they identified the remains as Wendy Stephens, the youngest known victim of the Green River serial killer to date (Kamb, 2021).

The DNA Doe Project

The DNA Doe Project is a nonprofit, all-volunteer organization set up to aid in the identification of John and Jane Does across the country. It was founded in 2017, with the mission to use genetic genealogy to determine the identity of unknown persons. John or Jane Doe is the name given to unidentified deceased persons, usually victims of violent crimes. In most recent times, the DNA Doe project has become the go-to agency for law enforcement and medical examiners. The work they do is similar to that of genetic genealogists. They use the Doe’s DNA and build a family tree based on the closest family match in the DNA database, and eventually are able to identify who the Doe is. Recently, they have been credited with identifying Wendy Stephens, the youngest victim of the Green River killer. On their website, a list of active and pending cases as well as success stories can be found (DNA Doe Project, 2020).

Conclusion

Forensic genealogy has taken the investigative world by storm and has introduced a new angle of looking at unsolvable cases. Most notably, it has led law enforcement to identify the Golden State Killer, who remained hidden in plain sight for nearly 40 years. A case that kick-started the use of genetic genealogy for investigative purposes. Since then, it has led to the capture of countless people guilty of horrible and violent crimes. It has also led to the capture of people who thought that they had gotten away with their crimes. On the other side of

that coin, it has aided in the identification of numerous victims. These victims were given back the names that were ripped from them, and their families were given the closure they needed after going so long with not knowing what happened to their loved ones. With the advancements that have evolved in just three years, just think where the future of forensic genealogy is headed. The possibilities are endless. However, one thing is for sure: bloodlines can reveal people with blood on their hands.

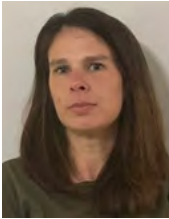
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Emerson's Philosophy of Education and the Dyslexic Child



Marcy Cox
Author



Owen Elmore, Ph.D.
Faculty Mentor

It is a disconcerting feeling when you realize your brilliant child is falling behind her peers academically for no discernible reason. You did everything you were supposed to – filled the nursery with books, read to her every day, limited TV to one Sesame Street a day, played all the fun, educational games, and primarily limited junk food—your kid should be a genius. Why is the child who had over a dozen board books memorized verbatim by 2 ½, struggling to read and spelling like someone spilled a bowl of alphabet soup on her paper? You talk to all the teachers, consult all the professionals, and finally come to terms with the fact that a “regular” school is not the answer for her. You find the most fantastic school for dyslexic children and luck into getting the last open spot in the fourth grade. Then a couple of months later, you stumble across an essay with a familiar educational philosophy and realize the blueprint for this unique school had to be inspired by Ralph Waldo Emerson, a man of many talents whose philosophy of education paved the way for dyslexic children to succeed in school – and in life.

Ralph Waldo Emerson was an American essayist, lecturer, and philosopher who fathered the transcendentalist movement of the mid 19th century. In a series of lectures and essays, Emerson outlined his transcendental core belief that while people and nature are inherently good, society does corrupt, and people are at their very best when self-reliant and independent. Emerson recognized the importance of education in one’s journey to becoming self-reliant and laid out an educational reform plan he believed would guide man towards these goals. Emerson’s philosophy of education, with its focus on the student as an individual and push for active, creative learning opportunities, remains relevant today, proving especially beneficial in the education of dyslexic children.

An essential tenet of Emerson’s philosophy is his focus on educating a child as an individual instead of the more prevalent educational focus on the class as a whole. Dr. Sahoo posits that Emerson utilizes his doctrine of individualism in his education philosophy, thus emphasizing the need to educate each child as an individual (Sahoo 47). In his essay “Education,” Emerson tells us, “Our modes of education aim to expedite, to save labor, to do for the masses what cannot be done for the masses, what must be done reverently one by one; say rather, the whole world is needed for the tuition of each pupil” (Emerson 153-154). Emerson later admits that he has no school reform plan at the ready, but the perplexities and difficulties in the school system will “solve themselves when we leave

institutions and address individuals” (Emerson 157). Emerson foresaw education as more than just book knowledge but as a way to develop a child’s own potential and believed the path to nurturing these abilities came from seeing and treating each child as an individual (Sahoo 47).

Emerson recognized early on that there was no one-size-fits-all concept concerning children’s education. By catering to the majority in a classroom setting, children were getting left behind, and even those students on level were ignoring the gifts and talents that marked them as individuals. This Emersonian focus on the individual is vital in educating a dyslexic child. Children with learning disabilities or differences have many strengths and talents that a standardized test can never measure. For example, my daughter, Charley, on top of being artistic, creative, and kind, can do crazy math computations in her head, can memorize most things read aloud to her, and comprehends things far beyond her years. Yet, she barely passed second grade because she did not score well on the weekly 18-page reading test that made up their entire quarterly grade. Placing a dyslexic child, like Charley, into a traditional group ruled academic setting only made her feel defeated and less able to achieve success based upon her merit and talents. Since moving to a school that focuses more on her unique strengths and abilities, she has become more confident and self-assured. Therefore, giving real-life credence to Emerson’s idea that focusing on a child as an individual is an important factor in one’s educational success and reaching his goal of self-reliance.

Another major piece of Emerson’s philosophy of education stresses the importance of non-traditional, creative, outside of the classroom learning opportunities as opposed to the more conventional rote memorization and recitation classroom method. Emerson believed that having a student regurgitate textbook knowledge only proved that the student had studied said material, not that student had a genuine understanding of the subject. He claimed children are “shut up in schools and colleges, and recitation rooms for ten or fifteen years, and come out at last with a bag of wind, a memory of words, and do not know a thing”(qtd. in Williamson 381) over two hundred years ago and yet this rote memorization model remains in many classrooms to this day.

Emerson reasoned that to educate a child, a school must attach meaning to a printed word so that the printed word automatically recalls a thing or experience. He believed the best way to achieve this connection in a child’s mind is to foster a learning process that allows a child to see and experience things through his senses (Hildebrand 63). He advocated an approach that teaches the isolated facts of varying subjects along with creative, active learning activities that illustrate correlations between different subjects and teaches the real-world applications that can further aid the students’ well-being in life. In her book *Overcoming Dyslexia*, Dr. Sally Shaywitz lays out an optimum education system for dyslexic

children that holds many of Emerson's educational tenets at his core. She stresses the importance of integrating classroom subjects, so when new words and concepts are taught, the words heard in science and social studies are familiar to a student, having already been learned in their specialized language arts program. (Shaywitz 347) This correlation between the subjects is beneficial to a dyslexic child through its use of nonrepetitive repetition, as it may be. A base of the exact words and concepts are being taught across the subjects, but in different and exciting ways to hold a students' interest and keep them engaged. Shaywitz's and Emerson's philosophy aligns even further in their belief that learners should be active participants in the classroom. They both recognize the need for students to become actively engaged with the material they are studying. Modern cognitive psychological studies have proven that active learning opportunities promote more profound levels of processing because it creates stronger connections in the students' minds (Williamson and Null 385). Having children read a chapter in a science book about energy, force, and propulsion will give them the black and white facts but going outside to kick soccer balls at various speeds and building battery-powered generators (Charley did both of these things in class last week) creates the connections and "pictures" in a student's mind that Emerson knew was crucial for truly educating students. Integrating correlations between subjects and applying active learning opportunities that Emerson so strongly proposed are vital proponents in a dyslexic child's education.

As gut-wrenching as it is to watch your child struggle, it is equally awe-inspiring when you see them begin to thrive. When one day you leave a list of Emerson quotes up on your computer screen and come back in to find said child voluntarily reading the quotes and copying her favorite one down to read aloud (!!!) to her class the following day. Dr. Laura Cassidy, the founder of the school that changed our lives, says, "...if kids are judged as having potential and value they are going to be okay. They may struggle on a test or not make an "A," but that's not really what's most valuable for them to get out of school. It's to have the self-awareness that they can contribute to society" (Shaywitz 354). Dr. Cassidy's goal for dyslexic children is the same as Emerson's for all children, the need for self-reliance in order to be successful, contributing members of society. Ralph Waldo Emerson's philosophy of education, focusing on the individual and active, creative learning activities, laid the foundation for an educational system that can aid all children in their journey to self-reliance.

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**Book Review: *Signs Preceding the End of the World* by Yuri Herrera,
Translated by Lisa Dillman (2009; English Translation 2015)**



Cathy Gilbert
Author



Arturo Contreras
Author



Ginger Jones, PhD.
Faculty Mentor

In *Signs Preceding the End of the World*, the power of language lies in how words are written, spoken, and translated. Mexican writer Yuri Herrera lays bare his powerful understanding of the systemic racism that migrants face on their journey from Mexico into the United States, and the barriers of language and identity that accompany that journey. The protagonist, Makina, translates telephone calls to and from the people of her community on the only land line for miles around. She puts her linguistic skills to use when her mother asks her to cross the border into the United States to deliver a handwritten note to her brother. Makina carries the message with her when she embarks on a perilous mission that was greater than she could have dreamed in her worst nightmare. Herrera, a professor of Spanish and Portuguese at Tulane University, won the 2016 Best Translated Book Award which he shared with his translator Lisa Dillman, a Professor of Pedagogy and Director of the Honors Program in Spanish at Emory University.

Herrera's sparse style of storytelling exemplifies the power of language. In just ninety-six pages, the author guides his reader through a labyrinth of the criminal underworlds of Mexico and the United States to explore the complex issues of migration, nativism, and profiling. Herrera code-switches, or blends parts of two languages—Spanish and English—to create a hybrid language that was spoken by the immigrants of Mexico in the United States. Makina's journey turns into more than just a physical adventure; it also explores the development of language, and the loneliness of the search for identity.

Makina's story shows how language is changed by the experiences of people who use words from other languages to create a pseudo-language, Spanglish, which eventually creates a different sense of the idea of existence. This evolution is but one example of the entire metamorphosis that people go through when they travel from one place to another. During an interview at the 2019 Bocas Lit Fest in Port of Spain, Herrera explained to the interviewer that (as Makina says in the novella) "...when you say 'Give me fire' [instead] of 'Give me a light' what is learned about fire, light, and the act of giving? ... When migrants have to give up their land, their families, language and identity, the loss is a kind of an end of the world, and they have to reinvent themselves" (Neima 4:35/52:45, 16:10/52:45). Despite the cost to the migrant, Herrera thought that "this loss

allows [the migrant] to create something new" (Neima 15:00/52:45)). Herrera defines this creation of the new language and identity by way of Makina's voyage in the novel. As Makina and the reader travel together, they learn and understand the mental gymnastics that immigrants undergo to understand the signs leading to the end of one world by the creation of a new one. "Signs" or markers in language require correct interpretation by listeners and readers or communication will be misunderstood. Despite living in the same world, time, and space as the White Americans, Herrera's characters do so in different strata of society. Each of their existences can be seen to each other only at the point of interaction, where friction occurs and where violence and misunderstanding are created because no one is reading the "signs" or markers necessary for communication.

The author dissects the inhumanity that migrants often endure on their pursuit to better lives. He fuses harsh reality with mythology in Makina's journey which led her to follow a path parallel to that of Mictlán, or underworld of Aztec folklore, where a deceased soul must pass through nine challenges to achieve eternal rest (Porras "Mictlan"). Herrera divides Makina's journey into nine chapters that parallel the Aztec belief of the soul's transformation to the chaos of human suffering that many migrants endure as they attempt to enter the United States. For instance, the second chapter of the novel is titled "The Water Crossing," which corresponds to the second level of Mictlán where the soul of the deceased encounters a passageway of water. Herrera discussed creating effective language and the linking of mythology. He believes that "literature is not subservient to reality but rather it is doing something else to reality. That is what I try to do with language and stories" (Neima 9:18/52:45). Merging mythology and the plot of his novel allows the author to create a story that takes its reader on a dark journey that exemplifies the difficulty, suffering, and inhumanity that comes with crossing the Mexican American Border.

While this book is an extraordinary example of modern storytelling, the novel portrays the Mexican males in the worst stereotypes that exist today. Mexican men in this novel are either rapists, drug lords, or weak. Makina's interaction with Mexican men include attempted sexual assault, invitations to prostitution, and abandonment of family and identity for a bit of the American Dream. This book could have been a great opportunity to express the hardships faced by both women and men who attempt to migrate for a better future for themselves and the families they leave behind. Instead, it portrays Mexican men in the same light as a former President did when he said, "They're bringing drugs. They're bringing crime. They're rapists." (Trump, June 16, 2015). Sadly, this was a deep flaw in the novel for one of us, a man of Mexican descent.

Despite this flaw, the book still has value for initiating discussion regarding crucial issues that American society tends to ignore. The power of a great novel is

to inspire discussion from different educated and informed points of view. *Signs Preceding the End of the World* is a beautifully written allegory about the conflict and complexity of merging two cultures regardless of whether Mexico or America want change, change has come to both cultures. One could rightfully argue that Herrera, a Mexican writer, chose to portray all the Mexican men of this novel as weak or predatory, and wonder why; however, the author does not have the last word, his reader does. As Mexican literature, *Signs Preceding the End of the World* is a great read because the reader is challenged to explore the idea that identity can be altered due to changes in language, geography, or culture. This book will force the reader to question what identity means and how mental worlds are created and ended by the inclusion of foreign languages and ideas. If the reader constructs an educated, informed opinion to see that there are at least two sides to every story, Herrera has done his job. We, of Mexican descent and of European descent, read this book from two different perspectives, but we think both are correct because each of us came away with an enlightened, educated higher order of thinking.

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**The “Right” Religion of Writers:
 How Literature and the Patronage System
 Were Influenced by the Religion of the Monarchy**



Tia N. Malak
Author



Alice Blackwell,
Ph.D.
Faculty Mentor

England experienced a multitude of changes during and after its Restoration period. The changes that occurred in literature included the beginnings of a commercial market and the decline of the patronage system, as well as the rise of new literary genres. One specific genre, satire, became increasingly popular and allowed writers like John Dryden and Alexander Pope to capitalize on the vast range of audiences. However, John Dryden was able to satirize this new commercial literature in “Mac Flecknoe” due to the privilege he sustained from being a Poet Laureate of the Crown and the support he received from likeminded aristocrats, as opposed to Alexander Pope who was denied access to the patronage system; when Pope wrote “The Rape of the Lock,” he needed to appeal to commercial audiences and the mass market to sustain his writing career. These men, who it is important to note were both Catholic, lived mere decades apart but had different, polarizing experiences throughout their careers because literature, politics, and religion were all intricately related.

John Dryden was influenced by the evolution of the patronage system into a more open, accessible commercial market and had strong feelings opposing the transformation. This evolution began when technological advances, such as the printing press, and rising literacy rates resulted in an increasing demand for more texts (Houston 270). The wealthy, highly educated upper-class citizens were now not the only ones who could read and afford to purchase written works. In “Mac Flecknoe,” a satire directed towards a rival poet, Dryden showed disdain for this new commercial market, as evidenced in the lines:

Now Empress Fame had published the renown
 Of Sh—’s coronation through the town.

 No Persian carpets spread th’imperial way,
 But scattered limbs of mangled poets lay:
 From dusty shops neglected authors come,
 Martyrs of pies, and relics of the bum. (Dryden 2105)

Here, Dryden accused Shadwell, and any other poet who resembled him, of being published simply based on popularity. Despite being popular, though,

so much of this printed work went unread that the pages were eventually used for other purposes. Dryden's satire, "as a text engaged in both political and literary criticism, ... is above all interested in the laws ... that regulate literary production, social institutions, and the metamorphic process that binds text and society together" (Kingsley 329). With "Mac Flecknoe," which was an attack on commercialized literature, Dryden tried to cling to what he believed was the correct way to regulate the publication of literature and its connection to society, the patronage system.

Under the patronage system, in which a member of society paid for a commissioned work, John Dryden wrote from a place of privilege as his target audience was the upper crust of society. Dryden was able to establish himself as a poet for the Crown writing in support of the Catholic monarchy ("John Dryden" 2075). The only people he had to please were the King and concurring aristocrats. If he satisfied them with his work, then his occupation was not impacted. Therefore, he was afforded an advantage over Alexander Pope who was also influenced by the patronage system, but negatively. Years later, Pope was denied access to the patronage system due to his Catholicism and "such civil disenfranchisement barred him from receiving the literary patronage most talented writers depended on for their livelihood" ("Alexander Pope" 2438). This left his target audience to be the public consumers when he wrote "The Rape of the Lock."

Because Pope did not have a patron, he needed to appeal to the mass market for his writing career to succeed, not condemn it like Dryden did. His satirizing piece, "The Rape of the Lock," was written to mock the actions of a society woman and her suitor. In this poem, Pope transformed Belinda herself into a commodity, parallel to the growing expendable nature of literature at this time. Referring to Belinda, Hernandez states "... she is engulfed in a sort of ideological fantasy, structured as a *consumer*" (580). Her purpose for her family was to marry, and to marry well, at that, not unlike how mass published literature needed to do well to support the author's livelihood. The expectations placed on Belinda can be seen in the lines:

These swell their prospects and exalt their pride,
When offers are disdained, and love denied.
Then gay ideas crowd the vacant brain;
While peers and dukes, and all their sweeping train,
And garters, stars, and coronets appear,
And in soft sounds, 'your Grace' salutes their ear.
'Tis these that early taint the female soul,
Instruct the eyes of young coquettes to roll,
Teach infant cheeks a bidden blush to know,
And little hearts to flutter at a beau. (Pope 2474)

With these lines, Pope also mocked the characteristics that an aristocrat would find ideal to make a suitable marriage match: the man should have a title and money and the woman should be beautiful and submissive. This ridicule could resonate with the non-aristocratic public because a poor person did not have such luxury to turn down a marriage proposal for reasons like the woman was not pretty enough or the man did not have the title of a lord. As a result of the need to pander to a more general audience, "The Rape of the Lock" was not as caustic towards its readers, contrasted to Dryden's contempt of this same audience in "Mac Flecknoe."

Alexander Pope needed to entice and humor these non-aristocratic potential readers with his satire as his religion already had the potential to adversely impact his career, unlike John Dryden, who could insult away. During the seventeenth and eighteenth centuries in England, much of the literature was religious or political in nature. The religion practiced by each writer ultimately played a role in his poetic career caused by the direct linkage of religion and politics. The accepted denomination of the monarchy fluctuated with the changing of the thrones and each new monarch had his or her own preferred writers. Compared to Pope, Dryden had the advantage of being a Catholic who wrote under a Catholic king, Charles II ("John Dryden" 2075). However, by the end of the seventeenth century the monarchy had once again returned to the Stuart reign. This left Alexander Pope, also a Catholic, to write under a monarchy that opposed papal loyalties ("Alexander Pope" 2438). The consequence of this shift was a disadvantage that affected Pope and his career. According to Hernandez, "The same year that Pope put the finishing touches on the poem, 1717, saw his definitive identification with the Catholicism that would ensure a life of discrimination" (577). In addition, legislation during the later Stuart period resulted in renewed prejudice towards Catholics (Sowerby 29). Due to religious persecution and lack of support from the non-Catholic members of high society, Pope was more limited than Dryden as to who and what he could or could not criticize for fear of the Crown.

The difference in support and lack of support from the Crown can be inferred to have influenced the polarizing subjects of each author's respective satire. John Dryden had been able to make a name for himself as a writer worthy to the King when he "... attacked powerful men: aristocrats, politicians, and their partisan hacks who intrigued against the Crown" ("John Dryden" 2075). In comparison, Alexander Pope could only expect derision and alienation from the Crown if he showed Catholic loyalties ("Alexander Pope" 2438). Pope needed to appeal to the public to make money, unlike Dryden who could abuse anyone but his patron and still be paid well for his work.

Shifts in monarchies created shifts in religious tolerance that touched nearly every citizen, especially the writers who produced satire. John Dryden and Al-

Alexander Pope only lived decades apart, but their career and religious experiences were immensely different. If Dryden had not had the support of the King when he published “Mac Flecknoe,” then he may possibly have needed to appeal to the rising mass market of literature that he had so rudely mocked. If Alexander Pope had been afforded the same support from the Queen when “The Rape of the Lock” was written, then he might have been able to use his wit for ridicule in defense of the Crown. Dryden and Pope demonstrated a shared expertise in the genre of satire, yet the contradiction of constant change that was prolific in England during their respective careers irrevocably caused differences in their writing experiences that polarized the targeted audiences of these men.

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Historic Blues: New Historicism in James Baldwin



Logan P. Messina
Author



Ginger Jones, Ph.D.
Faculty Mentor

Sonny’s Blues is a story about two brothers who live in Harlem. Both brothers have a different life experience in the neighborhood. The author James Baldwin, who grew up in Harlem, probably used his own life experiences to describe both the setting and the characters of his story, a component of the literary criticism of New Historicism, which views a work as directly affected by the time it was written as well as the direct experience of the author. *Sonny’s Blues* is an example of New Historicism in the experiences of James Baldwin through his depiction of the black cultural experience in Harlem and his similarity to the title character Sonny.

New Historicism is a literary theory that, in part, focuses on the specifics of the writer and the environment when the work was written. Peter Herman, in his book *Historicizing Theory*, claims that New Historicism “[does] not merely analyze anecdotes to demonstrate that “history” is heterogeneous rather than monolithic” (164). Claiming this theory does not identify history as a singular item, but rather as fluid to the people and environment involved. Herman continues his critique of this theory by saying the work must be “[embedded] in social and psychological formations” (162). This idea continues his point of the cultural environment as playing a crucial role in understanding the historicism of the story. By identifying New Historicism as dependent on writer and culture, this theory directly identifies James Baldwin’s work.

The black cultural experience of the characters in the story closely resembles the real-life experience of the author. Like Sonny and the narrator, Baldwin grew up in Harlem. After picking up Sonny and riding towards his home, the narrator noticed the car went “between the green of the park and the stony, lifeless elegance of the hotels and apartment buildings, toward the vivid, killing streets of our childhood. These streets hadn’t changed” (Baldwin 24). Even after years, Harlem was still the same violent place for the characters. Similarly, Baldwin upon speaking about his childhood home, “calls for a rent moratorium to prod Harlem’s landlords into repairing slum tenements” (Eckman 23). Just like the living situation depicted in *Sonny’s Blues*, the lack of attention to housing in Harlem had not been improved since Baldwin’s youth.

Baldwin was an integral figure in the Civil Rights movement in America. He traveled south to help with voter registration. He has “[prophesized] that he himself would probably be slain by white fanatics in the South; or even, he footnoted, ‘right here in the North’” (16). Fearful for his life whether in the south

or in the north, Baldwin describes the violence and disregard white people have toward his culture. In *Sonny's Blues*, the narrator's mother tells him a story about his dad and uncle walking home one night when "This car was full of white men. They was all drunk, and when they seen your father's brother they let out a great whoop and holler and they aimed the car straight at him. ... By the time he jumped it was too late" (Baldwin 29). The narrator's uncle was struck by that car and killed. This murder "illustrates the sort of hate crimes that were widespread, and frequently committed without consequence, during the generation before Sonny's" (Chapman 1). With the New Historicism theory, Baldwin pulls events from his real life. Not only does he pull from the feelings of fear being killed in either the south or the north, but also, he had experience of being afraid of a car. Recounting a tale of helping voters register in the south, Baldwin and his associates would stop talking when a car drove past, while "[they would] see the lights of the car pass the window. In this total silence. And [they would] be aware that everyone, including [them], [were] waiting for bullets" (Eckman 17). The volunteers for voter registration sat silent in fear that they would be attacked by the car just as the uncle was slain in his story. The historical context to Baldwin is one of the New Historicism comparisons to the story.

The character Sonny is similar to Baldwin. According to Fern Eckman, James Baldwin is "intuitive, rash, impractical, lonely, frightened, witty, rebellious and superlatively gifted" (13). He has an array of characteristics that all lead into his talent. Sonny, who is a jazz musician, battles with addiction. Sonny was "something [he] didn't recognize, didn't know [he] could be" (Baldwin 42). All the emotions from his addiction lead into his music. Sonny "needed a fix, ... needed to find a place to lean, ... needed a clear space to listen" (43). He felt the drugs made him a better musician no matter the consequences. However, after prison, Sonny realizes that the addiction did not give him any relief. In the same manner, Baldwin would go through stages of connecting with people and then leaving the area to escape from the pressures. "Sonny spends time in Greenwich Village with other musicians" (Chapman 1), when he isn't feeling supported by the narrator's in-laws, with whom he is staying. In the same manner, "Baldwin moved to Greenwich Village" (1). Baldwin draws from his life experience when writing the character of Sonny. After feeling too crowded by his peers, he "complains that the dependence he nurtured is robbing him of his life-rhythm" (Eckman 14). As a minority not only in race but also in sexuality, Baldwin would travel around the world to find a place where he was comfortable. In a way, he was looking for an escape. Throughout the story, Sonny was looking for an escape, too. Even as a young teenager, "[Sonny] had been hip on going to India" (Baldwin 24). His attention was how he could develop as a person outside of Harlem. After his mother died, "the reason [Sonny] wanted to leave Harlem

so bad was to get away from the drugs" (43). Both Baldwin and Sonny had a "dependence" they were looking to escape.

By using the New Historicism theory of literature, James Baldwin shows a personal connection to his short novel by describing life experiences, an environment, and similarities to one of his characters, Sonny. *Sonny's Blues* is set in Harlem; it discusses the Civil Rights Movement, which connects to Baldwin's youth. The novel explains the character Sonny, the artist who tries to find his spot in the world in the same way Baldwin, as a prolific young writer, escapes to Europe. The parallels and significance of culture in the story directly identifies this book as one that can be analyzed using the theory of New Historicism.

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The History of Parapsychology and Its Influence on Pop Culture



Eva Phillips
Author



Mark LaCour, Ph.D.
Faculty Mentor

Abstract

Psychic phenomena such as extrasensory perception, telepathy, telekinesis, and clairvoyance and mediumship are all concepts that fall under the category of parapsychology. Parapsychology became an official discipline of psychology at Duke University in the 20th century after psychologist J.B. Rhine founded the branch. Rhine and his colleagues conducted several experiments that evoked harsh criticism as many other academics regarded these concepts as pseudoscience. Even though parapsychology continues to be considered pseudoscience by the scientific community, it is still a major subject of interest for research as well as entertainment. The psychic phenomena involved in parapsychology caught public attention following the research conducted at Duke University, and thus parapsychology has integrated itself into popular culture as a widespread topic of entertainment. The influence that parapsychology has on pop-culture has allowed for the continuation of research of the subject.

Keywords: parapsychology, psychology, pseudoscience, phenomena, pop-culture

Psychological anomalies have long been a pinnacle of fascination for many. The idea that experiences and abilities can occur beyond the known dimensional planes of concrete science is widely received with skepticism, but there are enough persistent believers to keep such an idea circulating for investigations. Concepts such as extrasensory perception, telepathy, telekinesis, as well as clairvoyance and mediumship are widely considered pseudoscience, yet there is still current experimentation occurring to prove the possibility of these phenomena. These paranormal phenomena are considered inexplicable by scientific standards and are classified under the discipline of parapsychology. The fascination with the discipline of parapsychology has been thoroughly integrated into much of popular culture as a result of the widespread obsession with supernatural abilities. The intertwining of parapsychology and popular culture has created an increasing interest in investigating the possibility of the existence of psychic phenomena through scientific methods, and the belief in these phenomena may never entirely cease.

In the late 19th century, German philosopher-psychologist Max Dessoir coined the term “*parapsychologie*”—later anglicized as parapsychology—to describe the study of psychic phenomena. When he was fifteen years old, Dessoir

experienced “a spontaneous and overwhelming sense of oneness with the cosmos, that awakened a philosophical awareness and an interest in transcendental aspects of the mind” (Sommer, 2021). Years later, Dessoir became a member of the Society for Psychical Research, an organization that was founded to examine psychic or paranormal events. In 1888, Dessoir co-founded the Berlin Society for Experimental Psychology largely “as a response to wider concerns regarding [spiritualist Carl] du Prel’s metaphysical agenda” (Sommer, 2012); this Berlin association was considered an important forum for those “dissatisfied with the narrow methodological and philosophical boundaries of fledgling experimental psychology” (Sommer, 2021). Dessoir was openly skeptical of physical mediumship, but he was convinced of the existence of telepathy and published a series of telepathy experiments, stating the following: “It has ceased to be a question of proof of the facts of super-sensory thought-transference: all that matters now is merely to ascertain the conditions of such transference” (Sommer, 2021). In 1889, Dessoir proposed to change the title of the German periodical *The Sphinx* to include a subtitle *Sphinx’ Monthly for Parapsychology* (Sommer, 2012), thus introducing the term parapsychology to “denote a hitherto unknown fringe area between the average and the pathological states” (Sommer, 2021).

In 1930, Joseph B. Rhine adopted the term parapsychology—originating from Dessoir—and established the Parapsychology Laboratory at Duke University (Powell, 1994). In parapsychology, “psi” refers to cognitive (Psi-Gamme) and physical (Psi-Kappa) anomalies that cannot be explained by scientific standards such as extrasensory perception and psychokinetics. Extrasensory perception (ESP) is a form of cognitive psi in which information is gathered through means beyond the scope of the five known sensory processes, and it is often referred to as the sixth sense. During his time at Duke University, Rhine and colleagues conducted numerous experiments in telepathy, clairvoyance, psychokinesis, and precognition. To test his subjects for psychic abilities, Rhine used Zener Cards, designed by perceptual psychologist Karl Zener specifically for ESP research (Joyce & Baker, 2008). The cards came in packs of twenty-five and consisted of five different shapes (five of each) on one side—a circle, cross, wave, square, and a star—and a Duke building with a blue background on the backside (Joyce & Baker, 2008). Rhine would hold up the backside of the card to the subjects and ask them to name the shape on the front, so random guessing would only give a subject an overall twenty percent probability of guessing correctly (Leary, 2020). Rhine took many precautions to eliminate external forces that might affect the authenticity of these experiments. For instance, a machine was used to shuffle the cards to remove shuffling errors, and subjects were not told whether they had guessed correctly or not to prevent counting cards (Joyce & Baker, 2008). Additionally, the subject and the experimenter were placed in different rooms to

remove physical or facial cues. Rhine and his colleagues were extremely thorough in their precautions to prevent faulty results because they were eager to investigate parapsychology with concrete methodology. While Rhine's experiments of ESP inspired further investigation into parapsychology, "ESP remains at the fringe of scientific inquiry with 96 percent of scientists in the National Academy of Sciences skeptical of the concept" (Joyce & Baker, 2008).

In 1934, Rhine published a book entitled *Extra-Sensory Perception* in which he wrote about his research at Duke, "[believing] the data [was] supportive enough of ESP to warrant continued investigation" (Joyce & Baker, 2008). The book was largely met with criticism from the scientific community, but it succeeded in drawing worldwide attention to Rhine's work (Powell, 1994). American science fiction writer John W. Campbell was fascinated with concepts of pseudoscience, and his work was largely influenced by Rhine's theories on ESP. Campbell believed that it was entirely possible for human beings to possess latent psychic abilities and is credited for creating the field of "psionics", a combination of psychic abilities and electronics. Campbell's work is largely accepted as being responsible for the "ten percent of the brain" myth, which is "the popular and widely-spread belief that we only use or have access to ten percent of our brain's power" (Cherry, 2020). The ten percent theory proposes that the remaining ninety percent of the brain is capable of "unlocking" psychic powers, and despite a wide array of evidence debunking this theory, many proponents still embrace the concept. It is possible that these enthusiastic supporters use this theory (myth) to support their inherent belief that humans are capable of abilities beyond scientific explanation—perhaps it is empowering. Propelled by John W. Campbell, the "psi boom" of science fiction continues to influence popular culture tremendously. Amidst this psi boom in the early 1960s arose the creation of Marvel's X-Men, a fictional team of individuals who possess a wide variety of parapsychological abilities. Variations of psychic powers such as telepathy and telekinesis (also referred to as psychokinesis) are amongst the most common abilities depicted in the X-Men mutants. Telepathy is essentially communication with the mind or the transference of information from one individual to another beyond sensory channels, and telekinesis involves the ability to manipulate objects with the mind, and both completely violate the known laws of physics. According to co-creator Stan Lee, the X-Men are born with their abilities and are just considered mutants because he did not want to explain how they obtained their abilities, unlike some of his previous characters—Spiderman, the Hulk, etc.—who have well-developed backstories as to how they contracted their powers (mostly through some form of radiation). Even Spiderman possesses a form of parapsychological phenomena—precognition, or "Spidey-Sense". Although Spiderman cannot literally see into the future, he can "sense" danger in

his surroundings, giving him psychic reflexes beyond human capacity. The intermingling of parapsychology and superheroes serves as an inspiration because it entertains the possibility of capabilities beyond the scope of scientific laws, and who isn't curious to see if the physical laws of nature can be bent?

In the mid 1970s, renowned author Stephen King published *Carrie*, a horror novel dominated by parapsychological themes. The novel centers around Carrie White, an outcast teenage girl who is relentlessly bullied by her peers and controlled by her maniacal mother and discovers she has telekinetic powers. Carrie entwines aspects of parapsychology and psychological trauma, reinforcing the trope that trauma creates power by "unlocking" latent psychic abilities. This reopens the "ten percent of the brain" controversy by emphasizing the idea that humans possess unknown abilities and can (or must) be pushed to the edge to reveal them.

Even decades after the publication of *Carrie* and the continuous remakes of the motion picture version, the concept of psychic abilities continues to dominate popular culture, in recent years most notably in the hit Netflix science-fiction show *Stranger Things*. The protagonist of the show, Eleven, possesses telekinesis as well as a form of mediumship where she can communicate and "visit" a parallel dimension. As in *Carrie*, a major recurring theme throughout the show is that Eleven channels her psychological trauma into her psychic abilities, essentially giving her more power (or control). Emotions are constantly perceived as a catalyst for psychic abilities, which feeds into the collective need to advance the restricted understanding of scientific laws and further investigate aspects of parapsychology. Such thematic ideas of psychic abilities coupled with psychological strength in popular culture contribute to continued fascination with the discipline of parapsychology and experiencing the world beyond the five major senses. It is highly unlikely that any form of evidence discovered to debunk parapsychological phenomena will ever succeed in entirely extinguishing the inherent belief of supernatural experiences, simply because people want to believe and do not want to be constricted to the tangible laws of the universe.

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Coda

Holly Wilson, Ph.D.

It all began with experiences I had at Miami Senior High.

I told my high school counselor, Mrs. Ellen Pease, that I wanted to go to the high school summer program in Israel. I never thought about the cost of it; I didn't have any money. I didn't know until later that Mrs. Pease went to the Greater Miami Jewish Federation and arranged for them to pay my way. I earned high school credit for studying Jewish history and Hebrew. We stayed on a Kibbutz between Tel Aviv and Jerusalem called Beit Berl. We ate cucumbers and tomatoes and an egg for breakfast. And we studied Jewish history.



I asked the Rabbi if he could help me learn more about Judaism. He recommended *The Chosen* by Chaim Potok. The novel is about two Jewish boys, one Orthodox and the other Conservative. What caught my attention was the scholarship they were engaged in as they studied Torah (the Hebrew Bible or what Christians call the Old Testament) and the Talmud, a compendium of interpretation.

The students would first read and interpret a passage and then argue with others about what that passage meant and how other rabbis had interpreted the passage. The boys studied by themselves, but then everyone came together to discuss a topic. Studying was an isolated activity, but also a communal one. Students worked together to understand something that was difficult, but not so difficult they couldn't make progress.

This was the first time I was exposed to scholarship. I too wanted to study the Torah and the Talmud because it was the kind of research to which I could dedicate my life. But I was neither Jewish nor male, and in *The Chosen*, women did not study Torah.

But that was not the only exposure I had to scholarship in high school. Another teacher, Mr. Huffman, sent me to the University of Miami for the honors program in science to work with Dr. Rod Wellens, an Assistant Professor of Psychology. Dr. Wellens put me to work on an experiment on facial expressions. It was my task to test subjects about whether they could recognize emotions correctly based on facial expressions. I then wrote up the experiment with graphs and a narrative.

This was my first attempt at scholarship; but a very different type of scholarship. We were not debating ideas and interpretations of centuries old texts; I was trying to discover a truth. This was scholarship that was put in writing, not discussed in community like the Talmudic scholarship.

As I got closer to graduation, I applied to Vanderbilt University. A student I knew, who was two years ahead of me, was at Vanderbilt, and Dr. Wellens told me that Dr. Carroll Izard, the leading researcher in emotions and facial expressions, was at Vanderbilt. Vanderbilt offered me a scholarship that I readily accepted.

In Dr. Izard's senior course about emotions at Vanderbilt, I was exposed to yet another type of scholarship. I had to write a research paper, which meant going to the library (there was no Internet back then) and searching the stacks of books for a topic worth writing about. There were so many books! It wasn't like the Talmudic and Torah scholarship. I had to research a topic. I had to write about something that no one else had done before. I could reference other scholars, but I could not write what they wrote. I had to write something new.

The teaching assistant I had for the ethics class introduced me to a book she was studying by Hans-Georg Gadamer called *Truth and Method*. What she said about it intrigued me. I wanted to study it too. The book was about "Interpretation" and what goes on in interpretation. Thus, I became captivated by philosophy, and that created a problem. How was I going to learn all I needed from philosophy and psychology and religion (which I was also studying)? I couldn't triple major and finish college in four years.

It didn't take me long to figure out a solution: I would create my own interdisciplinary major. I consulted advisors in all three disciplines about which courses I should take and then submitted the proposal to the Associate Dean of the College of Arts and Sciences. I have no idea how I could have been so bold, but my new major, "Studies in Philosophical Anthropology," was approved. I completed the major, earned honors in philosophy, and graduated from Vanderbilt University in four years.

I went on to graduate school in philosophy, where I ended up studying Immanuel Kant and writing my dissertation on Kant's philosophical anthropology. After taking classes for 3 years at Penn State University, I spent 3 years in Germany researching and writing my dissertation on Kant.

I respect Kant more than any other philosopher I have read and studied. I found that his insights were fundamental and illuminative. I have since never found a better ethics than his. I think his philosophical anthropology is better than any other philosophers. I read and study other philosophers who also are captivated by Immanuel Kant.

I found a path in philosophy that led me to become a scholar. It is really satisfying to be a scholar and to be recognized by my peers who are also scholars. Being a scholar opens up the world and contributes to connections to a community of people from all over the world who find the same ideas meaningful. We are a community of scholars searching for the truth and working hard to create new truths that benefit humanity.

Contributors

Alice Blackwell, professor of English, moderates LSUA's annual Humanities Conference, held for online and on-campus students. Blackwell is a medieval scholar who teaches online and on campus.

Celeste Clause will graduate from LSUA in May of '22 with a B.S. in Criminal Justice. She has served with the campus Student Government Association and has become passionate about being a voice for people who cannot fight for themselves. She plans to earn a Master's in International Affairs. Clause enjoys painting in different mediums as well as reading various novels.

Arturo (Art) Contreras, currently a bridge construction engineer for the California Department of Transportation, aspires to be, after retirement, an English teacher in a developing part of the world. The idea of giving back to a world that has given him so much is a driving force in his life. Art was born in Mexico and raised in East Los Angeles by a single mother. The hard work and ethics, instilled in him by his mother, drove him to earn an Engineering degree from Cal Poly San Luis Obispo, in 1997. He will be earning an English degree online from LSUA in 2022.

Marcy Cox is a senior online English major living in Louisiana with plans to earn a Ph.D. She lives with her amazing daughter, two spoiled dogs, and her extremely patient husband. She works at LKA, a one-of-a-kind innovative charter school for dyslexic children and cannot wait to see how these brilliant kids grow up to change the world. And if one really pays attention, one can occasionally catch a glimpse of the back of Cox's head on a television screen—she moonlights as a movie extra.

Owen Elmore, a professor of English at LSUA currently teaching in the online program. He has published several essays about the work of William Faulkner and is listed in the *Faulkner Annotated Bibliography* published by Rowan and Littlefield.

Gardenia Evans lives in Nassau, The Bahamas. An online student, she graduated from LSUA with a degree in English last semester; this is her second publication in *The Oak Leaf*. She uses her skills to write position papers in support of her government's mandate.

Josephine Farshi completed her B.S. in Biochemistry in 2019. She is presently working as a dental aide while pursuing a Master's in Public Health at the City University of New York. She began, but did not complete, her propolis research while an undergrad at Pace University.

Cathy Gilbert, an online student, will graduate from LSU Alexandria in May 2022 with a B.A. English. She lives in Kentucky where she enjoys hiking in the woods and watching the rivers flow. Volunteering for animal rescue groups and reading children's literature are her passions.

Sandra Gilliland, Associate Professor of Psychology, is director of LSUA's CORE program. She is also a Licensed Marriage and Family Therapist (LMFT), specializing in clinical psychology.

Lisa Hamilton is an online English Major at LSUA. A professional actress and director for 20 years in the Houston area, she taught theater for College of the Mainland, The College of Santa Fe in New Mexico and Alvin Community College and worked as a teaching artist for Young Audiences Houston. Hamilton plans to become certified as a teacher and teach English to middle school students. She is the proud mother of three children—and three adorable dogs.

Jennifer Taylor-Innerarity, Associate Professor of Criminal Justice, not only teaching subjects such as Constitutional Law, but is also an active member in law enforcement and a leader in supporting diversity in the police force.

Ginger Jones recently edited a collection of essays about online teaching: *Solutions to Distance Learning in Higher Education* for Cambridge Scholars Publishing. She teaches English for LSUA's online English program.

Mark LaCour is an Assistant Professor of Psychology, with an emphasis in experimental psychology. His latest research considered the decision-making of online shoppers.

Tia Malak is a full-time online student at LSUA who lives in Conroe, Texas. She is a sophomore English major and intends to pursue a Master of Library Science after graduation. She is married and a mom to two children, ages 7 and 8. When she's not out having adventures with her family or volunteering at her children's school, she enjoys reading. This is her second appearance in the *Leaf*.

Logan Messina lives in Metairie, LA where he works as a systems operator in health care, helping to implement new, secure, medical records systems. He is pursuing an online undergrad degree in English.

Elmer-Rico E. Mojica is an Associate Professor in the Department of Chemistry and Physical Science at Pace University. His specialty is in Analytical Chemistry utilizing instruments to analyze chemicals of interest in different field of science and has been on faculty since 2011.

Eva Phillips plays soccer for LSUA when she's not pursuing her major in psychology. She likes eating pizza and hope to become a therapist for children and adolescents who must cope with trauma or mental illness.

Lawrence Phillips is presently a B.S. Forensic Science major in his fourth year at Pace University. He plans to earn a Master's in Forensic Science and hopes to work as a criminalist with focus on crime scene processing.

Harriet Pflieger is a 25-year-old online English literature major from South Central Pennsylvania. She is an aspiring book editor and enjoys reading Gothic horror in her spare time.

Kane Prestenback is an online Humanities major at LSUA. Originally from South Louisiana, he briefly attended LSU in Baton Rouge and Rollins College. A lifelong performing artist, he is a graduate of Circle in the Square Theatre School and a TS Eliot Fellow with The Old Vic in London. Kane has lived in New York City for over a decade, working as a performer, puppeteer, content creator, and arts administrator. Prior to New York, Kane performed and created experiential entertainment for many popular Central Florida attractions.

Mary O'Brien is an online English major who lives in Stafford, Virginia with her husband, daughter, and dog. After she completes her Bachelor of Arts at LSUA, she plans to earn a Master's in Literature. Currently the Commerce Editor for LoveToKnow Media, O'Brien previously studied Theatre at Indiana University of Pennsylvania; she is devoted to storytelling and the collaborative art of dramatic performance. A distance runner, O'Brien is training for her first full marathon. She is also enthusiastic baker.

Cheney Scull lives in Alexandria and majors in psychology at LSUA. She enjoys traveling and spending time with friends and family. She plans to pursue a Ph.D. in psychology and work as a counseling psychologist.

Holly Wilson has published articles on Kant as well as well-reviewed book issued by the State University of New York Press. She has a popular press book available about practical judgment. She is the Associate Editor of *The Journal of Ethics*, head of the English and Humanities Department, and happy dog mom to Luna.

