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From the Editor-In-Chief-

It is my pleasure to introduce the fourth issue of The Carthage Vanguard, a unique interdisciplinary research journal produced by a team of undergraduates. The role of academic research, once reserved for only those in graduate school, is becoming an essential part of the undergraduate experience. With that, there is a responsibility to recognize and publish unique perspectives, scholarly ambition, and profound original research. The Carthage Vanguard strives to create an avenue for talented, young researchers of all disciplines to share their work at the undergraduate level.

This year’s issue provides incredible reflections on the world around us, from heavy contemplations of abstract concepts to pragmatic discussions of problems in our communities. In the humanities section, our English articles explore the “paradox of creation,” the formation of female identity, and the role of beauty and aesthetics in The Picture of Dorian Gray. Our Political Science articles discuss Hobbes’s treatment of punishment in Leviathan as well as concealed-carry on college campuses. In the natural sciences section, we investigate ECM-cell interactions. In the social sciences section, we study the interaction of humans and stray dogs in Ecuador and the effect of “applied behavior analysis” in Southeast Wisconsin.

I am excited to say that with this issue we officially become an international research journal, as we are publishing our first article from the country of Ecuador.

I would like to thank all those who contributed to this issue: the researchers who submitted such exemplary work; the editors and reviewers for contributing their time and effort in selecting the articles; Jessica Livingston for all her work in designing this issue; and of course you, the reader, for fulfilling the true purpose of this publication.

Brett Grimes
Editor-In-Chief
Through scholarly inquiry, artistic creation, and community engagement, the Division of Arts and Humanities cultivates a rich artistic and intellectual community that fosters a respect for diversity and encourages lifelong learning. Students learn to engage critical and creative thinking skills as tools for reflection, expression, and engagement.
Inspiration and Imitation: The Role of the Poet in the Paradox of Creation

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Abstract

My primary text is Robert Duncan’s 1960 poem “The Structure of Rime I.” The first of a 29-part series, it explores the nature of writing and creation via the motif of the image, the personification of the sentence, and the ever-shifting patterns of power dynamics. Many critics and scholars discuss, as I will, the influence that Duncan’s time at the Black Mountain College exerts on his style of writing—that is, they note that his writing takes a nonlinear, collage-like format. Furthermore, they study the role that religious and mystic beliefs play in the creation of his work. I too will examine religion, specifically the Biblical allusions within “The Structure of Rime I,” and will demonstrate how they contribute to the poem’s claims regarding the creative process. A close-reading of the poem reveals that the poem’s speaker is representative of all poets. In addition to examining the religious components of the poem, analyzing the speaker’s relationship with writing (both the way he perceives it and the way his interlocutor, a nameless woman, suggests it ought to be perceived) unearths the poem’s function as a call to action for poets. It calls poets to abandon the structure and linearity of creative rules in favor of immersing themselves in the oftentimes abstract creative process, and to thus make “meaning” just as much a part of the process as it is a part of the product.

Introduction

“The Structure of Rime I” was published in Robert Duncan’s 1960 collection of poetry entitled The Opening of the Field. As the “I” indicates, this was part of a poetic series, for which he wrote 29 in total. The first 13 were published in The Opening of the Field; the next seven were published in Roots and Branches; the following five appeared in Bending the Bow; three more were published in Ground Work; finally, the 29th installation was published in Ground Work II.

These poems explore the nature of writing, as well as the nature of creation in general. As opposed to approaching writing from a strictly linear perspective, Duncan uses the image of the field—hence the title of the collection. Rather than adhering to neat and orderly linearity, writing for him unfolds spatially across a canvas, much like traditionally visual art forms (painting, drawing, etc.). Jackson Pollock, who lived from 1912 to 1956, was one such painter. His work was categorized as both “abstract expressionist” and “field painting”—“abstract” describes art that is without a concrete subject or narrative, and “expressionist” denotes the idea that the work of art somehow conveys emotion (Hudson). Likewise, “field painting” refers to works of art without a singular focus.

In a similar vein, A. K. Weatherhead’s essay entitled “Robert Duncan and the Lyric” notes that Duncan also describes his writing as a “collage” (Weatherhead 164). A term with a dual meaning, “collage” can refer to either the format of the poem itself, reiterating the idea of the spatial field and canvas’ rejection of linearity, or to the notion that a poem results from the interaction of a collage of inspiration, some examples of which include emotions, aesthetics, and history. Weatherhead explores the ways in which Duncan’s poetry fits the first definition. He isolates “The Fire: Passages 13” from Bending the Bow as an example. The beginning of this poem is, more or less, a chart of words—six columns of words, with six words in each column, underneath which lies another miniature chart, this one two by two. At first, especially if the reader is locked into the expectation of linearity, the opening of this poem may appear nonsensical. The poem seems to cross from writing, the traditionally linear art form, into the realm of visual art, a spatial field. By contrast, this analysis of “The Structure of Rime I” will focus on collage’s second definition, that of a poem being born out of a myriad of inspiring concepts.

According to an article entitled “A Brief Guide to the Black Mountain School,” the collage and field’s rejection of perfectly structured rules and the subsequent adoption of experimental form was practiced by members of the Black Mountain College. Duncan was one of these members, as were the writers Robert Creeley, Denise Levertov, and Charles Olson, among others. The Black Mountain College “was an educational experiment” lasting from 1933 to 1956. One of its main goals was to emphasize the importance of art to having a full “human understanding,” and they did so by elevating the importance of the creative process (Academy of American Poets).

Robert Duncan’s poetry, particularly that within The Opening of the Field, is representative of the ideals held by the Black Mountain College. In terms of visual formatting, many of his poems resemble the decentralized collage; in terms of content, “The Structure of Rime I” speaks...
to Duncan’s call for the movement to that open form of writing. The speaker of “The Structure of Rime I” wades through the issue of how to write as well as the relationship between writer and writing through his interactions with the written product itself and with a nameless “woman,” one “who resembles the sentence” (Duncan 6—though maybe Duncan would resist my imposing line numbers onto his nonlinear work). Throughout the investigation of the poem, other motifs that arise to help provide the answer to that question of how to write are those of images, sentences (and Sentences), the Law, and power dynamics.

A potentially unsettling question that poses itself throughout this exploration of writing and creation, and one that this thesis seeks to answer, is: What is the role of the poet? In this thesis, I will sift through “The Structure of Rime I” to evaluate the role of the speaker—a poet himself—as the recipient of a call to action, and then, as a poet, I also will attempt to respond to the call. The call that the “The Structure of Rime I” presents is for contemporary poets to, as the speaker does, wrestle with writing and those Laws that may or may not govern writing, and to thus investigate ways of finding and conveying “meaning.” One manner in which to conduct that investigation, as demonstrated by Duncan’s poem, is to make the work more about the process than the conclusion. Whereas conclusions have the potential to limit and confine, an instinctual and open-minded writing process informed by a collage of inspiration gives meaning the space it needs to emerge.

Survey of the Literature

Much scholarly focus has been placed on Duncan’s later work, leaving The Opening of the Field comparatively less explored. Perhaps this is due to the fact that Duncan himself did not introduce the label “collage” until Bending the Bow, which was published in 1968, eight years after The Opening of the Field. However, the seeds of the idea had already been planted and can be seen in his earlier works, given his time spent in the Black Mountain College and the emphasis on the use of the “field” there. It also seems to be the trend that if any focus is placed on his earlier work of The Opening of the Field, it tends to be on the poem “Often I am Permitted to Return to a Meadow.” Focus on “The Structure of Rime I” specifically is few and far between as well (if anything, it is only an analysis of the “Structure of Rime” series as a whole that has occasionally cropped up), and so this is where my thesis will insert itself into the existing discussion.

The “collage” as an end result of Duncan’s writing process is not the only focus of critical scholars’ work on Duncan. A. K. Weatherhead, for example, besides investigating the manifestation of the “collage” in Duncan’s later work, also explores some of the origins of the collage, as well as some of its consequences. He attributes Duncan’s usage of it to the writers Ezra Pound and T. S. Eliot, proponents of the idea that language ought to be perceived in more of a simultaneous fashion than a linear one. They “suggested that word groups would be perceived simultaneously rather than in temporal sequence” (Weatherhead 163); they wanted more focus to be directed toward how the poem functioned in space. Weatherhead describes this as the poem’s “architecture” (Weatherhead 167). He then interprets the potential consequences of that collage format. One is that the poem escapes having a single focus or a single meaning (a characteristic, described earlier, of “field painting,” or in this case, “field poetry”). Another consequence actually has to do with the risk of failure within this particular format—“[The elements of a poem] appear as if they had come to the poet all together in a single moment of time; and he moves quickly from one item to another, keeping it moving” (Weatherhead 169). This hints at an innate inability of the poem to sufficiently represent the thought process of the poet. For as much of a role that shape and spacing can and do play in poetry, it seems that a choice still must be made as to what is written first by the poet, what is perceived first by the reader. The representation becomes an approximation, an imitation of the thoughts that occurred in simultaneity.

As Weatherhead’s does, another essay, Norman Finkelstein’s “Late Duncan: From Poetry to Scripture” also focuses on a time later than The Opening of the Field. But again, the ideas proposed here may be translatable; with the advantage of hindsight, it may be possible to determine whether “The Structure of Rime I” from The Opening of the Field could actually be a predictor for the trends Finkelstein observes in Duncan’s later work.

Finkelstein also addresses the “collage” that characterizes some of Duncan’s work. He looks at this collage in terms of the influences that shaped Duncan’s approach to the concept of creation. Out of this comes a list of terms to define to understand Duncan’s perspective, as they are terms that essays consistently tend to attach to Duncan’s name. “Gnosis” (the belief in or possession of a spiritual/transcendental knowledge), “theosophy” (a movement that can be traced back to Gnosticism, referring also to divine knowledge or wisdom), and “emanational” (a view of creation that refers to the process of the thing being created issuing forward; it also often refers to the process of creation by God as opposed to creation from nothing) are three of these terms (“Gnosis,” “Theosophy,” “Emanational”). Finkelstein discusses these terms in relation to Duncan’s work overall; for the purposes of this thesis, an analysis of “The Structure of Rime I” will speak to the third term, emanational, in order to investigate the poet’s task of creation.

Finkelstein then discusses the role of this “collage” on the content of Duncan’s work, namely, his apparent fascination with the concept of the “creation and fall of man” (Finkelstein 345). The essay then includes a quote from Duncan whose content ties directly into what this thesis will discuss in terms of images and imitation: “Poetry in its steady revisions of its original vision, an accurate eye correcting its accuracies, an image of a man made in his own image inaccurately” (qtd. in Finkelstein 345). From here, he concludes that the poem then becomes both the creation and the fall—a concept reminiscent of Plato’s pharmakon, medicine and poison in one (qtd. in Derrida 1701). The idea of accurately imitating or representing an image, and the idea of the poem’s nature as both the creation and the
fall, add a Biblical layer to the analysis. Because the poem will inevitably fail to accurately imitate the image as a result of its equally inevitable fall from the grace of creation, still choosing to utilize imitation as a means of creation is portrayed as sinful—even blasphemous—because that imitation can never truly portray the original.

Finkelstein talks about how meaning (the meaning) is “inexpressible” (Finkelstein 357)—but in fact, this becomes the reason for the act of imitation. It is actually less about reducing something to what one understands about it (a potentially blasphemous avenue) and more about using the resources at one’s disposal in order to somehow begin to express the ineffable. This makes imitation, rather than a disrespectful or sacrilegious practice, a viable response to Duncan’s call to action for contemporary poets.

“The Structure of Rime I”

I ask the unyielding Sentence that shows Itsself forth in the language as I make it,

Speak! For I name myself your master, who come to serve.
Writing is first a search in obedience.

There is a woman who resembles the sentence. She has a place in memory that moves language. Her voice comes across the waters from a shore I don’t know to a shore I know, and is translated into words belonging to the poem:

Have heart, the text reads, you that were heartless. Suffering joy or despair you will suffer the sentence a law of words moving seeking their right period.

I saw a snake-like beauty in the living changes of syntax. Wake up, she cried. Jacob wrestled with Sleep – you who fall into Nothingness and dread sleep. He wrestled with Sleep like a man reading a strong sentence.

I will not take the actual world for granted, I said.
Why not? she replied. Do I not withhold the songs of birds from you? Do I not withhold the penetrations of red from you? Do I not withhold the weight of mountains from you?

Do I not withhold the hearts of men from you?
I alone long for your demand. I alone measure your desire.

O Lasting Sentence, sentence after sentence I make in your image. In the feet that measure the dance of my pages I hear cosmic intoxications of the man I will be.

Cheat at this game? she cries. The world is what you are. Stand then so I can see you, a fierce destroyer of images.

Will you drive me to madness only there to know me? vomiting images into the place of the Law!

Analysis

This thesis will now separate the poem into smaller pieces in order to make them more accessible, and then retype them chronologically, discussing each in turn. Duncan’s poem begins thus:

I ask the unyielding Sentence that shows Itsself forth in the language as I make it,

Speak! For I name myself your master, who come to serve.
Writing is first a search in obedience.

Immediately, the capitalization of “Sentence,” as well as “Itsself” (whose antecedent is “Sentence”) elevates its—or more accurately, Its—status to one higher than that of any other sentence. By capitalizing these words, it almost seems as though the speaker is showing the Sentence respect; however, the use of the word “unyielding” counters that. This is a poem in which adjectives are a rarity, making the ones that are used all the more significant. In the same breath that the speaker seems to acknowledge the respect owed the Sentence, he calls It “unyielding,” conveying both frustration and his own expectation that, for some reason, he seems to feel he is owed the Sentence’s compliance. It seems likely that that expectation stems from his perception of the role of the poet—the poet does the writing, and a poem (or a sentence) is the manifestation of the poet’s will. Even as early as within these first few lines, the conflicting displays of both respect and disrespect reveal the speaker’s giving himself away as someone who lacks a full understanding of the creative process. The fact that this sort of exposure occurs in the first few lines of the poem suggests that the rest of the poem will in part serve to show the speaker’s journey toward that full understanding.
This was touched on briefly in my initial analysis of the poem’s first lines, but to put it more explicitly and delve more deeply into it: these opening lines of the poem describe the nature of the writing process in terms of a relationship. The speaker notes that “writing is first a search in obedience,” but who must obey whom? In the previous two lines, the speaker names himself “master” over the Sentence, and then identifies one party as the one that must serve. Grammatically, “who come to serve” seems to refer to the Sentence, the “your” of that line—as in, “For I name myself your master, [you] who come to serve.” The line would not be grammatically correct if “who come to serve” referred to “master”; it would need to say, “who comes to serve” instead. And yet, the structure or syntax of the line—that is, the fact that there is not that extra word “you” to make it evident to whom “who come to serve” refers, the fact that there is nothing but a comma to separate “master” from “who come to serve”—almost indicates, or at least evokes hesitation regarding, the uncertainty of which party it is that is doing the serving.

Further complicating the nature of the master/servant relationship is the contrast between the first two lines and the three that follow. “The…Sentence that shows Itself forth in the language as I make it” expresses the idea that the words being spoken and/or written is the necessary step in order for the subject to come into being. This begins a series of parallels to the Bible, specifically the book of Genesis, where creation by words is shown to occur as well: “Then God said, ‘Let there be light,’ and there was light” (Genesis 1:3). This concept, creation by words, is referred to as the “poet-priest.” In “The Speech-Giving Spirit,” priest and writer Simon Tugwell helps define this term: “If it is in any sense true that man was created to speak God’s language, then man must be the poet-priest of creation, uttering aloud the word by which God created each thing and all things in the silence of his heart” (qtd. in Dearborn 142). Beyond using the similarities in both the speaker’s and God’s processes of creation to parallel to speaker to God, this quotation also ties the speaker’s poetic process to Duncan’s poetic process from his time at the Black Mountain College. The fact that the nature of a poet-priest’s creative process involves bringing a concept into being practically simultaneously with giving the command makes that process as much a part of creation as the product. As the Black Mountain College preached, the process and product must overlap.

And yet, if the words being put to page is enough to bring the subject into existence, and if the speaker being cast as the poet-priest puts him on a level of power parallel to God, why does he need to command the Sentence to speak? That contrast between what the speaker claims to be doing (“ask[ing]”) and the command he is shown to actually give (“Speak!”) seems to downplay his self-professed role of “master,” though when he does profess this role, it appears decisive, final. Perhaps this is merely an effort on his part to reclaim that dominance he once had or wishes to have. As mentioned earlier, he also describes the Sentence as “unyielding,” an acknowledgement of the Sentence’s disobedience and failure to follow commands, which further upsets the master/servant binary. Finally, once again solidifying the confusion, the second stanza concludes with, “Writing is first a search in obedience”—but is it the writer who must be obedient? Or the writing itself? This ambiguity in wording hints that the speaker may in fact have some degree of understanding that the creative process is more complicated, more reciprocal, than the poet simply being the master and the poem simply being the servant. However, despite the inklings of understanding he expresses here, the speaker spends much of the rest of the poem attempting to rebel against it, to reestablish himself as the master.

There is a woman who resembles the sentence. She has a place in memory that moves language. Her voice comes across the waters from a shore I don’t know to a shore I know, and is translated into words belonging to the poem.

The first sentence of this stanza of the poem seems to be a response to the call that the speaker makes in the previous one. “Speak,” he says, and the next act that comes to pass is the arrival of this woman. Because the speaker is addressing the writing when he gives this command, and because the woman’s presence appears to be an answer to that command, the woman is in some way paralleled to writing. However, to slightly modify that relationship, the woman is only said to resemble the “sentence,” lower case “s,” which implies that she resembles a mere imitation of the most Ideal Sentence, capital “S.” She then seems to be relegated to an inspirational or Muse-like figure for the speaker; and yet, the fact that her presence is linked to the writing itself makes it seem as though she actually, despite the note of “resemblance,” is the actual text of the speaker’s poem itself.

To return briefly to the poem’s opening once more: “I ask the unyielding Sentence that shows Itself forth in the language as I make it, / Speak!” French deconstructionist Jacques Derrida speaks of all texts living in conversation with one another; these lines of the poem read similarly to the opening lines of Homer’s Odyssey, in which the narrator invokes the Muses to aid in his retelling of Odysseus’ story. Although the speaker of “The Structure of Rime I” does not directly label it an invocation of any sort of Muse, God, higher power, etc., choosing to begin a creative work by asking another entity to speak similarly characterizes both works of literature—and this connection is made even stronger by the previous interpretation of the woman being likened to a Muse. Once again, within these three lines, a power dynamic that will continually develop throughout the rest of the poem is both established and already questioned. The speaker’s giving the command to speak apparently puts him in power; however, within this command is the admission—a reluctant one, one that

1 The notion of the “Ideal” is explored by Plato in Book X of his Republic. He describes the “idea” or “form” of something as “truth,” and any attempt to create that idea or form as “representation” (Plato 65).
he tries to hide—that without the assistance of a second entity, the story will not be able to unfold.

The final sentence of this stanza has two different implications that continue to question the master/servant binary, as well as the role of the woman. “Her voice comes across the waters / from a shore I don’t know to a shore I know, and is translated / into words belonging to the poem”: This makes the woman’s voice instrumental in the creation of the writing—though she is not the one doing the writing; her voice is simply translated into that writing. Again, she seems to be both the inspiration for the writing as well as the literal text itself; however, this then leaves the question of who is physically doing the writing unanswered. If the lines leading up to this stanza are used to answer the question, it would seem to make sense that the speaker is still the writer. However, the use of passive voice (“Her voice…is translated”) casts hesitation over that interpretation by begging the question, “Is translated by whom?” If it were the speaker, why would he not explicitly state it?—he has already demonstrated a desire to be known as the “master.” The sudden shift from that attitude indicates that perhaps he can no longer be credited with that authorship. The second issue that alters the meaning of the master/servant binary is the acknowledgement that the “words [belong] to the poem.” Again, they are not said to belong to the speaker of the poem, who earlier so adamantly identified himself as “master,” so perhaps he is less of a master of the writing than he thinks.

Have heart, the text reads, you that were heartless. Suffering joy or despair you will suffer the sentence a law of words moving seeking their right period.

The beginning of this stanza, “Have heart,” is a command, but is followed by, “[Y]ou that were heartless.” It is written in the past tense already. The simple act of saying, “Have heart” is enough to cause the having of a heart to happen. This returns to the idea of the poet-priest, or God’s methods of creation in Genesis: the notion that speaking the words is enough to bring the concept into existence.

Another Biblical tie here lies in the fact that “Have heart…you that were heartless” reads similarly to the Beatitudes. The only difference is that the Beatitudes do not possess this poet-priest quality—the second half of the sentence is in the future tense: “They are blessed who grieve, for God will comfort them” (Matthew 5:4). In this instance, grammatically at least, simply saying, “They are blessed who grieve” is not enough to bring into effect their being comforted; that remains some future outcome. But it is a promise, a promise that something currently imbalanced will soon be righted. Likewise, this section of the poem promises restoration as well—restoration of the heart, and restoration of the writing process.

Also within this stanza, and something that builds onto the notion of restoring the writing process, is another instance of grammatical slipping. When a sentence begins with a gerund, it is customary to transition from that clause to the next with a comma. In this case, the lines would be expected to read, “Suffering joy or despair, / you will suffer the sentence.” But there is no comma. Are they separate actions, or is “suffer[ing] the sentence” still dependent on “[s]uffering joy or despair”? Or does the lack of comma actually serve to tie the actions more closely together—that is, by visually running the two ideas together so that they are one? Regardless of this question, it seems that in this stanza, the text of the poem—the woman, if that translation can be made—is beginning to teach the speaker the things he is missing in his understanding of writing and creation. Though she does not explain it in depth at this moment, she introduces the idea of “a law of words,” rules that govern language. Perhaps she is trying to explain to the speaker that whether it brings him joy or despair, he is bound to “suffer the sentence / a law of words moving,” and that no amount of power on his part as a poet will allow him to escape it—at least, not the way that he is currently going about it. The poem is beginning to move from simply questioning the power dynamics at play between a poet and a poem to actually defining what that relationship truly is, or truly should be.

The final three lines of this stanza have a duality of meanings. Thus far in the analysis, “sentence” has been interpreted in the grammatical sense. That is, it has been interpreted to refer to a unit of language produced by someone (potentially the speaker). However, this usage of “sentence” calls that definition into question, particularly because of the word “suffer”—“suffer the sentence” connotes the judiciary system, making “sentence” a judgment or a punishment rather than (or as well as) a grammatical unit. “A law of words moving / seeking their right period” continues the ambiguity of meaning. The inclusion of “words” reconnects the stanza to grammaticality; however, “right period” casts doubt once again. One potential translation of this phrase is “correct time,” tying back to the judicial sentence, as in, an appropriate length of time for that sentence. The other refers to the structure and linearity of language (an idea described by the Swiss structuralist Ferdinand de Saussure): a sentence unfolds one word at a time, from left to right, until the end, at which point a period or other form of punctuation ends the thought.

Finally, the word “law” has multiple implications as well. It could refer to the rules that guide grammar and sentence construction, or it could refer to the rules that guide the views and actions of the justice system. Perhaps both readings are correct, and the rules that guide writing are a form of punishment; rules become restrictions—which is the reason for Duncan’s call to abandon rules of linearity in favor of an open, field-like poetic form.

I saw a snake-like beauty in the living changes of syntax.

“A snake-like beauty,” perhaps due to the other parallels and references to the Book of Genesis throughout the poem, calls to mind the serpent who tempts Eve in the Garden of Eden. “Snake-like,” for that reason, is often associated with traits such as cunning and slyness. Connecting this concept with “beauty” gives the sense that there
is beauty in temptation, or even beauty in sin—beauty in blasphemy. From this, the reader is left to wonder why that is the case. This foreshadows the conclusion (discussed earlier in the introduction, but not yet realized in the analysis) that imitation, though problematic, is in fact a poet’s only option for attempting to uncover “truth,” and therein lies its beauty.

Given that responsibility to express “truth,” “the living changes of syntax” serves as another reminder that again reinforces the role of the creator as poet-priest—saying the words or the sentences is enough to cause the change to occur. That is, the change that occurs is as close to an exact replica of the poet-priest’s thoughts as is possible.

Wake up, she cried.
Jacob wrestled with Sleep – you who fall into Nothingness
and dread sleep.
He wrestled with Sleep like a man reading a strong sentence.

The woman is speaking again in this section, commanding someone to awaken. She then, in another Biblical reference, brings up Jacob. “Jacob wrestled with Sleep,” she says. The Bible says, “Your name will no longer be Jacob. Your name will now be Israel, because you have wrestled with God and with people, and you have won” (Genesis 32:28). These lines, the one from the poem and the one from the Bible, parallel Sleep (capital “s”) with God and with, to some extent, humans, made in the image of God. “To some extent”—that is, this passage differentiates between Sleep and sleep, so perhaps, as seemed to be the case with the Sentence/sentence dichotomy as well, Sleep is meant to parallel God while sleep is meant to parallel humans. Once again, the lower case would be an imitation of the capitalization.

The capitalization of both Sleep and Nothingness also equates the two concepts and, as already mentioned, distinguishes between two types of sleep. The concept of sleep is associated with rest and rejuvenation, with dreams…but also with nightmares and—if it is taken as a euphemism—with death. Meaning could alter based on which association is chosen to inform the reading, but the parallel between Sleep and Nothingness created by capitalization seems to pinpoint exactly that which sleep should be associated in this context. Although Biblically, death may mean some sort of afterlife (Heaven, Hell, purgatory), another belief of the outcome of death is just…emptiness. Nothingness. With no life force left to animate the body, there is simply nothing left but a vacant corpse. The woman’s addressee, the speaker, is reported to have somehow experienced Sleep/Nothingness and is now generalizing that experience to “sleep.” “Generalizing” is a psychological term related to the process of learning and concept formation. It refers to the act of responding in more or less the same way to two different, though slightly similar, stimuli. For example, a young child may call all men “father” simply because they all fit the criteria of tall, adult male. So in this case, the addressee is responding similarly to sleep (an imitation, a watered-down version) as he is to Sleep.

The final sentence of this section of the poem adds another layer to the parallelism already discussed: “He wrestled with Sleep like a man reading a strong / sentence.” The implication of this is that he (the speaker, the woman’s addressee) wrestled with Sleep (capitalized, the original) the same way that a man (generalized, the “everyman”) would wrestle with a strong sentence (lower case, an imitation, but a “strong” one). All of this together seems to indicate something about the speaker’s understanding of Sleep; he is reported to approach wrestling with Sleep from a limited standpoint, one which lacks a full understanding. He is dealing with the original in the same way that he would deal with a sophisticated imitation and thereby reducing the original to what he understands based on the imitation. This may indicate that there is only so much the speaker can know about God/Sleep/the Sentence—all he has to go on are imitations of varying sophistication.

That parallel, beyond illuminating the ways in which the speaker is interacting with Sleep (and therefore, Nothingness), also reveals something about that Nothingness itself. A man would wrestle with a sentence in order to discover what it means. It seems that the idea of “meaning” becomes a crucial link between the two parts of this simile: akin to the man searching for the sentence’s meaning, the speaker’s wrestling with the limbo of Sleep, the limbo of Nothingness, is a manifestation of his anxiety as a poet to create meaning. This anxiety is what leads the poem to call poets to use, in spite of all of the described dangers of doing so, imitation to create—because, as discussed, it seems to be the only remotely successful option for exploring truth and identifying meaning.

That anxiety is further highlighted by the tone of the lines, “Jacob wrestled with Sleep – you who fall into Nothingness / and dread sleep,” which reads as accusatory. It is almost as if the woman is saying, “Jacob wrestled, Jacob fought back—and what are you doing?” This reading is emphasized by the word choice “fall,” which implies the speaker’s helplessness and inability to stop what is happening. The speaker here fears the meaninglessness of that Nothingness, but rather than it being translated as a literal fear of death, it is rather the anxiety of a poet who may be faced with the responsibility of creating meaning in his work. Earlier, this thesis discussed the possibility of the woman beginning to help the speaker gain a fuller understanding of creation; this is another moment in which that teaching occurs. An anxiety about creating meaning within one’s work could lead, and often does lead, to creative paralysis. The woman, therefore, is taking this moment to teach the speaker some of the lessons imparted on writers of the Black Mountain Collage, namely the one which advocated for the focus on the process rather than the product. Wake up, she says. Be more like Jacob. Wrestle enough to write, and allow meaning to arise organically from that writing.

I will not take the actual world for granted, I said.
Why not? she replied.  
Do I not withhold the songs of birds from you?  
Do I not withhold the penetrations of red from you?  
Do I not withhold the weight of mountains from you?  
Do I not withhold the hearts of men from you?  

The speaker implies the existence of another binary here, by mentioning one half of it: the “actual world.” This suggests that there is some other world, a less-actual world, perhaps the one people experience after death—after Sleep. That other world could be the Nothingness (or, from a Biblical standpoint, could be Heaven, Hell, and/ or purgatory). However—although these are all potential readings of this section of the poem, an even more likely option is that of it representing, as half of the previously discussed binaries have, the Ideal version of the world. The speaker’s “actual world” is the one he literally experiences; the non-actual world is then the one that cannot exist because it is too perfect, too ideal, unable to be recreated. Immediately after the speaker makes his declaration of not taking this “actual world” for granted, the woman says, “Why not?”, apparently in reply. This response, in combination with the rest of the questions she follows it with, imply a particular answer—that the speaker should take the actual world for granted because yes, the woman does withhold these things. But the woman withholding the “real” or “Ideal” versions of these things, leaving him with the worldly imitations. Taking the world for granted indicates that the poet has accepted it without questioning it—without wrestling with it, as Jacob wrestles with God and people. So why would this woman tell him to take it for granted? The answer speaks to the already discussed anxiety that poets experience in the face of the task to create meaning: by being too invested in the perfect or the Ideal that he creates nothing for fear of failure, the speaker, the poet, ends up withholding something himself. In this case, what he withholds is the closest approximation to truth that it is possible to produce.  

I alone long for your demand.  
I alone measure your desire.  

The speaker here, the woman, still seems to be talking to the poem’s overall speaker, the creator of the sentences. She claims to long for him to make demands of her, although, as established in the previous stanza, she is the one with power over him—yet another instance of the master/servant binary being disrupted. This seems an important section in which to revisit the other identity of this woman, and that is that her identity being the writing itself. Rather than reading this as the woman longing for demand, waiting to measure desire, it seems to make more sense to read it as the writing performing these acts. The writing then becomes the one waiting for, longing for, the moment when the speaker stops lingering in the limbo or “Nothingness” of creative paralysis and instead begins to realize that the creative process is in some ways the most important part of creation.
word “fierce,” according to the Oxford English Dictionary (OED), means to act forcefully, strongly, or violently, and the OED also remarks that it connotes behavior like that of a wild animal. This contrasts greatly with the sophisticated mastery claimed by the speaker in the initial stanzas of the poem. (Incidentally, it also illuminates the hesitation felt earlier—the confusion as to who is the one serving. If the master is not so masterful as he thinks, perhaps it really is he who does the serving—and maybe some part of him is aware that his role as “master” is not so solidified, which is why he feels the need to command the Sentence to speak.)

Finally, the more overt point contained within these two quotes regarding images is the fact that he is accused of destroying them, of vomiting them up. The speaker has declared himself creator of sentences in the Sentence’s image—and thus, creator of imitations of the image—and yet, this woman is claiming that in reality, he is destroying the image. This implies a certain inevitability of destruction in imitation: imitation again becomes a sort of blasphemy. Then his vomiting of the images suggests that the images cannot be contained (by the speaker, a supposed mere mortal?), will be unstoppably removed (an idea also held by the term “birth,” but “vomiting”—with all its negative connotations—was chosen to describe this experience), and will also be distorted in their creation by the messy and harmful way in which they are brought into the world.

The woman, in addition to issuing these accusations with her own powerful diction, also takes offense at a specific word choice of the speaker. The word choice “cosmic” is an adjective associated with objects or ideas beyond earth or beyond man; “intoxications” (according to the OED) could refer to two things, both of which serve to emphasize the blasphemy that is occurring (or said to occur) throughout the poem. The first meaning, an inebriating substance or liquid, would relate back to the idea of temptation: the temptations of sin and/or blasphemy have already been discussed, but are thus expanded upon here. In discussing the “cosmic intoxications of the / man I will be,” the speaker implies that he is drunk on the idea of what he will become in the future. Knowledge of the future is outside the realm of possibilities for a mortal man, a man of the earth—that knowledge is in fact cosmic—and a desire for this knowledge could be perceived as blasphemous. The second meaning, an act of poisoning, would relate back to the “vomiting” that occurs at the end of the poem (“Cosmic”). Intoxicants like alcohol are poisonous in excess, and so this appears to indicate that the speaker, first of all, desires to know his future, and second of all, abundantly so. The blasphemy that occurs could then be perceived as twofold.

The incredulous disapproval of such blasphemy is then expressed by the female speaker. “Cheat at this game? she cries”—perhaps “this game” refers to the order of life, the order of the universe, in general. Following from this is the idea that in upsetting this order by seeking to know the future, the speaker is cheating, committing blasphemy. She continues by saying, “The world is what you are.” As opposed to the speaker’s calling it “the actual world,” the woman calls it simply “the world,” implying there is only one—or at least, only one that matters at the moment. This indicates that what she is saying is that the world, the reality that one experiences, is based on what one is at the current moment rather than on what one will be in the future, a proclamation which dismisses the speaker’s (blasphemous) desire to know his own future. It may also be that this preoccupation with knowing the future is blinding him to the “actual world” that surrounds him, that ought to be the inspiration for his writing. And that then becomes the true blasphemy—his not comprehending the creative process. (This would explain the woman’s reasons for withholding the less-actual world from the speaker in those earlier lines of the pome—her desire for him to overcome the paralysis inspired by the daunting task of creating anything that fully lives up to that ideal original.)

The returned focus on the shifting master/servant binary (in the form of the woman’s desire for the speaker to work together with his “actual world” to produce writing) again reveals that this creative process is a collaborative one; it is not so simple as definitively isolating the poet as the master and the writing as the servant. To a similar effect, Derrida’s Plato’s Pharmacy summarizes some of Plato’s thoughts on writing, quoting from Plato’s Phaedrus: “Writing can only repeat (itself)…it ‘always signifies…the same’ and…it is a ‘game’” (qtd. in Derrida 1698). According to Plato here, writing is the game—though this does not invalidate the claims made under the assumption that “the game” was the order of the universe. Even then, close-reading and analysis revealed that in misunderstanding the nature of the universe, the speaker also misunderstands the writing or creation process. This more direct confirmation, if it can be taken as such, that stems from tying Plato’s Phaedrus into “The Structure of Rime I” only strengthens the arguments already made regarding the speaker’s problematic tendency toward blasphemous misunderstandings of creation.

Then, the woman’s increasingly passionate speeches to the speaker are her efforts to open his eyes to the true nature of that process, that it is less about his mastery and more about his partnership with the sentence, and therefore, with the writing. The fact that the poem ends with the woman speaking—and not just speaking but “[crying],” the culmination of a crescendo that began in her first words to the speaker—indicates that the speaker has not come to the understanding to which the woman has been trying to lead him. She spends the last breath of the poem giving her last, her best, effort to bring him there, but he seems too set in his ways. This then establishes the stakes for contemporary poets, to whom Duncan is directing his call to action.

**Conclusion**

The ever-shifting patterns of power dynamics within Duncan’s poem, patterns that reveal the true nature of the writing process as one of reciprocity, teamwork, and collaboration, also express the challenges that lie within
that process. While it is admirable to seek perfection in writing via an imitation of the most ideal form of writing, that strategy ultimately ends up being less successful. It can result in creative paralysis, out of which no writing will be produced, but it can also result in writing that simply fails to live up to the standard set by perfection—an inaccurate and faulty imitation. Duncan’s “The Structure of Rime I” consequently calls for contemporary poets to yes, imitate in order to create, but to imitate the collage of experiences that shape their “actual world,” and to allow meaning and truth to emanate from that.

Works Cited


When the young female artist sits down with her medium, be it canvas, paper, typewriter, or anything of the like, how does she know she is writing her own work? How can she be sure she is thinking on her own and that her ideas come from her very being, not one imposed upon her? Before she even picks up her pen or her brush, how does she sculpt and write and paint who she is as a person, and how does she create her image of 'self'? Can we hear her at all even once she finds herself? The young female artist must come to an awareness of her individuality and mold an image of herself, breaking away from what is expected of her. For a young female artist to satisfy her impulse to create a self, she must identify and kill the "Angel in the House" in her world. She breaks from the mold and claims her mind and body as a sexually independent woman; the age that she breaks away has a great significance on not just her, but those around her. Once she has fully realized herself, she uses her art to commemorate and give tribute to the Angel she destroyed.

Key Words: artist, woman, identity, apology, tribute, individuality

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In Virginia Woolf's *To the Lighthouse*, the Ramsay family and their guests spend time on the Isle of Skye in Scotland from 1910 to 1920, and the novel is split into three sections - pre-war, mid-war, and post-war. The novel follows the thoughts of the characters as they interact and ponder their lives and decisions in relation to their own emotions and their effect on others. Mrs. Ramsay is the Angel in the House, unifying the various strong personalities of her husband, her children, and all her assorted guests; Lily Briscoe is a stubborn young woman who yearns to paint, and spends much time admiring Mrs. Ramsay for her undying diligence in her role despite Lily's inability to imitate said role.

Ian McEwan's *Atonement* is set in England in three frames of time over four sections - first the 1930s, the two middle sections taking place in wartime (France and England), and present-day. Briony Tallis, our young, biased narrator, makes a claim that devastates her entire family as she tries boldly to form her sense of self as a woman in the first part; the aftermath and the effects of this mistake influence the last three sections of the book, and how Briony deals with her actions and finds herself.

Both novels are centered around times of war and have pivotal scenes in the form of dinner parties; in both, the home and objects of the home come to show the importance of the domestic as a place of unity before the war, and an abandoned place beyond the war. Formally, the novels also have much in common: each relies on long sentence structures, each includes long passages narrated in a stream-of-consciousness style, and the internal drama of each focuses on family...
When the young female artist sits down with her medium, be it canvas, paper, typewriter, or anything of the like, how does she know she is writing her own work? How can she be sure she is thinking on her own and that her ideas come from her very being, not one imposed upon her? Before she even picks up her pen or her brush, how does she sculpt and write and paint who she is as a person, and how does she create her image of self? Can we hear her at all even once she finds herself? The young female artist must come to an awareness of her individuality and mold an image of herself, breaking away from what is expected of her. For a young female artist to satisfy her impulse to create a self, she must identify who is the “Angel in the House” in the world she exists and acknowledge that she will be pigeonholed into that same role eventually. She then must kill the Angel, break from the mold that she has been sealed into, and claim her mind and body as a sexually independent woman; the age that the young female artist breaks the mold has a great significance on not just her, but those around her. Once she has fully realized herself, she uses her art to commemorate, give tribute, and possibly apologize to the Angel she destroyed.

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As these young female artists try to break the mold, they often naively make choices that negatively impact those around them, which ends up shaping the way they form themselves. In Virginia Woolf’s To The Lighthouse, Lily Briscoe has a great love for the angelic Mrs. Ramsay, but in order to become an artist and finish her painting, she must throw away Mrs. Ramsay’s traditional ideas and wants, sculpt her own picture of a self how she wants, and realize her full potential as a woman; she uses her whole body to create a painting inspired by Mrs. Ramsay. In Ian McEwan’s Atonement, Briony’s supposed understanding of the adult world and her desire to be the storyteller causes her to crush her sister’s life and that of her sister’s lover, Briony, upon later reflection and actual understanding of the adult world, forms her version of self in repentance to Cecilia by becoming a nurse and trying to erase her sense of personality almost entirely, and then comes into her own self using her storytelling, giving the lovers a happier ending than the truthful one.

The Angel in the House is a popular image of the perfect woman of the Victorian age. The phrase “the Angel in the House” refers to British poet Coventry Patmore’s extremely popular novel in verse of the same name. The Angel in the House depicts a marriage in four volumes and includes a portrait of a wife so angel-like that she becomes a popular model of Victorian womanhood. As depicted by Patmore, the Angel in the House should be passive, trusting, virtuous, meek, charming, sympathetic, self-sacrificing, and - above all else - pure. She is to comfort the male population by soothing and flattering. She is to also be the fount of a family’s morality, which, in turn, requires that she maintain her own moral, spiritual, and sexual purity at all costs. In Patmore’s poem, the ideal woman to fulfill the Angel role acts as such:

*Man must be pleased; but him to please*  
*Is woman’s pleasure; down the gulf*  
*Of his consoled necessities*  
*She casts her best, she flings herself*

Patmore speaks of the Angel’s willingness to toss everything aside just to tend to her husband’s fancies, and while he makes her out to be sort of weak, she holds much strength in order to sacrifice her wants and needs for those of her husband. The Angel in the House inhabits and purifies the domestic sphere in order to help her husband shake off the vile and obscene layer of dust from the outside world when he returns from work in the public sphere; she renews him by her grace and perfection and lifts his character up. In To The Lighthouse, Mrs. Ramsay is the Angel in the House, living to please everyone and bring unity to the household while being lovely, beautiful, and admired by all. In Atonement, the Angel in the House figure has been split between mother and elder daughter - Emily and Cecilia Tallis - neither of whom can actually fully fulfill the position.
Mrs. Ramsay’s beauty and grace are praised by everyone, throughout the course of the novel, from Mr. Ramsay to William Bankes to Lily Briscoe and all in between. She helps out men that are simply guests in her house, willingly putting forth her energy for them, and yet her “beauty” is thought of in terms of her usefulness to the men she aids. She is acknowledged as beautiful and glowing in the moments after she satisfies their wants - whether they were material or emotional - and her value is manifest and gauged through her utility to the patriarchal force. This thought process shows the focus of the male in the matters of the domestic and how he believes she should act in order to be a proper figure in the household - tending to everyone and being helpful to all. She offers to shop for Mr. Carmichael, even knowing that he dislikes her. She defends Mr. Tansley, the “little atheist”, against the children and others that look down upon him. Paul Rayley even has the courage to ask Minta to marry him because of Mrs. Ramsay; he feels her responsible for making him propose and for being the only person who believes in him: “Nobody else took him seriously. But she made him believe that he could do whatever he wanted . . . he would go to her and say, ‘I’ve done it, Mrs. Ramsay; thanks to you’” (78).

In terms of her own family, she tends to their needs even if they directly contradict her own. She placates James when he continually asks if they can go To The Lighthouse the next day despite his father’s negative answer. Mr. Ramsay finally smiles and glows when he is praised by Mrs. Ramsay and given her sympathy yet he uses her beauty to insult her role and to simplify her to put himself above, as the society told him he should; Mr. Ramsay stares at her reading in their bedroom, praising her beauty but he “exaggerated her ignorance, her simplicity, for he liked to think that she was not clever, not book-learned at all. He wondered if she even knew what she was reading” (121).

Despite that sentiment from her petulant husband and despite the male-driven idea that beauty is generated by usefulness, she is also admired by women for her effort and all the pains and sacrifices she takes to be the fount of energy and aid for the patriarchy. In the case of women looking at Mrs. Ramsay, she is not seen in terms of her usefulness, but her skill and effort put into her position makes her a respected figure and make her beautiful. Lily is the most prominent crier of praise for Mrs. Ramsay; she paints her a respected figure and make her beautiful. Lily is the most prominent crier of praise for Mrs. Ramsay; she paints her as the Angel when she continually asks if they can go To The Lighthouse the next day despite his father’s negative answer. Mr. Ramsay finally smiles and glows when he is praised by Mrs. Ramsay and given her sympathy yet he uses her beauty to insult her role and to simplify her to put himself above, as the society told him he should; Mr. Ramsay stares at her reading in their bedroom, praising her beauty but he “exaggerated her ignorance, her simplicity, for he liked to think that she was not clever, not book-learned at all. He wondered if she even knew what she was reading” (121).

But what have I done with my life? thought Mrs. Ramsay, taking her place at the head of the table, and looking at all the plates making white circles on it . . . She had a sense of being past everything, through everything, out of everything, as she helped the soup, as if there was an eddy - there - and one could be in it, or one could be out of it, and she was out of it . . . There was no beauty anywhere. She forbore to look at party is a small scale copy of the social order within the domestic, she must oversee it with utmost care. In contrast to other novels in which the meals seem to happen by magic -- by some unseen force -- To The Lighthouse and Atonement both depict the work that goes into organizing the occasion, preparing various dishes, and ensuring guests’ comfort. In so doing, they also recognize that these “Angels in the House” perform valuable labor. The dinner party is shown to be a test of the Angel’s “magic” - her charm - to center and unite the people involved, balance the meal, and create an event that everyone enjoys.

Both Mrs. Ramsay and Emily Tallis are responsible for planning a dinner party to unite family and guests at one table, as well as overseeing the making of a splendid meal; both meals are centered around a large quantity of meat -- the Boeuf En Daube in To The Lighthouse and the roast in Atonement. Mrs. Ramsay is physically centered around the dining room table, which contrasts Mrs. Ramsay’s freedom of philosophical introspection wherever he so chooses, be it his library or even just wandering about; Emily Tallis, while mainly self-confined to her bedroom, does focus her thoughts around the dining room table, while Jack Tallis is off at work late many nights. This divide and difference in freedom shows a gendered world that the young female artist must both understand and break away.

As if all the demands of the dinner parties are not enough, the Angels even have to worry about the environmental temperature in accordance with their meal plans. Heat comes to play in both dinner meals, as Mrs. Ramsay frets and stresses about the Boeuf En Daube getting cold as the party tries to wait for Paul Rayley, Minta, and Nancy to return and join them at the table, and Emily Tallis wants to change the roast meal to salads because it was too hot for so heavy a meal. This attendance even to temperature shows the grand scope that the Angel must pay attention to; the atmosphere itself must be adjusted to and controlled in order to hold the balance of the meal. Too little heat means the energy of the room dies too low to be rescued, but too much heat leads to high tempers and even impending bursts of sexuality, relating the word “heat” to an intimation of animalistic tendencies. While their work does not go unnoticed by the young female artists, these spectacular, powerful, and flexible Angels in charge can be viewed as old-fashioned and married to their role.

Something that causes a rift in the Angel in the House role, however, is self-consciousness. The Angel gives of herself to everyone before her own needs, but Mrs. Ramsay questioning her loss of self is at odds with the idea of the Angel in the House. At the dinner party at the Ramsays’, a striking moment of doubtful thought issues from Mrs. Ramsay, the seemingly perfect Angel in the House:
Mr. Tansley. Nothing seemed to have merged. They all sat separate. And the whole of the effort of merging and flowing and creating rested on her (82-83).

She, who is meant to bring everyone together and please the social circle, reflects on what should be an enjoyable, lively dinner and feels anguish at its imperfection and separation and the bleak pressure upon her to remedy and unify the group. She sees the ugliness of the personality of her husband, the isolation of the long table and the people isolating themselves, and the ramshackle condition of the house around them that was meant to bind them together. She does end up succeeding in unity of the party with the lighting of the candles and all the individuals fixated upon the fruit display holding worlds in front of them: “that was his way of looking, different from hers. But looking together united them . . . the faces on both sides of the table were brought nearer by the candle-light, and composed, as they had not been in the twilight, into a party around the table” (97). Even in moments of self-consciousness and doubt, she still falls back on her role to redefine and comfort her that she knows who she is; the details of the dinner become her defining features and it is only when she is truly alone that she ever does something for herself. Even more spectacular about the moment she gives herself as an individual is that she chooses it for herself. She does have a self within the Angel role and will not let it be entirely squashed in her fulfillment of her duties through the Angel in the House.

In the dinner party scene, Mrs. Ramsay is overwhelmed by gloom when she realizes she must unite everyone there while they are all so reluctant to do so. Lily realizes Mrs. Ramsay’s job as the Angel in the House and how crucial this dinner party is to create unity between the attendants of the party, and she chimes in to help perpetuate conversation among the table. While Lily does want to help Mrs. Ramsay, she struggles to balance her desire to please her with her unwillingness to play pretend and fake her feelings at the dinner and throughout the novel at large. Lily asks Mr. Tansley to take her to The Lighthouse with him (despite his sexist comments about her inability to paint because she is a woman), filling in the moments that Mrs. Ramsay needs to formulate more thoughts and ways to bind the group together. Sacrificing her personal feelings for the love of Mrs. Ramsay, Lily gives into the dominant culture around her, acquiescing briefly to one of the men determined to keep her down and oppress her creative spirit; she is haunted for many years by Tansley’s jeers and jabs, and she comes to realize that she cannot support the role of the Angel or ever take it upon herself. The role of the Angel is to give all of herself away — even to the Mr. Tansleys of the world — to rejuvenate the world, but the role of the young female artist is to form and keep the self for one’s own use in creating.

While Lily Briscoe admires Mrs. Ramsay greatly, she cannot and will not become an Angel in the House; Lily does not marry, but even if she had, her personality and unconventional ways of thinking would have been incompatible with the Angel in the House image. As Lily attempts to mold herself in Mrs. Ramsay’s image in the moment that she offers her help in finding Minta’s brooch, she is laughed off by Paul Rayley - “it was the odd chuckle he gave, as if he had said, Throw yourself over the cliff if you like, I don’t care. . . . it scorched her” (102). Lily, still innocent and not fully aware of her womanhood, doesn’t realize that Minta’s brooch was less a physical entity in this moment, and more a symbol of her virginity and its irrevocable loss. Everyone else is aware of the brooch’s meaning, but Lily has not fully formed her version of self and Paul’s impolite and nasty laughter is a comment on Lily’s unattractiveness, which is also noted by Mrs. Ramsay throughout the novel. Internally responding to Paul’s words, Lily thinks to herself “she need not marry, thank heaven: she need not undergo that degradation. She was saved from that dilution” (102). Lily sees outside the general conventions of beauty, created by Woolf as a character who looks beyond the historical and typical conventions of female identity. She is relieved of the worry of being pushed into the mold like Minta and made to be a wife. For Lily, then, being an Angel in the House is impossible, but even more important than its impossibility is that she finds the role itself undesirable.

In creating Lily, Woolf finds an outlet to express how she feels by creating a character who thinks as she does about the formation of identity for the young female artist. Invited to speak at a meeting of a branch of the National Society for Women’s Service - a suffragist group - in 1931 by her friend Pippa Strachey, Woolf gave a speech that she temporarily titled Professions for Women (reworked into a written lecture for her posthumously published novel, The Years). This speech lays out the female writers who opened the path for Woolf, how she had freed herself from the societal pressure on her writing, and the persisting problem that needed to be solved: how women, particularly the woman writer, “have won rooms of their own and are earning their own livings, but their rooms are still bare. The great questions for these women are how their rooms will be furnished and decorated, and with whom those rooms will be shared” (219). Woolf was asking these women who had broken the mold to keep writing the story of women around them, and to carry the torch onward and progress what with what they had been finally granted.

In her speech, Woolf herself takes action against the Angel in the House. In order to be a woman writer looking at the literature of men and to be a critic of their work, rather than sympathizing and going along with all the assumptions and thoughts of these men, she had to kill this phantom hovering over her. This Angel told her, “be tender; flatter; deceive; use all the arts and wiles of our sex. Never let anyone guess that you have a mind of your own”, and tries to guide her pen; the combination of the Angel’s suggestion and her action to change Woolf’s writing incites Woolf to turn and strangle her, as the Angel would have “plucked the heart out of [my] writing”. Woolf continued to fight off this Angel and kill her by striking with her creative voice; this murder of sorts allowed Woolf to move from reviews and critiques to novels of her own, delighted that she could be paid for telling people stories. Woolf also questions what it means to be a woman; her
answer is that a woman cannot definitively know until “she has expressed herself in all the arts and professions open to human skill”. Lily’s actions and her drive to become a painter etch out Woolf’s desires for women to move beyond the strictly domestic and to experience herself through other avenues.

While Lily does sacrifice herself at the dinner party to Paul Rayley and Charles Tansley, she has her limits; in the third portion of the book, she no longer will subject herself to degradation and censorship. Lily forms her identity by means of breaking away from the mold of the Angel in the House and effectively killing the Angel; the factor that makes it all so difficult is that Lily does love Mrs. Ramsay, who died somewhere within the span of ten years that the house on the Isle was left unoccupied. After returning to the house that has been restored, Lily remembers the leaf on the tablecloth she moved at the dinner party and launches into action to finish a canvas at last, but something is different; “You will find us much changed” is the phrase that Mr. Ramsay utters to Lily in the chaos of leaving for the lighthouse with two of his children. Lily says that one pities the dead, “one brushed them aside, one even had a little contempt for them. They are at our mercy. Mrs. Ramsay has faded and gone, she thought. We can over-ride her wishes, improve away her limited, old-fashioned ideas” (174). Woolf suggests through Lily that though Mrs. Ramsay is a graceful and respected figure, she is a dying breed and perhaps her generation will be the last of the Angels; the rise of the young female artist does not come to destroy but to make a new generation able to mold themselves. Mrs. Ramsay is then less the Angel in the House or Mrs. Ramsay herself, but a recalled memory from which Lily can choose her story and her subject; Mrs. Ramsay is a figure, a representation, rather than a real person standing in her way. Lily finds the way to herself not by being just like Mrs. Ramsay, but by breaking away from her and creating a self of her own, being inspired by Mrs. Ramsay’s life and beauty in both her sense of duty and her quiet individuality. Lily’s epiphany of self comes through her painting. She begins by being inspired and molded by Mrs. Ramsay and then finds a way to free herself in Mrs. Ramsay’s absence; she creates art that utilizes her entire body, marking her as her own person and a woman.

In the society structured around the Angel, a woman’s body is not for herself, but merely a way of holding her together to care for everyone else. The young female artist does not hold to this belief, claiming her own body belonging to her and her voice, body and mind joined to completely make her a woman - these binding ideas come from French writer and feminist theorist Helene Cixous. L’écriture feminine was introduced in 1976 as a novel new style that focused on the feminine voice and worked to shake up the traditional format. Translating literally into “feminine writing”, l’écriture feminine is a breakaway from and a means to break through the system of writing imposed by society and dominated by the masculine. Cixous urges women to reclaim their bodies that have been stolen from them and their voices that have been stomped down; the way they can recover themselves and attempt to prevent the robbery of others is by inspiring and loving other women. The flow of love will flow into writing and speaking, and it goes around and around, creating the cyclical approach that Cixous takes to writing itself with l’écriture feminine. This melding of body and consciousness or mind awakens women’s sexuality, which has been repressed and hidden - “the dark continent” - and the feminine text is “volcanic; as it is written it brings about an upheaval of the old property crust, carrier of masculine investments” (1954). This orgasmic release allows woman to break through the imposed societal mold pressed out for her; the use of l’écriture feminine could be the bridge to fully creating a self and the new way to demonstrate female identity. Lily’s painting becomes a way to speak that Mrs. Ramsay had not tried to follow through with: l’écriture feminine. Unbound by words, l’écriture feminine allows Lily to develop thoughts and emotions and erotic impulses in her found womanhood - to speak in paint and visual means away from the male language and thoughts that want her to fit the feminine mold they have provided. The marks that Lily does not make are just as important as the ones she does make, speaking volumes in her silence. Lily’s entire body is thrown into her painting, her inspirations manifesting through shouts - “Mrs. Ramsay! Mrs. Ramsay!” - and actual tears rolling down her face. Her emotion flies out of her and is refocused and reshaped by her painting on the canvas, her interpretations of Mrs. Ramsay that are more abstract and shadow-filled. Her tears that flow after killing of the Angel, in rearranging Mrs. Ramsay as a memory, come not from a place of malice or contempt, but in celebration for finally breaking free from the constraints of others and the doubts and nagging voices that kept her down.

Lily’s painting culminates her fulfillment through her art and through the eulogy for Mrs. Ramsay in the final few sentences of the novel: “She looked at the steps; they were empty; she looked at her canvas; it was blurred. With a sudden intensity, as if she saw it clear for a second, she drew a line there, in the centre. It was done; it was finished. Yes, she thought, laying down her brush in extreme fatigue, I have had my vision” (209). Lily’s newly found sense of self allows her to make bold, decisive choices, unlike her at the beginning of her painting, afraid to mar her work with a mark she was not sure about; she finds the freedom to make her mark definitively and reach the pinnacle of what her art means for and in her new identity and what it means to understand and accomplish elegiac art. She is allowed to find herself and form her being without the pressure to be exactly like Mrs. Ramsay, and construct her own image while making an elegiac piece in Mrs. Ramsay’s honor.

When looking at the larger scheme of art as elegy, we can think of Virginia Woolf herself. In the foreword to the novel written by novelist Eudora Welty, she writes that “the portraits of Mr. and Mrs. Ramsay are said to derive from Leslie and Julia Stephen, the author’s parents” (vii). In looking closer, we can see Lily Briscoe characterized as Virginia Woolf herself, through her worldview and views on the formation of female identity. In Killing the Angel in the House: The Autonomy of Women Writers, Elaine Show-
alter also raises the point that this Angel Woolf kills may be reflective of Leslie Stephen; Woolf’s father encouraged her to write but stressed following the Womanly code of conduct very strictly. She was liberated in her art and her responsibilities after her death in 1904, and freed herself not just from the personified mold of the Angel, but from her father’s oppressive pressure on her art. As Lily creates the painting inspired by Mrs. Ramsay but breaking the traditional rules and slots for women to fall into, Virginia Woolf took her memories of her parents and their lives and molded them into fictional characters over whom she had control.

In To The Lighthouse, Mrs. Ramsay is held as the pinnacle of Victorian womanhood and acts as the Angel in the House, organizing and overseeing the household while bending to accommodate all. Lily Briscoe, the young female artist, sees the role that Mrs. Ramsay upholds as set for her, and while she loves and admires dear Mrs. Ramsay, the role will not fit her and she does not wish it to; by means of her art, Lily Briscoe forms her own image of herself as a young female artist, and in Mrs. Ramsay’s death, she is free to develop herself without the pressure of the role society wants to force upon her.

In Atonement, Emily is hardly present in her own household’s day-to-day activities due to her ferocious migraines; she is then bound to bedrest in her dark bedroom any time she feels a spell coming on in an attempt to quell what she calls the “beast”. Emily herself knows that she is failing in her domestic duties, and that “illness had stopped her from giving her children all a mother should” (63). While she cannot attend to the house and unite everyone due to her frequent and violent illness, “over the years, many hours of lying still on her bed, had distilled from sensitivity a sixth sense, a tentacular awareness that reached out from the dimness and moved through the house, un-seen and all-knowing . . . she lay in the dark and knew everything. The less she was able to do, the more she was aware” (63). While Emily thinks herself cursed with this ability, understanding and decoding where everyone was in the house and what they were doing just by means of simple sounds shows her Angel in the House instincts are still alive.

Emily’s desires to be the Angel in the House and fulfill her duties come to fruition as her migraine begins to subside. She sets up a plan to go and check on the arrangements for the dinner party meant to welcome Leon, her son, and his friend, Paul Marshall, changing menus and overseeing decorating; this dinner party marks the unity of family and guests who have not been together for a significant period of time, and her want for perfection and unity in time of impending war shows the instincts of the Angel. Emily would “soothe the household, which seemed to her, from the sickly dimness of the bedroom, like a troubled and sparsely populated continent from whose forested vastness competing elements made claims and counter-claims upon her restless attention” (67). The urge to soothe and cure the broken apart household reflects Emily’s Angel tendencies, as well as her natural instinct to first tend to her male guests: she plans to welcome first Leon and Paul Marshall, next to placate her sister’s boy twins, and then call her husband. Only after she has tended to the men will she check on Cecilia and the flowers, and then track down Briony after her play collapses. This chain of thought closely echoes Mrs. Ramsay’s thought about needing to unite the dinner party, and Emily and Mrs. Ramsay’s dual feelings of obligation and personal need come through closely intertwined. Emily also strangely rises to the occasion when the police arrive for the missing twins and the rape of Lola, directly contrasting Cecilia in her unsettled, nervous silence.

During Emily Tallis’s absence due to her unceasing migraines, Cecilia is both pushed into and tries on the Angel in the House role. Cecilia herself says that she is not bound at home: “no one was holding Cecilia back, no one would care particularly if she left. It wasn’t torpor that kept her - she was often restless to the point of irritability. She simply liked to feel that she was prevented from leaving, that she was needed” (20). In Emily’s assessment, it is possible that Cecilia has not married because her three years at college have made her “an impossible prospect, with her pretensions to solitude, and her smoking in the bedroom, and her improbable nostalgia for a time barely concluded” (61); Emily’s opinions reflect the traditional thoughts of society and the domestic, but Cecilia is experimenting with a new sense of identity, one that doesn’t abide by the strictures of the Angel role. Cecilia herself has not formed her sense of self fully yet; she puts herself into the Angel in the House mold in Emily’s absence under pressure, yearning to break free and find an adventure outside of her house. While Cecilia is testing out filling her mother’s shoes, she symbolizes the uncomfortable, unexplored space between the Angel and the young female artist, trying on the traditional role to see if it fits her and then pushing the role’s limits in lieu of immediately shattering it for a new identity. In the moments that Cecilia spends picking out a dress to wear to the dinner party, we see her lying between the lines of the two roles, shunning a dowdy black outfit that would make her look like “an austere, joyless woman” (90) and a frilly pink dress that “flared like an eight-year-old’s party frock” (92). She cannot fit either position, but she has not yet broken away from either place.

There then is a parallel between Cecilia and Minta Doyle, as two young, impressionable women who felt such pressure on them to accept and meet the standards of the Angel that they succumbed to the role. Minta and Cecilia both are fond of literature, and the books they read reflect their ideals; Minta is reading Middlemarch by George Eliot, in which the “heroine” of the novel is the picture of new womanhood, caring for her vocation rather than romance. Cecilia, bored with Richardson’s Clarissa (in which Clarissa denies herself again and again, playing this tragic pure martyr - a great example of the traditional ideals of these super sacrificial women), speaks of her preference for authors like Henry Fielding, whose whimsical work hardly concerns itself with forging a model of womanhood. Interestingly enough, Minta is reading George Eliot, a woman writing under a male pen name; she has escaped the mold in being an author, writing about a woman who cannot break the mold and thus telling these potential young fe-
male artists a conflicting message. Cecilia is reading works by men, Richardson intent on holding down the traditional mold for women and Fielding not concerning himself with it, rather than looking to her fellow women for their input. The novels themselves become Angels, attempting to dictate the young women into their places.

Despite the differences in their heroines, Minta’s and Cecilia’s reading is discouraged and looked down upon: Minta loses her book on the train and plays the ignorant, womanly fool for not knowing the ending, and Emily considers Cecilia’s education in literature a waste of her time and a trait that makes her unlikeable and disagreeable with men’s tastes. Both Cecilia and Minta were made to choose between the Angel role and the young female artist, but never had the chance or time to do so; however, Minta more easily takes the Angel role, unaware of her options to resist, while Cecilia fights against it, coming to know by trial that the Angel role is not what she wants and not what she will fit into as it stands.

On the day of Leon Tallis and Paul Marshall’s visit, Cecilia tries to fit the maternal and angelic role in her own way: filling Uncle Clem’s heirloom vase with flowers, entertaining the men in the garden, and comforting the upset Briony. Each early attempt turns out badly, however: she and Robbie break the vase; she and Leon get into a spat, and she cannot soothe Briony in the same way she did when Briony was younger. Cecilia does play into the Angel in the House idea when needed and expected to; she aids Jackson and Pierrot in finding socks, she scrutinizes her outfits for the dinner, trying not to look too old or too young, and she avoids a fight and Emily’s possible humiliation by convincing her mother and the chefs to compromise on the roast and salad debacle.

Before Cecilia even comes downstairs, she knows she must uphold the Angel in the House role at least for a little while: “Nominally, it would pass to Mrs. Tallis, but ultimately the success of the evening would be in Cecilia’s care. All this was clear and not worth struggling against” (96). As the woman caught in the crosshairs and between naivety and responsibility, she must sacrifice her leisure as a young woman and be the Angel, assuming her duty to make the dinner run smoothly and to attempt to unify the guests and family. Despite her recognition that the evening’s success relied on her, her focus soon is stolen away with the letter and her sexual experience with Robbie in the library prior to the meal. Her attitude at the dinner party is on edge then, as she knows Briony is aware not only of the letter and its explicit contents, but Briony also has the ability to spit out what she caught Robbie and Cecilia doing at any given moment.

While it had only been growing clearer to Cecilia that the Angel role would be impossible and undesirable for her, a grand conflict arises in her filling the position: her sexuality. The Angel is meant to sacrifice all pleasure in the interest of purity even in marriage, and Cecilia’s reading of Robbie’s explicit letter, as well as the intensely intimate sexual encounter between Robbie and Cecilia in the library directly contradict her assumed way of behavior under the Angel role; as an unmarried woman, all of the sexual components are frowned upon. In terms of forming an identity for herself, the moment in the library brings her to fully realizing her body and seeing herself as a woman: “. . . and it was then she made the falling, sighing sound, which, he realized later, marked a transformation” (126). While the observation is made by Robbie about their relationship shifting, it also marks Cecilia moving out of role confusion and into womanhood, taking ownership of her body in tandem with her mind and doing so in her own interests. Cecilia has not yet pulled herself into the young female artist role, but she breaks the Angel mold in a different way, by means of her body and l’écriture feminine; her art becomes her lovemaking with Robbie, and it fully incorporates her body and mind at once. Her art does not become tangible or elegiac, but she is also not fully allowed to make her decision in becoming a young female artist due to her untimely death.

Shifting from Cecilia to her younger sister, Briony - the young female artist focused upon in Atonement - a difference in identity formation comes alive. Woolf’s theory of breaking away from the Angel in the House’s influence is through art, with McEwan in agreeance; both Lily Briscoe and Briony form themselves as young female artists in their own mediums, respectively painting and writing plays and novels. The striking difference between Lily’s and Briony’s formations of self as a young female artist are their ages; with these ages comes awareness or lack thereof about how their identity influences and affects the people around them.

The consensus of neuroscientists from universities like MIT is that the prefrontal cortex, the portion of the brain that deals greatly with decision-making and personality development, is not fully formed until around age twenty-five. Lily Briscoe is forty-four years old before she finishes her canvas and finally finds her truest sense of self, and does it as a tribute, an elegy. Lily’s journey into womanhood and away from the Angel in the House mold comes slowly, and she bites her tongue and keeps her thoughts to herself multiple times through the book, avoiding insulting or offending others with her views that veered from the traditional; the seeds of discord with her intended and expected role are growing within her as a young woman in The Window, but are only realized fully and entirely in The Lighthouse. Briony is much younger - only thirteen - and her breakaway into a new self is much more destructive and more impulsive, her mind less than halfway formed from a psychological standpoint. Briony also has not been groomed into the Angel role yet, and her preemptive break is from childhood; she has taken the status of adult in her mind, so she thinks she must break away then and there. She does not take into account the domino effect her actions and words could cause because her mind is incapable of understanding the potential fallout. In Childhood and Society, Erik Erikson describes the eight ages of man: basic trust versus basic mistrust, autonomy versus shame and doubt, initiative versus guilt, industry versus inferiority, identity versus role confusion, intimacy versus isolation, generativity versus stagnation, and ego integrity versus despair. Two of these sections that seem particularly related to forming some sort of self between child and adult for Briony are initiative versus guilt and
then identity versus role-confusion.

Initiative serves as the vehicle for the child to act as part of society, not just observe it. Erikson says that “initiative adds to autonomy the quality of undertaking, planning, and ‘attacking’ a task for the sake of being active and on the move” (255). Erikson adds that with initiative, the child brings into the picture competition and jealousy, where autonomy kept others out; he links this jealousy to a castration complex, and in turn pinpoints that this step starts the slow process of moving the child toward becoming a parent and a “carrier of tradition”: “For here the child becomes forever divided in himself” (256). Erikson carries on to say that “where the child, now so ready to overmanipulate himself, can gradually develop a sense of moral responsibility . . . he will find pleasurable accomplishment in wielding tools and weapons, in manipulating meaningful toys - and in caring for young children”; Briony, whose weapon is her pen, immediately casts her cousins into the play when they arrive, which shows an attempt for her to not only carry out her vision and please her brother, but to assert her initiative over people less powerful than her in order to put herself in a higher position.

In stage five, the focus lays upon identity versus role confusion; the child has now matured beyond youth and is sifting through adolescence and puberty, rehashing some of the same steps they had as a child in order to figure out better who they are. Erikson says that “the sense of ego identity, then, is the accrued confidence that the inner sameness and continuity prepared in the past are matched by the sameness and continuity of one’s meaning for others, as evidenced in the tangible promise of a ‘career’”, and then states that the danger in this stage lies in role confusion (262). Role confusion comes as a mistaken identifying of one’s own position or “occupation” and or that of others, which happens to both Lily and Briony as they try to discover where they fit and who they are as young female artists. Both Lily and Briony come to define themselves as what they are not, making themselves other to the traditional female roles, yet while Lily identifies the ill-fitting role and sets it aside; Briony chooses to pursue filling roles that she has not been prepared for - the adult and the fully-fledged writer – and/or is not mature enough to claim, and this leads to much anguish for many characters.

Erikson calls the adolescent mind “a mind of the moratorium, a psychological stage between childhood and adulthood, and between the morality learned by the child, and the ethics to be developed by the adult” (263). This limbo period of lost identity perfectly ties to Briony's exploration of self, yet she is unaware, which makes her volatile to those in the circle she inhabits. In the dinner scene, there is a recognition of Briony’s confused status of self by Robbie after a sharp reply to his comment about her being “over the top all day long”: “Briony inhabited an ill-defined transitional space between the nursery and adult worlds which she crossed and recrossed unpredictably. In the present situation she was less dangerous as an indignant little girl” (132).

Briony is still an adolescent but thinks herself an adult, and she believes she understands the thoughts of the adults around her. She thinks she can create a self, but she has her ideas wrong: because she is still a child and unaware of her body, she cannot fully understand herself as an adult, or even more, as a woman. As she looks upon Robbie and Cecilia’s interaction in the garden with the breaking of the vase, Briony does see the divide between the child-self and the adult-self, but does not yet breach it. As Cecilia emerges from diving into the fountain for the vase fragments, Briony “had her first, weak intuition that for her now it could no longer be fairy-tale castles and princesses, but the strangeness of the here and now, of what passed between people, the ordinary people that she knew, and what power one could have over the other, and how easy it was to get everything wrong, completely wrong” (37). She realizes that there are things about the world that she will not understand but she could create meaning for; this moment is formative but also dangerous, as she is not simply commenting on the fact that she might misunderstand, but she seems content with the idea to glean meaning and distribute it and distort it as she wants to fit her storyline.

Another moment that calls attention to her age and previous unawareness of her body and the form of self that will be expected of her someday is the scene as she reads Robbie's letter to Cecilia. Briony knows that she is exposing herself to something new by the strange feeling she gets as she opens the forbidden, explicit letter, and she becomes aware that “she was entering an arena of adult emotion and dissembling from which her writing was bound to benefit” (106). She knows the moral implications of opening the letter that does not belong to her, but she is so keen to be aware of everything in order to enhance her writing, of which she believes is how she is forming herself, and carries on anyways. She breaks a hole through her child-self in her sin of opening the letter, as well as alienates herself specifically from the stand-in Angel in the House that she is to obey, invading Cecilia's privacy. The primal moment of womanhood that comes to Briony's attention is spurred on by that obscene sexual word for the female anatomy - “no one, not even her mother, had ever referred to the existence of that part of her to which - Briony was certain - the word referred” (107); she now has identified herself as a woman, but still as a child she cannot yet claim her body. She fractures the child-self but she is then stuck; she cannot force herself into the large Angel in the House mold, as it is currently filled by two, and she cannot break it, as it has not yet been imposed upon her. Briony is not cognizant of this discrepancy between her childhood and womanhood, and her young mind not experienced or knowledgeable enough to form one without harm to others, and she takes action to defend Cecilia against Robbie's primal, threatening, and animalistic desires, thinking that she now understands adults and that she can help mold others as well.

The moment that seals Briony's break from the mold set out for her, the moment she decides to set herself apart from what others had expected of her by making an irreversible decision, is when she gives her verbal testimony to the police - “It was him. I saw him” - and fetches the letter from Robbie to Cecilia as evidence of her truth. Her accusations backed by her hard proof turn her testimony not into the witness of a confused young girl, but the testimony of
a convicted young woman; after giving testimony, she is ushered to bed, away from the hubbub of the police work and the impending arrest of Robbie. Briony, who had been vying for adulthood and treatment for the whole novel up to this point, is exhausted and put to bed not by her mother, but Betty, the servant. As Briony falls asleep, she suddenly questions if her moves and actions were all that she thought with her assumed adult knowledge:

All that lay between was too clamorous, too fluid to understand, thought she sensed she had succeeded, even triumphed . . . In her dizzy state she was not able to say exactly what her success had been; if it was to have gained a new maturity, she could hardly feel it now when she was so helpless, so childish even, through lack of sleep, to the point where she thought she could easily make herself cry.

If it was brave to have identified a thoroughly bad person, then it was wrong of him to turn up with the twins like that, and she felt cheated (172).

Briony thinks not that perhaps her interpretation was not applicable all the way through, and that she may have missed some key element to understanding, but that her interpretation and testimony would be tossed away with Robbie’s good deed of finding and returning the runaway twins to safety; it is clear that even though she thinks she has broken away from her childhood, she is still just as stuck within her adolescence in thinking of the situation in this way. She also longs for her mother’s embrace, but knows that she cannot have it. She thinks both that she will be considered a liar after Robbie’s arrival, and that she is an adult and can no longer cling to her mother.

Briony has effectively killed the Angels over her in the first portion of the novel, but in different ways; the difference also between Briony and Lily is that Briony’s Angels are still alive when she chooses to kill them off, which is why her actions become so devastating to the future of the Angels she destroys. She has killed Emily by claiming herself as an adult, no longer relying on her mother’s opinion of her works or her affection to soothe her; this passive killing of the mother Angel is not new or surprising, as mothers experience a loss with their children moving from childhood to adulthood and severing certain ties in favor of newer, different ones. As Briony swings at the nettles to vent her frustration in her failed play, “she disposed of her old self year by year in thirteen strokes. She severed the sickly dependency of infancy and early childhood, and the schoolgirl eager to show off and be praised, and the eleven-year-old’s silly pride in her first stories and her reliance on her mother’s good opinion” (70). While Emily is not directly in the scene, we still get the sense that Briony has shirked her mother’s ideas of who she should be and effectively changed them, killing her as part of the Angel in the House. The break, however, is not clean and clear like Lily’s break with Mrs. Ramsay, as Briony falls asleep longing for her mother. In that moment, it is clear that Briony is too young to craft an elegy of what she has killed and what security she has lost in doing so.

While Emily is one half of the Angel in the House figure, Cecilia is the other; Briony’s killing of Cecilia as the Angel is much more violent and unintentionally destructive. While Briony believes she is saving Cecilia, the pseudo-Angel, from the animal Robbie, she doesn’t understand that her inability to process adult situations and feelings have caused her to kill the relationship between the lovers, as well as hold her slightly accountable for both of their deaths. In Briony using her version of events in accordance with how she wanted to portray her characters and create her story, she changes reality altogether and alters the events to come in a way that cannot be repaired.

In To The Lighthouse, we see a moment of striking similarity between Lily and Briony, perhaps the strongest link between the two young female artists. Lily is fantasizing about the possibilities of the progression of the marriage between Paul Rayley and Minta Doyle and imagining different strifes between the two lovers: “And this, Lily thought, taking the green paint on her brush, is making up scenes about them, is what we call ‘knowing’ people, ‘thinking’ of them, ‘being fond’ of them! Not a word of it was true; she had made it up; but what it was she knew them by all the same” (173). Despite the similarity of thought, the difference lies in the usage of this knowledge, this mutability of expressing people in art: Lily only thinks her stories to herself and knows them to be false, just tales of fancy.

Briony, however, takes her projections of meaning upon situations and her follies about living people to be real, her versions of reality to be written and their intent to rewrite the present; while Briony is not alone in projecting meaning onto situations, she does so with a writer’s mind and intent, imbuing all events through only her dark “rose-colored” glasses, allowing her supposed adult perception color everything and displaying her beliefs over top. Briony’s deception and willingness to believe and disseminate her own versions of events have devastating consequences in the lives of her family and drastic changes upon who she becomes and forms as her version of self. She accuses Robbie of raping her fifteen-year-old cousin, which ends up sending him to jail and then into the army.

Briony’s full recognition of her formation of self and how damaging it was to the people surrounding her doesn’t begin to occur until she is around age eighteen when she enters into the hospital profession as a nurse for injured soldiers - an homage to Cecilia, who is also a nurse. In the hospital, the nurses are not allowed to go by their first names - their Christian names - and are all required to wear their pressed, pinned, and regulated uniforms exactly the same; they become not individuals but nameless figures to the soldiers they care for and the women they accompany. Briony first tries to use this anonymity as a distraction from confronting the damage she did to her sister and Robbie’s lives: “physical discomfort helped close down Briony’s mental horizons” (259). This erasure of self also is used as a method of repressing her infantile ways and wants, outwardly eradicating her “unique” self she created at thirteen; however, she keeps follies and fancies in her diary, letting the artist stay alive within her but unable to reconcile how to create herself conscientiously as she has seen the harm it caused the first time. This erasure of self, while being something that detracts from her creative, becomes an act of l’écriture feminine, using her body to live as an abstract bit of art. She performs as a nurse,
but she even performs as someone else; this acting role becomes a form of art, dedicating itself to both eulogizing Cecilia (in copying her job) and to painting over the self that Briony had created.

As the war gets more serious with threats and rumors of Germany invading London, she finds herself unable to ignore the guilt in her mind as the body count rises before her eyes and she must confront her past choices and their effects on others: “If something happened to Robbie, if Cecilia and Robbie were never together... Her secret torment and the public upheaval of war had always seemed separate worlds, but now she understood how the war might compound her crime. The only conceivable solution would be for the past never to have happened” (272). This moment laces into her thoughts upon elegy and atonement and its futility for her at the end; she realizes the only way to erase her culpability and to fully attain a feeling of fulfillment from her apologies would be if she had never done it in the first place.

As Briony works in the ward and contemplates the marriage of her cousin and the man who actually assaulted her the night of the dinner party, Paul Marshall, she realizes the ineffectiveness of the elegy for her in her “art”: “Whatever skivvying or humble nursing she did, and however well or hard she did it, whatever illumination in tutorial she had relinquished, or lifetime moment on a college lawn, she would never undo the damage. She was un forgiveness” (269). In that admission of guilt over her actions and also admission of her inadequate fulfilling of her role as the young female artist, she then takes her next step toward figuring herself out - going to apologize to Cecilia in person. After finding Cecilia, and also Robbie, she finds strange comfort in their anger; Briony is told by Cecilia to make a statement to a commissioner retracting what she said about Robbie, and then to write and send Cecilia a long letter detailing everything she remembers. In being told to write, the Briony in the novel finally finds the push and the sense of her elegy meaning something to form herself fully as a young female artist:

She was calm as she considered what she had to do. Together, the note to her parents and the formal statement would take no time at all. Then she would be free for the rest of the day. She knew what was required of her. Not simply a letter, but a new draft, an atonement, and she was ready to begin (330).

What throws the reader for a loop and really brings in the formation of the young female artist is the revelation that the last twenty pages of the book bring. The final section of the novel gives us a seventy-seven-year-old Briony, reflecting on her family and her works as an author after getting a diagnosis of vascular dementia; Briony reveals that her novel about the events of the fateful night has been in the works for fifty-nine years. We learn that Briony, the young female author, never did apologize in person to her sister, and that the “happy ending” for Robbie and Cecilia was fiction - they died apart in the war, their last meeting being Cecilia clinging to Robbie in the driveway of her house before being arrested.

Briony's formation as a young female artist then becomes impregnated with an air of elegy, yet the elegy is not for her, but for the reader. Her final work of art before she begins losing her memory and abilities is one in which she gives her sister and Robbie a happy ending to the story that she mangled as a young girl, but the happy ending was only instituted in her final draft of the novel. For the reader, she satisfies their need for clarity and closure of sorts: “But what really happened? The answer is simple: the lovers survive and flourish. As long as there is a single copy. . . then my spontaneous, fortuitous sister and her medical prince survive to love” (350). Briony's ending does sate the readers’ want to have the lovers be together, but Briony does write for herself, forming herself as a novelist, writing what she pleases, and a young female artist in her art over fifty-nine plus years.

Like Lily Briscoe, Briony uses the memory of her sister, the Angel she kills, as a basis for her art; she creates art as a eulogy, giving her sister and Robbie the ending she thought they deserved. However, unlike Lily Briscoe, Briony's Angel had yet been alive when she “killed” her, bringing great consequences in the feelings about elegy for her; Briony didn’t place Cecilia in that train station before the bomb, and didn’t give Robbie septicemia, but her accusations upon Robbie led to it and made her implicitly responsible. Briony as a young nurse frets constantly over being unforgivable and erasing the version of herself that destroyed Cecilia's life almost completely, and despite her fear and guilt, she goes to see her sister to apologize; the elderly Briony tells us that she was cowardly and turned back halfway, “unable to confront her recently bereaved sister” (350). Briony acknowledges her crime but decides, as Lily does, to mold memories, but not for herself -- the molding and the elegiac are done in order to give some sort of hope to readers.

She reconstructs the memories of Cecilia and Robbie but she also tells us that elegy means nothing for her. Lily's art sets her free and gives her a sense of fulfillment in the realization of her vision by changing Mrs. Ramsay and molding her memory; in Briony's fabrication about going to see her sister, she has freed the reader, given them the Hollywood ending they wanted, in eulogizing the two lovers. She still feels the guilt but she knows that she cannot let it fester inside her, and as a fiction writer, she has the ability to play God to an extent. She uses her energy to make a novel with a touch of l'ecriture feminine, and has to come to accept, as a young female artist, that she will have to live with the weight of the things she has broken, as Atonement and forgiveness cannot be concluded upon. Her full understanding of herself as a woman then allows her to make choices to make her writing round and full. It is interesting that Briony does not just write an entirely fictionalized version of Cecilia’s life with Robbie, but she includes all of her own culpability within the fall of their lives due to her own actions - even her fantasy doesn’t leave her fulfilled through forgiveness, as Robbie and Cecilia soften but never give entirely. Her telling of the story shows how she formed herself - a self awareness most prominent - and how it has influenced her life and the implications on her work, and given her a postmodern perspective, skeptical
of a fairytale ending in which everyone gets what they want. In the end, when we are given Briony’s thoughts directly from her seventy-seven-year-old self, we see her spinning her ability to become “God” as a writer, the lasting arrogance from the thirteen-year-old Briony persisting: When I am dead, and the Marshalls are dead, and the novel is finally published, we will only exist as my inventions... No one will care what events and which individuals were misrepresented to make a novel... how can a novelist achieve atonement when, with her absolute power of deciding outcomes, she is also God? There is no one, no entity of higher form that she can appeal to, or be reconciled with, or that can forgive her. In her imagination she has set the limits and the terms... It was always an impossible task, and that was precisely the point. The attempt was all (350).

This moment echoes Lily Briscoe saying that we can do what we like with the dead, but Briony is telling us that for her, there is no possibility of atonement. Her work is simultaneously for her, in expressing herself and revealing her wrongdoings, and for the reader, giving her sister an ending of peace; atonement and apology is worthless as she realizes that the dead cannot forgive her, and her writing could not be asking for atonement because she cannot receive it - as God, there is no one above her to grant her forgiveness, and God asking for forgiveness might even imply that God isn’t infallible. Briony does not assert that elegy does not exist, but that some people are so forever connected to their actions that they will have to just live with the pieces they shattered forever poking them, like bone spurs in a broken leg. Lily can accomplish her vision in her art and through elegiac means for herself because of her distance from Mrs. Ramsay’s death, but while Briony can try to make amends by means of art, she knows she can never fully be fulfilled and or relieved from her part in the death of Cecilia and Robbie.

In Atonement, Emily Tallis and her eldest daughter Cecilia serve as a two part Angel in the House, attempting to unify the family at a dinner party but failing as the night ends in missing children and a devastating accusation. Briony Tallis is a young female artist who shirks her childhood and claims herself as an adult, attempting to form herself by changing the reality of others, which causes a domino effect that impacts the lives of her family members and close friends. As a result, Briony’s formation of self and break away from the mold that hardly yet had been set out for her was changed, and she spends her life becoming a novelist, working up to her most poignant and raw piece of art, giving elegy as relief to the reader, but acknowledging her right as a fiction author to play God and her personal inability to attain peace or fulfillment from elegy.

In both novels, the young female artist realizes their differences in their identities and their want to form themselves that don’t fit with the molds that society has laid out for them. These young female artists must first identify the “Angel in the House” figure within their domestic sphere, and then symbolically kill her; after this, the young female artist becomes liberated to claim her mind and body as her own, and to access herself as a woman, aware of her sexuality and independence. Her breakthrough into her sense of identity as a woman must come after she has attained adulthood; breaking away as a child can have severe negative consequences on the people surrounding the young female artist. Once she has fully become aware of who she is, and what she has lost in sacrificing the Angel to create herself, she uses her newly liberated creativity to make elegiac art, apologizing, commemorating, and honoring the woman she had to destroy in order to find herself.

The success of this elegy is mixed, as the modernist approach of To The Lighthouse holds hope for the young female artist, striving towards fulfillment, and yet the postmodernist view in Atonement shows that the young female artist will be always connected to the things she has broken, and must realize that elegy cannot serve their forgiveness. How can we reconcile these differences, or what do they mean to the future of young female artists forming their identities? The modernists find beauty and art in unity, and the postmodernists like to break their art apart and look at the raw, sharp, yet beautiful edges. Both tales of the young female artist serve to show the double-edged sword of the sacrifice needed for art, be it at someone else’s expense or our own; Lily does have her vision, but yet she suffers in her artmaking, which makes her still connect to the suffering of Briony. The differences of the modernists versus the postmodernists - despite being of almost opposite opinions and focuses - serve not to pull the novels apart or to break the notion of the young female artist forming her identity, but they show the power of the narrative of the young female artist’s hold on the world around her. She branches out and exists in all different critical lenses, and elegy still is created even if she does not benefit, which, in realizing her destructive formation of self, she has to accept. The modernists and postmodernists may not agree on the success of elegy, but the young female artists that rise up and create within the bounds of the two literary spheres still hold great and dangerous power in setting examples for others to see, encouraging and cautioning the young female artist in the turns in the path she will inevitably encounter.

Works Cited


The elusive concept of beauty has transfixed artists and laymen alike for centuries; the title character of Oscar Wilde’s *The Picture of Dorian Gray* is no different. When Dorian Gray sits for a painting that captures his youthful beauty, his fear of aging inspires the portrait to bear the mark of the years instead of Dorian himself, he enters into a life of hedonism that ultimately leads to his own demise. Literary criticisms surrounding Wilde’s novel suggest the influence of Walter Pater’s Studies in the History of the Renaissance on Wilde’s work. This paper will investigate the concepts of beauty and art, found throughout the novel, through the lens of Walter Pater’s aesthetic philosophies as well as Wilde’s own ideas as set out in “The Decay of Lying,” and his preface to *The Picture of Dorian Gray*. Pater’s philosophies are an obvious influence for Wilde, but the lifestyles projected in *The Picture of Dorian Gray* represent the variance between Wilde’s personal beliefs and those promoted by aestheticism and hedonism. The paper’s central argument applies both Pater’s and Wilde’s definitions of art and beauty close readings of the novel’s text. Through analysis of the actions and assertions of Dorian Gray, Lord Henry, and Basil Hallward, definitive associations between the characters and the writer they represent are revealed. Oscar Wilde’s *The Picture of Dorian Gray*, heavily influenced by Walter Pater’s beliefs, reveals the complexity and danger of aestheticism through the life and death of Dorian Gray, whose hedonistic behavior, believed to bring ultimate satisfaction, actually inhibits his ability to live fully.

KEYWORDS: Aestheticism; beauty; youth; Oscar Wilde; Walter Pater

The elusive concept of beauty has transfixed artists and laymen alike for centuries; the title character of Oscar Wilde’s *The Picture of Dorian Gray* is no different. When Dorian Gray sits for a painting, the artistic creation that results is beyond all he could have expected. The portrait’s beauty, so perfectly capturing its subject, inspires Dorian to wish for his own eternal youth, designating the painting itself to bear the consequence of the years. Following the rules of hedonism introduced to him by Lord Henry, an older gentleman taken with the boy’s charm, Dorian descends into a life of pleasure and sin. As he frequents opium dens, engages in suspiciously vague relationships with other young men, and commits murder, his portrait shows him the truth of his actions. As the years pass and the painting becomes more wretched, Dorian’s obsession with it grows. When he can no longer face the visual representation of his sinful nature and age, he stabs the painting and thereby kills himself.

Wilde’s aphorisms, articulated most often by the character of Lord Henry, are the reader’s first introduction to the aesthetic philosophy that permeates the novel. Though originated by French writers, the father of the ‘art for art’s sake’ movement is thought to be English writer Walter Pater. The ideas set forth in his work, Studies in the History of the Renaissance, define aestheticism and are an obvious influence on *The Picture of Dorian Gray*. Wilde’s essay, “The Decay of Lying,” and the preface to his novel mirror many of Pater’s beliefs, which are then embodied in the characters and behaviors of Dorian Gray and Lord Henry.

Dorian’s relationships with Lord Henry and Basil Hallward prove to be the greatest influence on him. Upon their first meeting, Lord Henry presents the concept of hedonism to Dorian, confusing it with aestheticism and shaping the outcome of the youth’s entire life. Basil Hallward, while the only true artist of the three, strays most from Pater’s aesthetic philosophies, instead playing the voice of reason for his two friends. Dorian, devoting his life to the pursuit of pleasure, exemplifies both the benefits and consequences that result from living hedonistically. Wilde’s *The Picture of Dorian Gray* reveals the complexity and danger of aestheticism through the life and death of Dorian Gray, whose hedonistic behavior, believed to bring ultimate satisfaction, actually inhibits his ability to live fully.
Literary criticisms of Oscar Wilde’s *The Picture of Dorian Gray* primarily focus on the themes of homosexuality, religion and morality, art and beauty, and the philosophy of aestheticism found within the novel. Joseph Carroll, in his book, *Reading Human Nature: Literary Darwinism in Theory and Practice*, interprets the behavior of Dorian, Lord Henry, and Basil through the lenses of Darwinism, Christian beliefs, and Pater’s definition of aestheticism. By looking closely at the homosexual undertones of the novel, he finds that the lifestyles and interests of homosexuals in the late-Victorian age corresponded with aestheticism because of the significance placed on youth and appearance. Glenn Clifton’s essay, “Aging and the Periodicity in *The Picture of Dorian Gray* and The Ambassadors: An Aesthetic Adulthood,” also considers the connection between youth and aestheticism. He compares the treatment of aesthetics and the conflict of aging in Wilde’s *The Picture of Dorian Gray* and Henry James’ *The Ambassadors*, and concludes that youth is so idealized because of its untapped potential for greatness. He identifies the reason behind the fin-de-siècle’s obsession with youth as being a rejection of traditional Victorian society, which “tended to identify with the aging Queen Victoria” (Clifton 289).

Greg Buzwell, too, views Dorian’s actions as a purposeful refutation of the strict morals of the late-Victorian era. His essay, “*The Picture of Dorian Gray*: art, ethics, and the artist,” examines Dorian’s criminal exploits as well as his refined upper class life, he finds a connection between criminal activity and aestheticism.

Patrick Duggan focuses more on Wilde’s ideals, than those of the Victorian Age in which he lived. In “The Conflict Between Aestheticism and Morality in Oscar Wilde’s *The Picture of Dorian Gray*,” Duggan states that the novel exemplifies Wilde’s belief that immorality and degeneration of the individual and society will be the inevitable result of an unrestricted aesthetic lifestyle. He looks closely at how the properties of aestheticism are applied to Dorian Gray’s life, and concludes that it “results in a lack of remorse, self-absorption, and intellectual regression” (Duggan).

Michael Patrick Gillespie, in “Ethics and Aesthetics in *The Picture of Dorian Gray*,” on the other hand, interprets Dorian Gray’s behavior through the philosophies of ethics; Dorian is not lacking a “set of standards” (Gillespie 149), instead, his values reflect his devotion to hedonism and clash with the traditional beliefs of righteousness. His brief overview of the Pre-Raphaelite art movement that heavily influenced aestheticism makes clear Wilde’s use of natural and floral imagery in the text.

Many critics have found a connection between Dorian’s devotion to aestheticism and his eventual downfall; my thesis will attempt to define the aesthetic lifestyle, acknowledging its advantages and disadvantages, in order to determine whether or not Dorian achieves it. I will examine the extent to which Wilde’s novel fulfills the philosophies of the aesthetic movement as set out by Walter Pater in *The Renaissance: Studies in Art and Poetry* and Oscar Wilde, himself, in his essay “The Decay of Lying” and his preface to *The Picture of Dorian Gray*. I plan to use the critical analyses of Dorian Gray and Lord Henry’s behaviors found in Carroll and Buzwell’s works. Clifton’s thoughts on youth in the late Victorian age will help clarify my thesis’ definition of beauty. Dugan and Gillespie’s essays will aid in my exploration of what it means to live an aesthetic life.

Aestheticism is the “art for art’s sake” (Gillespie 142) movement begun in France in the mid 1800s. Proponents of the movement believe that “the function of a work of art lies simply in its existence and in its ability to exude beauty” (Gillespie 142). Oscar Wilde’s preface to *The Picture of Dorian Gray* can be read as a definition of aestheticism; it asserts that art serves no purpose other than to bring pleasure to its audience: “All art is quite useless” (Dorian Gray 4). The aesthetic movement grew out of the Pre-Raphaelite art movement, which “emphasized truthfulness and simplicity, often reflected in a devotion to Nature...[and] gave value to art works as ends in themselves rather than as means to separate goals” (Gillespie 142). Aestheticism, in rejecting the notion that art should serve to educate or moralize the public, frequently comes in conflict with the traditional morals of Victorian society, as demonstrated in *The Picture of Dorian Gray*.

Wilde and Pater both give descriptions of their ideal artistic critic. Pater’s critic is more analytical; his mission is to “distinguish, to analyse, and separate from its adjuncts, the virtue by which [art... produces this special impression of beauty or pleasure, to indicate what the source of that impression is, and under what conditions it is experienced” (Pater 725). Conversely, Wilde opposes the dissection of beauty, for “[t]hose who go beneath the surface do so at their peril. Those who read the symbol do so at their peril” (Dorian Gray 3). Both definitions are included in the preface to each writer’s work, demonstrating that Wilde’s *The Picture of Dorian Gray* is in conversation with Pater’s Studies in the History of the Renaissance. Wilde’s notion that “peril” will ensue as a result of following Pater’s instructions is found throughout his novel. The character of Dorian Gray becomes consumed by the prospect of his portrait bearing the weight of his sins and age. In trying to find meaning in the portrait and allowing its changing image to influence his life, Dorian goes “beneath the surface” of the artwork. By seeking to understand the symbolic message of the painting, Dorian drives himself mad. Art, Wilde argues, should be appreciated for its beauty and the pleasure it brings, nothing more.

In *The Picture of Dorian Gray*, an older gentleman, Lord Henry Wotton takes a special interest in the young Dorian Gray. While seated in Basil Hallward’s garden, Lord Henry decides to share what he feels to be the essential lessons for Dorian to learn as he embarks on his journey into adulthood. Amazed by his beauty and charm, Lord Henry urges Dorian to seize every moment of his youth, suggesting that doing so is the only way he will truly live.

A new Hedonism—that is what our century wants. You might be its visible symbol. With your personality there is nothing you could not do. The world belongs to you for a season...The moment I met you I saw that you were quite unconscious of what you really are, of what you really might be. There was so much in you that charmed me that I felt that I must tell you some-
Dorian Gray’s first one-on-one interaction with Lord Henry is appropriately set in a garden. Surrounded by nature, Lord Henry laments the ephemerality of Dorian Gray’s youth and beauty. Informed that “there is such little time that [his] youth will last” (Dorian Gray 23), Dorian Gray is suddenly forced to value himself only in terms of his physical appearance that must not be “wasted” (Dorian Gray 23). Before meeting Lord Henry, painter Basil Hallward describes him as having “a simple and beautiful nature” (Dorian Gray 17). The youth is admired for his innocence; the realization of his fleeting beauty, which will ultimately shape his life, has not yet occurred to him. However, Lord Henry chooses to prioritize Dorian’s outer beauty over his inner beauty. Lord Henry’s language, as opposed to that of Basil’s, dehumanizes Dorian, forcing him into the same category as the flowers that surround him: decoration. Immediately, Lord Henry introduces the notion of hedonism to Dorian, even admitting that Dorian could be the “visible symbol” (Dorian Gray 23) for its new movement. Dorian is offered the position of benefactor of an exclusive club, and he must either accept or decline Lord Henry’s invitation. In this moment, Dorian’s beauty shapes his path. By accepting Lord Henry’s instructions for how to live, Dorian gives up control of his own life. However, what both Dorian and Lord Henry do not realize is that their understanding of aestheticism is incomplete. While the hedonistic ideal of pursuing pleasure is part of the aesthetic lifestyle, the actual focus of aestheticism is the wondrous experiences that true beauty will impart. Dorian, transfixed by Lord Henry’s narrow interpretation of aestheticism, will forevermore be guided by the rules of hedonism.

Lord Henry, in his conversation with Dorian, is encouraging him to cherish this time of youth, for it is so fleeting. The “new Hedonism” (Dorian Gray 23) of which Lord Henry is so in favor, is not a traditionally acceptable mode of living; it encourages selfish and indulgent behavior. The acts of working to benefit others, he says, “are the sickly aims, the false ideals, of our age” (Dorian Gray 23). Those that devote their lives to helping others are unenlightened, by Lord Henry’s standards. The joys brought about by pleasure seeking are thought here to be greater than the rewards of selflessness and charity. Dorian is offered these rewards simply because of his appearance. It is Lord Henry’s attraction to Dorian that causes him to take the youth under his wing, guiding him toward his ideal life. Beauty acts as a type of trap, determining Dorian’s life without his consent or awareness. Lord Henry tempts Dorian by equating hedonism with enlightenment, causing Dorian to believe that only by submitting to the gentleman can he achieve a greater understanding of life. This “new Hedonism” that Lord Henry speaks of emphasizes youth. Whereas traditional hedonism can be followed at any age or stage of life, the revival of this lifestyle would focus on relishing in the beauty and pleasure of oneself and others while still young. He suggests that the youthful are the most alive, and can therefore appreciate the pleasures of life more fully. As age overtakes the body, senses begin to fade, inhibiting one’s ability to experience true pleasure. There is a strict time frame that Lord Henry sets for Dorian. In saying that “there is such a little time that your youth will last—such a little time” (Dorian Gray 23), Lord Henry creates a sense of urgency that makes Dorian aware and fearful of his own mortality for the first time in his life. This, too, compels him to abide by Lord Henry’s guidelines; he may only appreciate his feeling youth by following the rules of hedonism. The “passions” and “temptations” that consume the mind suddenly seem justifiable, instead of shameful and selfish. There is such a small window in which this new hedonism can be relished that if these sinful desires are not indulged in during youth, they will be forever abnegated.

While upon first glance, Lord Henry’s interest in Dorian Gray appears purely superficial, it quickly reveals itself to be more calculating. Knowing that his age and maturity impresses the youth, Lord Henry uses his influence to shape and mold Dorian into his ideal person. The assumption he makes that Dorian is “quite unconscious” (Dorian Gray 23) of his own person and potential—“what [he] really might be” (Dorian Gray 23)—is an instance of Lord Henry’s belittling and manipulation. To Dorian, the suggestion that he does not know his own potential is well intentioned; Lord Henry did not have to inform Dorian of the opportunities available to him, but he does so in order to prevent the wasting of such qualities. This act is seen as noble, building Dorian’s trust in Lord Henry and signifying the start of a mentor relationship between the two men. He continues his lecture, purposely omitting any possibilities for the boy’s future other than the one he favors. His manipulation is also exemplified when he credits Dorian’s charm for making him get involved, instead of taking responsibility for his own actions. He uses the threatening imagery of “senses rot[ting]” and “hideous puppets” (Dorian Gray 24) to strike fear into the mind of the youth. Rather than tempting Dorian with the wondrous possibilities that await him should he accept this “new Hedonism,” he focuses on the horrors that befall those that abstain from pleasure. Their relationship is born out of intimidation masquerading as concern and adoration.

Walter Pater acknowledges that while beauty is subjective, not everyone can identify a beautiful work of art. The ability requires “rich receptiveness” and “exquisite and accurate perception” (Leitch et al. 722). Lord Henry exhibits these sensibilities, as he not only sees the beauty that is Dorian Gray, but also appreciates it. He holds
“the power of being deeply moved by the presence of beautiful objects” (Pater 725), making Lord Henry Pater’s ideal aesthetic critic. He appreciates Dorian’s beauty so much, that he is moved to take a stand in defense of it. He wills the boy to live hedonistically because if he does not, Dorian’s beauty will be meaningless. In this sense, Lord Henry represents Walter Pater’s philosophies. Pater emphasizes the beauty of youth and the present moment, ideals promoted by Lord Henry. Dorian has the potential to lead a truly wonderful life, by Pater’s standards, and it would be a waste if he were to turn away from such possibilities.

There is a parallel set up between this garden scene and the Bible’s Garden of Eden. Dorian Gray represents the naiveté of Adam and Eve before their consumption of the apple. He is earlier described as having “kept himself unspotted from the world” (Dorian Gray 18), which is a direct reference to James 1:27: “Pure religion and undefiled before God and the father is this...to keep himself unspotted from the world” (New Revised Standard Version, James. 1.27). Before meeting Lord Henry, Dorian is pure and undefiled; he follows a righteous path as exemplified by his volunteer work with Lord Henry’s Aunt Agatha and his close relationship with Basil Hallward—the moral compass and voice of reason in the novel. Yet because his life is sheltered and he is well cared for, he is vastly unaware of the realities of the world; he has not yet eaten from the tree of good and evil. Lord Henry’s character represents both the snake and the apple, because he serves as the source of temptation and the knowledge itself. He tempts Dorian to enter this vast world wherein he can fully experience pleasure. In meeting and fashioning a relationship with Lord Henry, Dorian takes a bite of the apple. And when he does so, he can no longer go back to his simple boyhood.

This argument of Lord Henry’s closely parallels Walter Pater’s exaltations in Studies in the History of the Renaissance. Pater, too, places a heavy emphasis on the fleeting quality of life, saying, “[w]hile all melts under our feet, we may well grasp at any exquisite passion, or any contribution to knowledge that seems by a lifted horizon to set the spirit free for a moment” (Pater 729). Life’s pleasures are believed to hold so much value because they can only be enjoyed for a brief period of time. Pater continues his argument to suggest that while death can never be escaped, the pursuit of pleasure is the best chance of “expanding that interval, in getting as many pulsations as possible into the given time” (Pater 730). By this argument, Lord Henry is not as devious as he is initially made out to be. In urging Dorian to pursue pleasure above all else, he is really trying to protect Dorian from the fear of death. In this case, his intentions are more saintly than selfish.

Lord Henry strays from Pater’s values in his focus on youth. Pater does not specify a phase of life wherein the most pleasure can be achieved; he promotes aestheticism as a life-long objective. Lord Henry, on the other hand, makes youth the main focus of his conversation with Dorian. This may be, in part, because of the difference in years between Pater and Wilde’s writings. The Studies of the History of the Renaissance was first published in 1873, while The Picture of Dorian Gray was not published until 1890. The anxiety over the fin-de-siècle manifested itself in an obsession with youth (Clifton 286); Holbrook Jackson said of the period, “[n]ever, indeed, was there a time when the young were so young or the old so old” (Clifton 286). Dorian Gray’s youth holds greater value to himself and others at this moment in history. Lord Henry, as an older gentleman, has lost his youth and with it, the attention he likely received. He understands that youth, and the beauty it provides, must be appreciated for the time that it lasts, for it is even more temporary than life itself.

The extreme emphasis placed on youth and beauty is also demonstrative of the homosexual undertones in the novel (Carroll 96). Lord Henry’s immediate attraction to Dorian Gray is arguably that of a sexual nature; Dorian’s age and appearance make him more sexually appealing, and therefore, Lord Henry dreads the day that his youth will be lost. Lord Henry’s aesthetic philosophies actually compliment his homosexual practices. May of Pater’s and Lord Henry’s beliefs focus heavily on isolation and the self, instead of interactions and relationships with others (Carroll 98). Hedonism promotes experiences that bring pleasure to oneself, disregarding the feelings and experiences of others. Researcher Donald Symons conducted a study on homosexual behaviors and found that a key characteristic of the homosexual lifestyles is “promiscuous, impersonal sex” (Carroll 99). This hedonistic way of life relates directly back to Pater’s aestheticism, creating another link between the philosopher and Wilde’s character of Lord Henry.

Lord Henry’s influence on Dorian stretches even further as the time passes. His gift of a unique book completely consumes the youth’s mind and contributes to his narrow understanding of aestheticism; Dorian sees “in exquisite raiment, and to the delicate sounds of flutes, the sins of the world [that] were passing in dumb show before him” (Dorian Gray 97). Just like in the garden scene, the sins of pleasure are depicted in a positive light. The “exquisite raiment” (Dorian Gray 97) emphasizes the beauty of the sins; they are adorned well. Dorian Gray, finding pleasure in the beautiful: art, clothing, even himself, is therefore quite attracted to sins that appear so handsome. The “delicate sounds of flutes” (Dorian Gray 97) to which the sins dance give the impression of innocence; for sinning cannot be that bad if it is accompanied by gentle music. Dorian allows himself to be swept away into the world of passion and pleasure because of the book’s revelations. The gift of the book serves as the catalyst for Dorian’s break from Lord Henry, even though the older gentleman was the one who put the book in Dorian’s possession. After learning all that he thinks is of significance to him from the book, Dorian feels he no longer needs Lord Henry. The book gives him knowledge that prior to its reading would have required Lord Henry’s maturity and experience.

There were in it metaphors as monstrous as orchids, and as subtle in color. The life of the senses was described in the terms of mystical philosophy. One hardly knew at times whether one was reading the spiritual ecstasies of some mediaeval saint or the morbid confessions of a modern sinner. It was a poisonous book. The heavy odor of incense seemed
to cling about its pages and to trouble the brain. The mere cadence of the sentences, the subtle monotony of their music, so full as it was of complex refrains and movements elaborately repeated, produced in the mind of the lad, as he passed from chapter to chapter, a form of reverie, a malady of dreaming, that made him unconscious of the falling day and the creeping shadows. (Dorian Gray 98).

Wilde’s form in this passage, full of imagery, serves the function of paralleling the influence that Lord Henry’s book has on Dorian. As a variety of senses are engaged by the detailed descriptions, the reader is absorbed into Wilde’s text in the same way that Dorian is absorbed into his. The image of large and colorful orchid petals catches the eye and illustrates the greatness of the language Dorian is deciphering. The use of floral references, used throughout the novel in reference to Dorian Gray himself, are maintained here and create an immediate connection between Dorian and the book. In addition, as nature was a defining theme in Pre-Raphaelite art, its metaphorical presence establishes the book as being aesthetic in both form and content. The “odor of incense” (Dorian Gray 98) brings to mind a fog that blurs sight and monopolizes smell. The scent is so strong that it “trouble[s] the brain” of Dorian Gray and impedes his judgment, while the “monotony of [the] music” (Dorian Gray 98) lulls him into a comatose state. The effects of the book are reminiscent of hypnosis or drug usage; his fascination with such a feeling foreshadowing his later visits to opium dens, wherein he seeks to once again forget his surroundings and silence his own thoughts. The “form of reverie” (Dorian Gray 98) into which Dorian falls also has a double meaning. A “reverie” is both a trance-like state and a dreamy style of music; both seduce their subject, associating the powerful effects of the book with a form of art. The use of sensory imagery is so critical because Dorian decides to devote himself to a “life of the senses” (Dorian Gray 98). He prioritizes the use of his senses because they bring him pleasure through music, food, art, and lust, fulfilling his hedonistic desires.

In Studies of the History of the Renaissance, Pater emphasizes the “care for physical beauty, the worship of the body, the breaking down of those limits which the religious system of the middle age imposed on the heart and the imagination” (Pater 726) that was predominant in the Renaissance and now serves as the foundation for his definition of aestheticism. Dorian’s book, encouraging such behavior, reveals itself to be in support of aestheticism. When Lord Henry first came across the book years ago, it “revealed to him much that he had not known before” (Dorian Gray 21). The text was essential in the development of the older gentleman’s values, and he passes it on to Dorian in the hopes that it will have a similar effect on him. The influence of the book on Lord Henry marks another connection between him and Walter Pater, because the work is understood to be an embodiment of Pater’s philosophies.

The connection made between saints and sinners blurs the line between the two binaries. At first, Dorian cannot determine if he is “reading the spiritual ecstasies of some mediaeval saint or the morbid confessions of a modern sinner (Dorian Gray 98). The desires of saints and sinners, originally thought of as opposing, are here suggested to be so similar that Dorian cannot make a distinction between the two. Such a comparison proposes that there are not in fact, only two types of people: good or bad, saint or sinner, but instead, one type of person. Every person has the same desire: pleasure; it is how one achieves that desire that determines the category into which they fall. Some follow the path of religion and piety and, if successful, are eventually rewarded through “spiritual ecstasies” (Dorian Gray 98); others find their ecstasies in the physical world. Dorian and Lord Henry recognize pleasure as ultimate goal, because they understand it to be a sensation sought after by all.

Despite the idyllic offering of pleasure that the text brings, the description of the book itself bears an ominous tone, a hint at the corruption to come. The very act of reading it puts Dorian in a trance, and the term used to describe this trance, a “malady of dreaming” (Dorian Gray 98), implies that it is not a harmless daydream, but instead an ailment, an unfortunate incident. If given enough time, the malady may spread and consume Donrian’s entire being. The imagery of the “falling day” that gives way to “creeping shadows” (Dorian Gray 98) is foreboding. Under the cloak of impending darkness Dorian will be able to act on his newfound desires. Pleasure is depicted here as both good and bad. Again, the binaries have been deconstructed. The joy that comes from seeking out such hedonistic pleasure is addictive and ephemeral, much like a drug. This juxtaposition of good and bad is what is presented to Dorian in the form of his portrait. The sins committed by him in his pursuit of pleasure are reflected in the ugliness that overtakes the painting. Though disgusted by the deteriorating appearance of the artwork, the temptation of a life of pleasure is too great.

Pater asserts that the pursuit of pleasure is more important than the pursuit of righteousness. Here, it becomes evident that Dorian has acceded to Pater’s (and Lord Henry’s) philosophies. The notion of morals only serves to inconvenience him. When Dorian notices the first change in his portrait, a result of his broken engagement with Sybil, his conscience urges him to apologize for his actions and mend his relationship. The moral inclination he feels in response to the ugliness of his painting causes him shame, hindering his quest for pleasure. Upon reading the book, Dorian decides not to let conventional morals hold him back from pleasure. He, however, has an advantage, because upon learning that the painting, and not he, will bear the weight of his sins, Dorian “feels free to ignore the pious morality that pervaded the Victorian era” (Buzzwell). His ability to reject morality is directly tied to his eternal youth and beauty. Dorian’s extreme beauty is once again suggested to have drawbacks. Though it allows him to do as he pleases without hesitation, this freedom is not entirely good. Commenting on his novel after its publication, Wilde stated that “[a]ll excess, as well as all renunciation, brings its own punishment” (Duggan). Dorian Gray’s life is the epitome of excess, and it does indeed bring about his eventual punishment. Through the corrupt actions of
Dorian and the consequences that result, Wilde refutes Pater's argument that a disregard for morals will contribute to a better life.

According to Pater, the aesthetic critic “wishes to explain [beauty], by analyzing and reducing it to its elements” (Pater 725); Dorian, however, has no such wish. He has no interest in the reasons behind his pleasure, he simply wants to experience the feeling as often as possible. Dorian's aesthetic lifestyle, while seemingly ideal, is actually anything but. He surrounds himself with beautiful objects and people and sensations, but never descends further than the pleasure provided to him. By not knowing, nor caring to learn, why beauty provides him with pleasure, Dorian remains ignorant of life's true value and aestheticism’s true meaning. Dorian is perceptive to sensory attraction, but by refusing the challenge to understand himself or the world on a deeper level, he becomes a shell of a person.

Basil Hallward, on the other hand, does the complete opposite. As an artist, he dedicates himself to exploring the deeper meanings of life. Basil reveals to Lord Henry in the beginning of the novel that meeting Dorian Gray changed his art and his life in irreversible ways. When Basil paints Dorian in his true form, he hopes to discover the reason behind the influence that Dorian's beauty has had on him, but instead learns that such explorations leave him vulnerable.

You had leaned over the still pool of some Greek woodland, and seen in the water's silent silver the marvel of your own face; and it had all been what art should be—unconscious, ideal, and remote. One day—a fatal day, I sometimes think—I determined to paint a wonderful portrait of you as you actually are, not in the costume of dead ages, but in your own dress and in your own time. Whether it was the realism of the method, or the mere wonder of your own personality, thus directly presented to me without mist or veil, I can not tell. But I know that as I worked at it every flake and film of color seemed to me to reveal my secret. I grew afraid that others would know of my idolatry. I felt, Dorian, that I had told too much, that I had put too much of myself into it. (Dorian Gray 89-90)

Basil Hallward, in revealing his reasons for wishing not to display the painting of Dorian in galleries, offers his own insights on the definition of art. It should be “unconscious, ideal, and remote” (Dorian Gray 90). From this, it can be ascertained that art should not acknowledge itself. It should be “unconscious” of its own beauty and influence. There is a paradox in his describing art as both “ideal” and “remote,” as the two adjectives are almost contradictory. Ideal implies that art should be perfect and traditionally attractive, yet remote suggests isolation from other works. The epitome of art should be unquestionably beautiful, while also finding itself above and separate from other art. A good work of art, therefore, must contain something that sets it apart, a difference that makes it interesting and worthy. Basil knows that Dorian is a work of art the very moment he meets him; “[h]e knew that [he] had come face to face with someone whose mere personality was so fascinating that, if [he] allowed it to do so, it would absorb [his] whole nature, [his] whole soul, [his] very art itself” (Dorian Gray 11). Basil feels an unconscious pull toward Dorian, his beauty is so distinct that it cannot be ignored.

Pater defines beauty as that which has “powers or forces producing pleasurable sensations, each of a more or less peculiar or unique kind” (Pater 725). Dorian Gray's beauty is indisputable, because all who come in contact with him experience this pleasurable sensation. When in need of assistance to move his newly defiled painting from the drawing room to the locked schoolroom of his childhood, he commissions employees of frame-maker, Mr. Hubbard. Although the man “never left his shop...he always made an exception in favor of Dorian Gray. There was something about Dorian that charmed everybody. It was a pleasure even to see him” (Dorian Gray 94). Pater's definition compliments Basil's in that they both acknowledge the unordinary aspect of beauty. Pater, however, focuses more on the feeling that beauty produces in its viewer, while Basil is interested in how one source of beauty relates to others.

Basil’s status as an artist is more complex by Wilde's standards, as set out in the preface to The Picture of Dorian Gray. His painting of Dorian Gray is a beautiful work of art, fulfilling Wilde's first requirement of the artist as “the creator of beautiful things” (Dorian Gray 3). Wilde also claims that “[t]o reveal art and conceal the artist is art's aim” (Dorian Gray 3). Here, Basil struggles to determine whether or not he is a true artist. Upon completion of his painting, Basil fears that he has revealed too much of himself in the work, however, he later realizes that “it is a mistake to think that the passion one feels in creation is ever really shown in the work one creates...art conceals the artist far more completely than it ever reveals him” (Dorian Gray 90). Basil’s conclusion on art and the artist is taken almost word for word from Wilde's preface, suggesting that the character of Basil Hallward is meant to reflect Wilde's beliefs.

Understanding Wilde's genuine beliefs, however, is complicated by the fact that he contradicts himself in his preface. His dictum that “[n]o artist desires to prove anything” (Dorian Gray 3) is disproved by his very writing of The Picture of Dorian Gray. Wilde makes veiled references to Pater's Studies in the History of the Renaissance and “Dorian's life turns out to be something like an experimental test case for the validity of Pater's aesthetic philosophy, and the experiment falsifies the philosophy” (Carroll 96). He therefore desire to prove that while Pater's ideologies are tempting, and may bring short-term pleasure, they will not result in a fulfilling life, as demonstrated by Dorian's eventual self-destruction. Wilde's mission also rejects his own statement that “[n]o artist has ethical sympathies” (Dorian Gray 3), because The Picture of Dorian Gray could be considered to have an ethical message. Dorian's rejection of traditional morals depicts the trouble that results from such an act. “Morality, [Wilde] explains, is not a matter of an artist's or a writer's message; [the artist's
Basil makes an allusion to the fictional Narcissus when referring to Dorian; a character in Greek mythology so stunned by his own beauty after seeing his reflection in a river that he remains at the water bank until he dies. Narcissus’ self-adoration results in his own death. In comparing Dorian to Narcissus, Basil alludes to Dorian’s eventual downfall. This is only further emphasized when Basil recounts the day that he decided to paint Dorian as “a fatal day” (Dorian Gray 90). Though the account at first sounds melodramatic, Basil is not wrong in making such a claim. Dorian’s growing obsession with both the painting and his own unending youth eventually brings about his own death, his anger at the portrait’s exposure of truth causes him to stab it, inadvertently stabbing and killing himself. Beauty, in both instances, is not only powerful, but also deadly. The sight of it is all consuming. Beautiful works of art are dangerous and must be created with the utmost caution. Basil is nonchalant during his creation process and does not realize the potential power of his artwork until it is complete.

In addition to his comparison to Narcissus, Basil reveals prior that he “had drawn [Dorian] as Paris in dainty armor, and as Adonis with huntsman’s cloak” (Dorian Gray 89). These characters, however, do not satisfy him, and he wishes to paint Dorian “in [his] actual dress and in [his] own time” (Dorian Gray 90). Basil’s desire to present Dorian as himself instead of a fictional hero reveals the artist’s search for truth. Dorian’s beauty is so great that only by painting it truthfully will Basil feel satisfied with his work; he views this as the greatest artistic challenge. Evading this challenge previously by painting Dorian in the “costume of the dead ages” implies that not only is Basil’s determination to paint his subject honestly a quest for truth, it is also a quest for life. Instead of describing the figures that costume Dorian as being “historical” or “past,” he uses the term “dead.” Art’s search for truth now has more gravitas, as the creation of truthful art is presumed to give way to life. Yet the search proves challenging. Basil finds himself struck by Dorian’s beauty when it is “presented to [him] without mist or veil” (Dorian Gray 90). The imagery suggests exposure, but Dorian’s exposed beauty is found to be almost too overwhelming to capture. Art is not about hiding, but discovering and revealing. However, when “every flake and film of color seemed to [him] to reveal [his] secret” (Dorian Gray 90), Basil panics at the power of art and regrets his decision to paint a subject with whom he has such a fascination. His fear that “others would know of [his] idolatry” (Dorian Gray 90) exposes the magnitude of his adoration for Dorian. Basil is aware that such strong feelings may be frowned upon in Victorian society, both because of the Christian rule against worshipping multiple gods or idols and because Dorian is a young male, and such doting feelings may arouse suspicion. An artist’s intention, then, by Basil’s definition, is to conceal themselves in their artwork. He wishes to reveal all about Dorian, but nothing of himself. Basil’s fears reemphasize the power that art holds. Only a work of art could have the potential to expose its creator’s thoughts and feelings. Art is portrayed as having great influence and force. Basil describes his method of painting with the words “every flake and film of color” (Dorian Gray 90). The alliteration creates a harsh and almost explosive feeling, representative of art itself.

The process of painting, of creating, is dangerous, explosive even. Every brush stroke is capable of revealing truth, both of the subject and the painter, and such a possibility is so awe-inspiring and daunting, that it is fearful. The conclusion in Studies in the History of the Renaissance explores the effects of pleasure. Pater believes the human experience of the world is confined to “the impression of the individual in his isolation” (Pater 729); each person has their own understanding of reality, a sort of dream world. In moments of pleasure, however, “some form grows perfect in hand or face; some tone on the hills or the sea is choicer than the rest; some mood of passion or insight or intellectual excitement is irresistibly real and attractive” (Pater 729). In these moments, the true world is experienced, not any personal interpretation of it. Pleasure is sought after, then, because it is the closest humans can come to absolute truth. Beauty is therefore so greatly desired because of the pleasure and truth that it brings. Basil’s portrait of Dorian is beautiful and because of this, it causes a truthful experience for all that look upon it. Dorian is struck by the truth of his youth’s ephemerality; Basil sees his true feelings for Dorian reflected back to him. In creating a work that successfully communicates truth, Basil becomes a great artist.

While through most of the novel, beauty is depicted as good, because it produces pleasure, it can also have a negative impact. Dorian is brought pleasure by the art he collects and the company he keeps, but the effect is temporary and he continuously seeks more. Basil’s attempt to achieve beauty in his art results in immense fear over possibly exposing his deepest feelings. Sybil Vane, the actress with whom Dorian Gray falls in love, is restricted by her own beauty, as it forces her into a lifestyle she does not want.

Like Dorian Gray, Sybil Vane’s future is determined by the attention her beauty provides her. The first time she is introduced to the reader, Dorian describes her to Lord Henry as “a genius” (Dorian Gray 42), to which the older gentleman replies, “no woman is a genius. Women are a decorative sex” (Dorian Gray 42). According to Lord Henry, Sybil, therefore, can never be more than what her outer form presents; she is to be seen and not heard. The word “decorative” also suggests that Sybil should alter herself to fit those around her, as good décor should properly fit the room in which it is placed. Women are meant to compliment the men in their lives, and if their beauty and charm does not allow them to do so, they are found to be undesirable.

Even Sybil’s own family defines her worth based
on her physical appearance. Her mother enjoys, even encourages, the fact that Sybil’s beauty can attract the attention of men, saying of Dorian Gray, “if this gentleman is wealthy, there is no reason why she should not contract an alliance with him” (Dorian Gray 54). Sybil’s beauty takes on the responsibility of marrying well and raising her entire family’s social status. Her mother views her beauty as a tool that, if used correctly, may improve their lives. Her brother James worries about the attention that his sister receives from men, saying that Dorian wishes to “enslave” her (Dorian Gray 56). Both family members treat the young woman’s beauty as her defining characteristic, and as a woman in late Victorian England, the rest of society tends to agree with them.

For Dorian, Sybil’s beauty is seen most distinctly in her work onstage. Her performances captivate him and are the main reason behind his love for her. Ordinary women never appear to one’s imagination. They are limited to their century. No glamour ever transfigures them. One knows their minds as easily as one knows their bonnets. One can always find them. There is no mystery in any of them...They are quite obvious. But an actress! How different an actress is! Harry! why didn’t you tell me that the only thing worth loving is an actress? (Dorian Gray 44-45)

Dorian finds Sybil attractive because of the distinction she has from other women. His interest in her arises out of the “mystery” and “glamour” that she possesses (Dorian Gray 44-45). Dorian, a man of many interests and desires, finds the predictability and routine of traditional Victorian women dull; he rejects them in the same way he rejects traditional Victorian morals. Ordinary women pose for him no challenge, for “one knows their minds as easily as one knows their bonnets” (Dorian Gray 45). It does not take Dorian long to become familiar with a woman, and the instant he does, he becomes bored. An actress, however, transforms herself into infinite women and this versatility excites and intrigues Dorian. In this sense, Sybil, too, fulfills Basil’s definition of true art. She finds herself separate from others in her ability to become different characters. Her beauty is dependent on her unique talent, and when she loses this talent, her beauty dissipates.

Dorian’s resentment of “ordinary women,” reflects Pater’s belief that “failure is to form habits” (Pater 729). Forming and enacting habitual behavior opposes the very core of Pater’s aestheticism in that it accepts the monotony and impassionate conditions of life. The excitement and pleasure of Sybil Vane is tied to the unpredictable nature of her job in the theatre. She is constantly changing roles and therefore cannot settle into a routine, preventing Dorian as an audience member, and lover, from settling as well.

Pater believes that there is no distinction between life and art, and as Dorian falls deeper into his aesthetic lifestyle, he, also, cannot tell the difference. He is not able to distinguish a difference between the real person that is Sybil Vane and the roles she performs onstage, they are one and the same. Dorian’s utmost desire is to be moved by the presence of beautiful objects. When Sybil acts, she moves Dorian and is therefore found to be beautiful, but when she can no longer perform well, he is not moved by her performance and she is no longer beautiful to him. As an object that is not beautiful, Dorian has no use for Sybil and immediately rejects her.

Dorian’s confused interpretation of aestheticism is also demonstrated when he learns of Sybil’s death. Though at first distraught at the idea that he has driven her to suicide, he then remarks that such an act “seems to [him] to be simply like a wonderful ending to a wonderful play” (Dorian Gray 80). He is so removed from life that he does not feel pain upon hearing that the woman he claimed to have loved has taken her own life. Lord Henry, and ultimately Pater, encourages Dorian’s detached reaction through his musings on the beauty of tragedy.

Sometimes, however, a tragedy that possesses artistic elements of beauty crosses our lives. If these elements of beauty are real, the whole thing simply appeals to our sense of dramatic effect. Suddenly we find that we are no longer the actors, but the spectators of the play. Or rather we are both. We watch ourselves, and the mere wonder of the spectacle enthralls us. In the present case, what is it that has really happened? Some one has killed herself for love of you (Dorian Gray 80).

Lord Henry acknowledges that “[i]t often happens that the real tragedies of life occur in such an inartistic manner” (Dorian Gray 80), and therefore, the beautiful tragedies, such as Sybil’s suicide, are special. Such beauty is so special, in fact, that the human reaction to it is instinctive. When subject to such beauty, “we are no longer the actors, but the spectators of the play” (Dorian Gray 80). This is exemplified in Dorian’s response to the horrific news, first demanding Lord Henry to tell him the entire story, yet quickly calming and realizing that he “cannot feel this tragedy as much as [he] [wants] to” (Dorian Gray 79). Dorian cannot control his response to Sybil’s death, but rather must watch it from afar. He wishes to feel more, yet he cannot. His obsession with hedonism blinds him to the possibility of feeling anything other than pleasure. Again, his lifestyle is compared to a comatose state; “the mere wonder of the spectacle enthralls us” (Dorian Gray 80) and causes its observer to lose personal control and motivation.

Lord Henry’s explanation of Sybil’s suicide also draws a connection between beauty and love. He reminds Dorian that Sybil “has killed herself for love of [him]” (Dorian Gray 80), and that is what makes her act so beautiful. Sybil’s passionate love both takes away her beauty and restores it. Sybil “acted badly because she had known the reality of love. When she knew its unreality, she died, as Juliet might have died. She passed again into the sphere of art” (Dorian Gray 86). Dorian asserts that it is this unreality of love, the loss of love, which makes Sybil beautiful again. Real love, in causing her to perform poorly, takes away her beauty. Real love, in fact, is never associated with beauty. It is only idealized love that takes on an artistic quality. Dorian feels an idealized love for Sybil when she performs and Sybil feels an idealized love when she acts onstage as Shakespeare’s heroines. The pursuit of beauty and pleasure only removes the subject from the possibility of real love and therefore living a real life.
The aesthetic philosophies of Walter Pater promise that the ultimate pleasure will be attained through experiencing beauty. Dorian, in listening to Lord Henry’s praises of hedonism, is under the impression that an aesthetic life is the best life. He assumes he is living the fullest life possible because every moment is filled with pleasure. However, a life that is only filled with pleasure is an unbalanced life. Life must contain a wide range of emotions and experiences in order to be considered full.

Dorian’s brief relationship with Sybil demonstrates the shortcomings of a hedonistic lifestyle by revealing the limitations of his emotional experiences. In viewing Sybil as a vehicle for aesthetic pleasure, the only two feelings he has for her are obsession and lack thereof. By striving for what he believes to be an aesthetic life, Dorian becomes so intoxicated with the idea of pleasure that he distances himself from experiences that cause any other feeling. When he hears that Sybil has died, instead of feeling despair, he focuses on the beauty of her suicide. However, what Dorian fails to realize is that despair is a valid emotion, one that would broaden his experience of life and the world around him. Dorian tells Basil, “[t]o become the spectator of one’s own life, as Harry says, is to escape the suffering of life” (Dorian Gray 87). When Dorian submits to the ideal that Sybil’s death is beautiful, he rejects the reality of the situation in order to escape pain. A limited understanding of aestheticism is revealed to disconnect one from the truest reality rather than connect them, as Lord Henry—and Pater—has promised it will.

When Lord Henry first introduces the concept of hedonism to Dorian, he insists it will bring the youth the greatest satisfaction, because only an aesthetic lifestyle will allow Dorian to live without regret. By surrounding himself by beauty, Lord Henry suggests that Dorian will live in a constant state of pleasure. This continuous high that Dorian seeks, however, is contrary to human nature. Life consists of highs and lows, of beauty and ugliness, and by ignoring these qualities Dorian neglects the full range of human experience. Dorian’s practices of aestheticism, in encouraging such behavior, cannot possibly be the philosophy that leads to the fullest life.

Aestheticism makes a clear distinction between real and fake. The book given to Dorian by Lord Henry gives Dorian new insight into the aesthetic and hedonistic lifestyle, and such details emphasize the pleasure of the fake reality that hedonism provides. Dorian’s devouring of the book represents his acceptance of the lifestyle it promotes; therefore, when the book induces “a form of reverie, a malady of dreaming, that made him unconscious of the falling day” (Dorian Gray 98), his lifestyle is assumed to have the same effect. True aestheticism, Pater argues, will make the world, “irresistibly real” (Pater 729), yet Dorian associates it with dreaming, and rejects any authenticity that threatens his pleasurable existence. The false reality that Dorian aspires to create for himself has beauty, while the authentic reality suffers from a lack thereof. Disgusted by a report in the newspaper on the death of Sybil, Dorian remarks, “[h]ow ugly it all was! And how horribly real ugliness made things!” (Dorian Gray 97). Dorian distances himself from the reality of Sybil’s death because it is ugly, choosing instead to focus on the romanticized version of her death that he and Lord Henry discuss, because it is more beautiful. His misunderstanding of reality, however, further distances him from the possibility of living a full life.

Basil Hallward chooses to live in a very different manner than Dorian. As an artist, Basil is constantly in a state of creation, opposing Dorian’s constant state of “reverie” (Dorian Gray 98). When he feels that Dorian’s lifestyle has become harmful, Basil confronts Dorian, saying “[o]ne has the right to judge a man by the effect he has over his friends. [Dorian’s friends] seem to lose all sense of honour, of goodness, or purity. [Dorian] [has] filled them with a madness for pleasure” (Dorian Gray 118). Basil suggests a juxtaposition between “honour,” “goodness,” and “purity,” and “a madness for pleasure” (Dorian Gray 118), insinuating that Dorian, in living hedonistically, no longer upholds these qualities. Though living an existence of only purity and goodness is also not an indicator of a fulfilled life, Basil’s concern for Dorian’s moral deterioration demonstrates just how deeply Dorian has fallen into a life of hedonism. Basil only involves himself when he feels that Dorian’s behavior has gone too far, when his only experiences are in pursuit of pleasure, thereby restricting Dorian’s ability to live a full life. As the character of Basil is depictive of Wilde’s truest thoughts, his opinions of Dorian’s actions insinuate that Wilde, too, condemns the extreme take on the aesthetic lifestyle.

When Dorian makes the wish for his portrait to age while he remains forever young, he limits the experiences of his life in more ways than one. The life of hedonism promoted by the aesthetic beliefs of Lord Henry Wotton promises Dorian pleasure, but nothing more. In striving for beauty that he believes will enrich his experience, Dorian becomes so enraptured by pleasure that he ignores and rejects every other component of life. Dorian enters the comatose state of hedonism from which he cannot return, becoming a spectator of his own life. The beautiful fake reality that he creates for himself provides pleasure, but disconnects him from feelings of sorrow, pain, and even boredom. As the hunger for pleasure will never be completely satisfied, Dorian is cursed to spend his entire life in a constant state of dissatisfaction.

According to Wilde, Basil’s portrait of Dorian is the true work of art, as opposed to Pater’s belief that Dorian is the person. In The Picture of Dorian Gray, the character of Dorian attempts to follow Pater’s complex ideals of how to live, but his shallow understanding of the movement eventually leads to Dorian’s death. Dorian’s fate is Wilde’s warning against the notions set forth by Pater in Studies in the History of the Renaissance. Wilde, however, also contradicts himself in his novel. He claims that art does not take expression from the era yet Pater and aestheticism, components of the late-Victorian era in which he lived and worked, influence his writing. Wilde therefore, does not reveal his beliefs in what he explicitly says, but rather, what he does. Oscar Wilde’s exploration of beauty and aestheticism in The Picture of Dorian Gray, heavily influenced by Walter Pater’s Studies in the History of the Renaissance, advises against the pursuit of the aesthetic lifestyle because of its ability to limit one’s understanding.
and experience of a full life.

REFERENCES


ON HOBBES'S TREATMENT OF PUNISHMENT IN LEVIATHAN

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Abstract
Although the Orthodox interpretation of Hobbes’s sovereign as an omnipotent despot who compels absolute obedience via the implementation of cruel and arbitrary punishment seems to be supported by a cursory reading of Leviathan, a comprehensive examination of Hobbes's thought on the purpose and character of punishment offers a reconceptualization of the sovereign as a non-tyrannical entity driven exclusively by his duty to maintain state security. This article utilizes both Hobbes’s text (Leviathan) and pertinent secondary literature to support this claim. After depicting the orthodox interpretation of the sovereign in the existing literature, Hobbes’s definition of punishment is utilized as the central framework for a thorough examination of the purpose and character of punishment in Leviathan. This analytical method reveals the proto-liberal nature of Hobbes’s penal theory by demonstrating both its provision of substantive rights and its inherent limitations. Subsequently, an acknowledgement of the limited efficacy of sovereign punishment leads to a consideration of the essential role of statewide education in engendering communal obedience. Finally, this in-depth account of Hobbesian punishment and its relationship to civic education offers a reformed image of the sovereign, which in turn alters traditional conceptions of life in the Hobbesian commonwealth. Ultimately, this conclusion calls for future research on 1) the practicality of Hobbes’s proposed state and 2) the validity of his conception of human nature and the ultimate end of human existence.

Key Words: Punishment, Sovereign, Obedience

Introduction
At first glance, Hobbes’s theory of rule within his artificial commonwealth appears simple: an omnipotent, totalitarian sovereign who compels absolute obedience through the use of terror, fear, and the ubiquitous threat of violence. At the core of this conventional view is the commonly held notion of the sovereign as a dispenser of cruel and malevolent punishment. However, a more nuanced examination of Hobbes’s treatment of the purpose and character of punishment reveals significant challenges to this one-dimensional understanding of sovereign rule. By demonstrating the rights-based (proto-liberal) nature of Hobbes’s punishment theory, this paper will present a reconceptualization of the sovereign as an artificial, non-tyrannical entity motivated solely by his obligation to maintain a peaceful environment for the subjects of the commonwealth.

In order to frame this argument in its proper context, this study will begin by depicting the orthodox interpretation of Hobbes’s punishment theory (and his theory of the state more broadly) within the existing literature, while also illuminating specific passages from the text that are often cited in support of this traditional view. Secondly, Hobbes’s definition of punishment will be utilized as the framework for a thorough examination of the true purpose and character of punishment in Leviathan with the aim of demonstrating both its provision of substantive rights and its intended limitations. Subsequently, an acknowledgment of these restraints on sovereign punishment will lead to a consideration of the essential role of statewide education in engendering individual and communal obedience. Finally, this careful analysis of Hobbes’s punishment theory will serve as the foundation for a more complex account of the character of the sovereign and his relationship to the subjects of the commonwealth.

Depiction of the Orthodox Interpretation of Punishment in Leviathan
In truth, many of Hobbes’s statements regarding sovereign authority seem to imply the inevitability of a terrifying and oppressive regime. In Chapter 17, Hobbes equates the sovereign to a “Mortall God,” who possesses “the use of so much Power and Strength conferred on him, that by terror thereof, he is inabled to forme the wills of
them all…” (Hobbes, Leviathan, II.xvii, 227). Furthermore, the sovereign is described as retaining the use of “coercive power to tye their hands from rapine, and revenge…” (Hobbes, Leviathan, II.xviii, 238). Through this coercive power, the sovereign is said to significantly restrict the liberties of his subjects by controlling “what Goods he may enjoy and what Actions he may doe…” (Hobbes, Leviathan, II.xviii, 234). These stringent limitations include the censorship of speech and writing, the prohibition of certain associations, and the compulsory observance of a state-wide religious faith (Owen 2005, 142; Hobbes, Leviathan, II.xxi, 405). Hobbes also appears to allow for a limitless sovereign authority in his dual assertion that “‘the sovereign…is not subject to the Civill Laws” and that “no man that hath Sovereign power can justly be put to death, or otherwise in any manner by his Subjects punished…” (Hobbes, Leviathan, II.xxvi/II.xviii, 313; 232). Finally, if any individual desires to unburden himself from the yolk of sovereign authority, he has no grounds to do so because “non of his Subjects, by any pretense of forfeiture, can be freed from his Subjection” (Hobbes, Leviathan, II.xviii, 230). Ultimately, these passages are cited recurrently in support of an authoritarian interpretation of Hobbes’s political philosophy.

Such conceptions of Hobbes’s sovereign as an omnipotent despot assume a ubiquitous presence in the literature. One of the earliest contemporary theorists to affirm this view, J.A. Thomas asserts:

**The supreme achievement of Hobbes was to lay hold of the weapon usually employed to defend a democratic theory of government, and to wield it in the interests of an unqualified, unrelieved, despotism. In the Leviathan…we find this theory [the social contract] paraded as a justification for binding men with the chains of an unlimited authority.** (Thomas 1929, 185)

Thomas’s general conception of Hobbesian “despotism” has been refined by recent scholars who seek to provide a more explicit depiction of the horrors of life under sovereign rule. For example, David Van Mill (2002, 21) argues that the most predominant criticism of Hobbes’s political thought is his resolute support for an absolute sovereign who presents a significant hazard to the principles of individual freedom. He proceeds to highlight three contemporary theorists [Shkar (1989); Okin (1989); Gauthier (1995)] who each claim that the unequivocal power and lack of legitimate restraint possessed by the sovereign leads to oppression and the loss of individual rights (Mill 2002, 21-22). Other scholars go beyond accentuating this threat to individual rights by depicting life under sovereign authority as frightening, dismal, and restrictive. According to Epstein (2016, chap. 4), “The only legitimate sovereign is an absolute sovereign…Hobbes’s absolutely terrifying sovereign gathers up the multitudes into a stable, harmonious, obedient, and self-identical unity.” While Epstein acknowledges the stability generated by the commonwealth, he ultimately emphasizes the perpetual terror and awe engendered in each subject by the unchecked and undivided power of the sovereign. In the most fanatical expression of this view, Michael Ridge (1998, 538) likens the establishment of the artificial sovereign to the creation of an imperialistic “monster.” Ultimately, this body of scholarship seeks to portray Hobbes’s artificial commonwealth as antithetical to liberal democratic principles and entirely non-conducive to individual happiness (or some notion of a proper standard of living).

At its core, this pervasive view hinges on an incomplete understanding of sovereign punishment as presented in Leviathan. When Hobbes first introduces the concept of sovereign authority in relation to the commonwealth, he explicitly demarcates the exercise of punishment as the quintessential function of the sovereign. More expressly, he explains that men cannot escape the state of nature without a “visible Power to keep them in awe, and tye them by fear of punishment to the performance of their Covenants, and observation of [the] Laws of Nature…” (Hobbes, Leviathan, II.xvii, 223). The importance afforded to punishment (and the fear of punishment) in this initial description serves as the substratum for prevailing conceptions of life under sovereign authority as terrifying, violent, and fundamentally restrictive. In truth, a cursory reading of Leviathan would seem to uphold this view. As Hobbes proceeds to further explicate the absolute necessity of punishment, he makes various assertions that appear to validate claims to sovereign omnipotence and despotism (emphasis added):

“When a Commonwealth is once settled, then are they [the laws of nature] actually laws, and not before; as being then the commands of the Commonwealth; and therefore also civil laws: for it is the sovereign power that obliges men to obey them. For the differences of private men, to declare what is equity, what is justice, and is moral virtue, and to make them binding, there is need of the ordinances of sovereign power, and punishments to be ordained for such as shall break them.” (Hobbes, Leviathan, II.xxvi, 314)

“Therefore, before the names of Just, and Unjust can have place, there must be some coercive Power, to compel men equally to the performance of their Covenants, by terror of some punishment, greater than the benefit they expect by the breach of their Covenant;…” (Hobbes, Leviathan, I.xv, 202)

“For by this Authorie…he hath the use of so much Power and Strength conferred on him, that by terror thereof, he is inabled to forme the wills of them all…” (Hobbes, Leviathan, II.xvii, 227)

These passages appear to provide ample ammunition for an illiberal interpretation of sovereign rule. Hobbes’s utilization of words such as coerce, compel, terror, power, and strength in his description of punishment seems to portend a bleak and fearful existence, which is wholly incompatible with notions of individual rights and liberties. Also, punishment appears intimately associated with eliminating individual identity and personal choice through its capacity to “forme the wills of them all” and “compel men
equally." While the sovereign’s ability to coerce obedience via punishment (or threat of punishment) is said to promote security and peace, one cannot help but acknowledge the misery, quasi-enslavement, and perpetual fear that seem to define individual existence in such a civil arrangement. When Hobbes identifies the primary motives for seeking peace in civil society, he does not merely illuminate man’s fear of death and his demand for self-preservation. Rather, he includes a “desire of such things as are necessary to commodious living” (Hobbes, Leviathan, I.xiii) [emphasis added]. Although Hobbes does not expressly describe his understanding of “commodious living,” it is clear that those who contract to enter a commonwealth envisage some semblance of a comfortable and content existence beyond mere survival. Peter Steinberger (2002, 857) defines “commodious living” as a condition exceeding the attainment of peace and security. In his estimation, the state must go beyond preserving the life of its subjects to the extent that the individual is able to enjoy (in the least) moderate “happiness.”

Thus, Hobbes’s depiction of punishment (in the aforementioned passages) and his acknowledgement of man’s desire for “commodious living” appear mutually exclusive. Ultimately, the body of scholarship described above is born out of this apparent contradiction. In their assessment, the extent of the sovereign’s power to shape the wills of men via punishment (or fear of punishment) usurps the natural rights and liberties essential to the attainment of a proper standard of living (i.e., “happiness”). With this evidence considered, it is not difficult to understand how one could view Leviathan as “an unequivocal, and misguided, defense of an authoritarian and absolutist government” (Ristroph 2014, 1). However, a more nuanced examination of Hobbes’s treatment of the purpose and character of punishment reveals significant challenges to the pervading conception of life under sovereign authority.

**Hobbes’s True Conceptualization of Punishment**

Any attempt to elucidate the true role of punishment in Hobbes’s commonwealth must necessarily commence with an examination of its definition, which is clearly presented in Chapter 28:

A punishment, is an Evill inflicted by publique Authority, on him that hath done, or omitted that which is Judged by the same Authority to be a Transgression of the Law; to the end that the will of men may thereby the better be disposed to obedience. (Hobbes, Leviathan, II.xxviii, 353)

There are four particular facets of this definition that are essential to grasping Hobbes’s understanding of proper punishment: 1) punishment is inflicted by public authority, 2) a process of public judgment/evaluation must occur prior to punishment, 3) punishments are directly connected to violations of the law, and 4) punishments are directed toward a specific end. With an adequate grasp of these provisions, one can begin to differentiate between proper punishment and ‘acts of hostility.’ It is important to note that, contrary to punishment, acts of hostility are directly equated with acts of war that occur in the state of nature (Cattaneo 1965, 278). In other words, hostile acts harken back to man’s original condition in which he possessed an absolute ‘right of nature’ to “use his own power, as he will himselfe, for the preservation...of his own Life; and consequently, of doing any thing, which in his own Judgement, and Reason, hee shall conceive to be the aptest means thereunto” (Hobbes, Leviathan, I.xiv, 189). As will be demonstrated, acts of hostility are antithetical to the preservation of peace/stability and thus directly subversive to the social contract.

**Public Authority and Public Justification**

By asserting that punishments can only be dispensed by a publically authorized figure, Hobbes immediately confines punishment to a single source: the sovereign (or a judge/agent of the state who operates as an extension of sovereign authority). From this fact, Hobbes infers that “neither private revenges, nor injuries of private men, can properly be stiled Punishment; because they proceed not from publique Authority” (Hobbes, Leviathan, II.xxviii, 354). Contrary to the state of nature in which all men must fear the prospect of coercive force (i.e., private retribution) from their neighbor for any supposed offence, punishment in Hobbes’s commonwealth is strictly limited to reactions by the state (i.e., the sovereign) to violations of the “positive legal order put in place and secured by the state” (Hüning 2007, 223). Because the authority to punish is solely possessed by the sovereign, any harm inflicted by judges or agents of the state without his express authorization must be labeled as illegitimate acts of hostility (Hobbes, Leviathan, II.xxviii, 354). At this juncture, one can already begin to observe how punishment within the commonwealth significantly reduces the anxiety and fear engendered by the omnipresent threat of violence in the state of nature. While retributive force in the state of nature can come from any source at any moment, punishment in the commonwealth is strictly unilateral and therefore more predictable. While this initial facet of punishment does little to counteract the view of Hobbes as an absolutist, it none-the-less demonstrates a marked improvement from the natural condition of man and offers the first indication of the potential for commodious living within the commonwealth.

Furthermore, Hobbes’s definition specifies that an action must be judged/evaluated to be a crime (i.e., a violation of established law) prior to the imposition of punishment. Before one considers the role that the law performs in Hobbes’s conception of punishment, it is key to illuminate the individual rights implicit in his call for proper judgment and evaluation of alleged offenses. Early in Chapter 28, Hobbes infers from his definition of punishment that:

The evill inflicted by publique Authority without precedent publique condemnation, is not to be stiled by the name of Punishment; but of an hostile act;
because the fact for which a man is Punished, ought first to be Judged...to be a transgression of the Law. (Hobbes, Leviathan, II.xxviii, 354)

Furthermore, in the descriptive margin note accompanying this claim, Hobbes asserts that there can be "no pain inflicted without publique hearing" (Hobbes, Leviathan, II.xxviii, 354). From these two statements, it is clear that the sovereign (or extensions of the sovereign) must provide public justification for his acts of punishment before they can be considered legitimate. Ultimately, there seem to be three individual rights implicit in this obligation: 1) the right to public trial, 2) the right of the accused to be informed of the charges levied against him, and 3) the right to receive adequate justification for one's punishment before its implementation. Therefore, if the sovereign fails to justify his punishments to the accused in the public eye, he ultimately commits an act of hostility (i.e., an act of war) against his own subject.

Contrary to this line of reasoning, other thinkers have presented differing interpretations of the sovereign's obligation (or lack of obligation) to publically justify his punishments. For example, Corey Brettschneider (2007, 180-183) argues that most criminal actions (he never specifies those which do not apply) result in an immediate loss of citizenship and re-entry into the state of nature (i.e., a state of war). Once thrust back into this condition, the criminal is effectively classified as an "enemy" of the state who is subject to any possible act of violent retribution at the hands of the sovereign. The author asserts that, by providing a "war-like" interpretation of punishment, Hobbes "abandon(s) the need for justifications of punishment" (Brettschneider 2007, 183). Ultimately, Brettschneider seems to omit a key passage from Chapter 21 in which Hobbes explains that, "If a Subject have a controversy with his Soveraigne...concerning any penalty, corporal or pecuniary, grounded on a precedent law, he hath the same liberty to sue for his right...The subject hath the liberty to demand the hearing of his cause, and sentence according to that law" (Hobbes, Leviathan, II.xxi, 271) [emphasis added]. Thus, a "war-like" account of punishment seems to neglect the fact that Hobbes clearly provides a right to the accused and/or convicted to have their punishments justified as legitimate under the established law. This is the first instance in which the sovereign's authority to punish appears limited in scope. Because all "causes and sentences" must be publically legitimized, punishment cannot be (as some have surmised) dictated by the arbitrary will of the sovereign (Yates 2012, 154-155).

The Role of the Law in Hobbes's Punishment Theory

Hobbes's definition of punishment clearly asserts that a punishable offense must constitute a "transgression of the law." This seemingly banal provision forms the central tenet of Hobbes's punishment theory—a tenet from which various subsidiary conclusions can be drawn. Contrary to notions of sovereign omnipotence, a careful analysis of Hobbes's conception of law as it pertains to punishment reveals limitations to sovereign authority in the form of a ‘positive legal order’ (Cattaneo 1965, 277; Hünig 2007, 227).

Hobbes's characterization of civil law, offered in Chapter 26, can serve as an ideal starting point for this line of inquiry [original emphasis]:

Civil Law, Is to every Subject, those Rules, which the Common-wealth hath Commanded him, by Word, Writing, or other sufficient Sign of the Will, to make use of, for the Distinction of Right, and Wrong; that is to say, of what is contrary, and what is not contrary to the Rule. (Hobbes, Leviathan, II.xxv, 312)

From this description, it is evident that the authority to take legislative action in the form of commands is solely a function of the commonwealth, rather than private citizens. According to Hobbes, the term “command” refers only to the dictates of the artificial body to which the subjects are obligated (Carmichael 1990, 6; Hobbes, Leviathan, II.xvii, 312). Because the sovereign serves as the artificial manifestation of the commonwealth, he retains the position of “sole legislator” (Hobbes, Leviathan, II.xxvi, 313). Therefore, legitimate laws can only flow from the sovereign representative (i.e., a monarch or assembly) and not from judges or agents of the state. More importantly, Hobbes explains that a law can only become binding when the subjects have been made aware of its implementation either by “voyce, writing, or some other sufficient argument of the same...” (Hobbes, Leviathan, II.xxvi, 317). However, it is not sufficient to simply make the laws known. Rather, the subject is not bound by the law, or even expected to comply with the law, if they are not provided with adequate proof that it stems directly from the will of the sovereign (i.e., “sufficient Sign of the Will”).

However, Hobbes is quick to introduce a caveat to this distinction: “The Laws of Nature therefore need not any publishing nor Proclamation...” (Hobbes, Leviathan, II.xxvi, 318). Contrary to sovereign-made civil law, the Laws of Nature are simply, “qualities that dispose rational men to peace and obedience” (Hobbes, Leviathan, II.xxvi, 314). Although Hobbes dedicates considerable time to systematically cataloging nineteen distinct laws of nature, he distills them all into a single, universally comprehensible maxim, “Do not that to another, which thou wouldest not have done to thy selfe” (Hobbes, Leviathan, I.xx, 214). Every man that has sufficiently cultivated his reasoning faculties should, in Hobbes's appraisal, be well aware of the Laws of Nature and inclined to obey them. Although the Laws of Nature are said to be rational and self-evident in man’s natural state, they are (in the state of nature) only binding to man’s own conscience (i.e., in foro interno) and can be violated as he judges necessary for his self-preservation (Yates 2012, 144). However, once man enters into civil society via submission to sovereign command (i.e., civil law), “then are they [the Natural Laws] actually Lawes, and not before; as being then the Commands of the Common-wealth; and therefore also Civill Lawes.” (Hobbes, Leviathan, II.xxvi, 314). Thus, the Laws of Nature become self-evident appendages of the civil law, which are made externally binding (i.e., in foro externo) as a result of the
coercive authority of the sovereign. Thus, each subject is obligated to obey the laws of nature, regardless of their sufficient promulgation.

In addition to establishing the sovereign as the sole legislator and necessitating the promulgation of sovereign commands, Hobbes's definition of civil law also detaches the concepts of “right” and “wrong” from any association with a categorical notion of morality or justice. Rather, what is “right” and “wrong” is simply a measure of what the present Rule (i.e., the sovereign) judges to be detrimental or conducive to peace (Yates 2012, 91). Hünig (2007, 221) explains that violations of the law are simply offenses against the “positive legal order” established and enforced by the sovereign, rather than transgressions against a universal system of justice that is independent of sovereign-made law. Hobbes makes this position relatively clear when he speaks of the state of war (i.e., the state of nature): “To this warre of every man against every man, this is also consequent; that nothing can be unjust. The notions of Right and Wrong, Justice and Injustice have there no place. Where there is no common power, there is no law: where there is no law, no Injustice” (Hobbes, Leviathan, I.xiii, 188). Although (as described above) the Laws of Nature are self-evident to rational human beings in the state of nature, they are only binding in foro interno and therefore can be broken at will. Thus, Hobbes denies the possibility of a pre-political system of justice or morality (Goldsmith 1996, 275). He realizes that before these concepts can be granted any credence, there must be a coercive power that 1) prescribes the rules of right and wrong and 2) compels all subjects to obey these prescriptions by threat of punishment (Hobbes, Leviathan, I.xv, 202-203; III.xiii, 610).

Now that the civil law has been adequately treated, it is essential to turn to Hobbes's characterization of penal law (original emphasis):

**Penal are those, which declare, what Penalty shall be inflicted on those that violate the Law; And these Penal Laws are for the most part written together with the Laws Distributive; and are sometimes called Judgments.** (Hobbes, Leviathan, II.xxvi, 331)

By establishing a distinct legal category for penalties, Hobbes distinguishes between laws that direct subjects (i.e., civil laws) and laws that enforce these directives by establishing punishments for their violation (Goldsmith 1996, 276). Furthermore, penal laws (unlike civil laws) are directly addressed “to the Ministers and Officers ordained for execution” (Hobbes, Leviathan, II.xxvi, 331). Thus, the sovereign is not obligated to fully promulgate penal laws or provide adequate proof that they stem from his will. Although Hobbes admits that everyone “Ought to be informed of Punishments ordained beforehand for their transgressions,” penal laws should not be addressed to the offender who “cannot be supposed to faithfully punish himself” (Hobbes, Leviathan, II.xxvi, 331). Because full promulgation of penal law is not obligatory, “Ignorance of the Penalty, where the [Civil] Law is declared, Excuseth no man” (Hobbes, Leviathan, II.xxvii, 338). Nonetheless, a careful reading of the abovementioned definition reveals the exceptional rarity of such situations. By and large, penal laws are “written together with the laws distributive” and therefore are sufficiently known to all (Hobbes, Leviathan, II.xxvi, 331).

With a firm understanding of civil and penal law, one can begin to observe limitations to sovereign punishment, which are implicit in Hobbes's characterization of punishable offenses as “transgressions of the law.” First, the sovereign's role as the “sole legislator” who institutes laws (both civil and penal) by command must be qualified by Hobbes's understanding of the limits of sovereign command. The most pertinent example of these parameters can be observed in Hobbes's overt distinction between external acts and internal convictions. External acts can be classified as words or deeds that are openly expressed, publically recognizable, and voluntary. While internal convictions constitute thoughts and beliefs that develop from one's own reason and are not outwardly discernible unless externally manifested through speech or action. In Chapter 27, Hobbes provides an example of this distinction:

> To intend to steale, or kill, is a sinne, though it never appeare in Word, or Fact: for God that seeth the thoughts of man, can lay it to his charge: but till it appear by some thing done, or said by which the intention may be argued by a humane Judge, it hath not the name of Crime... (Hobbes, Leviathan, II.xxvii, 336)

Hobbes further clarifies this dichotomy by asserting that sovereign command (in the form of positive law) can only be extended to voluntary external acts due to the inability of legal coercion (i.e., punishment or the threat of punishment) to shape men's internal convictions (Hobbes, Leviathan, IV.xlvi, 700). In other words, an individual has neither the power to subjectively control his beliefs and opinions, nor the ability to have his convictions forcibly altered by an individual or the State (Hünig 2007, 218). Therefore, because internal thoughts and opinions fall outside the parameters of sovereign legislation, they can never constitute a “transgression of the law” and thus fail to qualify as punishable offenses. In this respect, Hobbes grants a categorical “freedom of conscience” upon which the sovereign cannot infringe (Hünig 2007, 219). Beyond the limitations of command, the sovereign's obligation to promulgate the law and provide sufficient “sign of the will” introduces the concept of individual liability, which directly influences the distribution of punishment. Because Hobbes accentuates the importance of knowing the civil law, he provides a system of culpability by which certain individuals are exempt from punishment. Thus, Hobbes contends that “if the Civill Law of a mans own Country, be not so sufficiently declared, as he may know it if he will…the Ignorance is a good Excuse...” (Hobbes, Leviathan, II.xxvii, 338). This emphasis on the individual (e.g., mans, he, own) demonstrates that sufficient knowledge of the law is judged on a subject-by-subject basis. More expressly, even if the law has been publically promulgated, an individual who lacks the means necessary to make him-
self aware of the law is entirely exempt from punishment. In his most compelling example of this insufficient means, Hobbes explains that children, mad-men, and the mentally handicapped cannot be held culpable for their actions due to their inability to know the law and/or consent to sovereign command. This results from the fact that, “Children, Fools, and Mad-men that have no use of Reason...can be no Authors (during that time) of any action done by them...” (Hobbes, Leviathan, I.xvi, 219). Furthermore, while those in complete charge of their mental faculties are punished for violations of the laws of nature regardless of their promulgation, these impotent individuals (i.e., children, madmen, and the mentally handicapped) lack the rational capacity necessary to form clear and self-evident knowledge of natural law.

The final, and most divisive, example of exemption from guilt is Hobbes’s notion of man’s inalienable right to self-preservation. This well-studied and contentious right will be given a more comprehensive treatment in subsequent sections. However, as it pertains to guilt/culpability, Hobbes asserts that “If a man by the terror of present death, be compelled to doe a fact against the Law, he is totally Excused; because no Law can oblige a man to abandon his own preservation” (Hobbes, Leviathan, II.xxvii, 345). Thus, the subject cannot be punished for violating the established law when he perceives death to be his only alternative because “nature itself forces a human being to commit the act” (Hüning 2007, 224). Interestingly, exemption for acts of self-preservation is not, as one might suppose, limited only to threats of physical violence. Rather, Hobbes also extends exemption to those who judge it necessary to steal food and other provisions for survival in times of famine (Hobbes, Leviathan, II.xxvii, 346).

It is now pertinent to assess the effects of the a-moral character of the law on Hobbes’s punishment theory. As explained above, the concepts of “right” and “wrong” are entirely contingent upon sovereign command and hold no credence outside of established law. Because the law serves as a state-constructed moral order, various individual rights and liberties are granted in its silence. More specifically, Hobbes stipulates that, “In cases where the Sovereign has prescribed no rule, there the subject hath the liberty to do, or forebear, according to his own discretion” (Hobbes, Leviathan, II.xxi, 271). While it is difficult to gauge the breadth of these personal rights, they constitute clear limits to sovereign coercion that, when taken together, form “The Greatest Liberties of Subjects” (Hobbes, Leviathan, II.xxi, 271). In Chapter 21, Hobbes offers a brief catalog of individual freedoms that can serve to inform one’s understanding of the range and character of the subject’s discretionary power: “[T]he Liberty to buy, and sell, and otherwise contract with one another; to choose their own abode, their own diet, their own trade of life...and the like” (Hobbes, Leviathan, II.xxi, 264).

Ultimately, this provision significantly influences the scope of sovereign punishment by invalidating the legitimacy of ex post facto crimes and penalties. In Chapters 27 and 28, Hobbes makes two assertions contingent upon the principles nullum crimen sine lege et nulla poena sine lege (i.e., no crime without law and no penalty without law): No Law, made after a Fact done, can make it a Crime: because if the Fact be against the Law of Nature, the Law was before the Fact; and a Positive Law cannot be taken notice of, before it be made; and therefore cannot be Obligatory. (Hobbes, Leviathan, II.xxvii, 339)

Harme inflicted for a Fact done before there was a law that forbid it, is not Punishment, but an act of Hostility: For before the Law, there is no transgression of the law... (Hobbes, Leviathan, II.xxviii, 356)

Each of these claims reinforces Hobbes’s overarching emphasis on what Mario Cattaneo terms “The Certitude of the Law” (Cattaneo 1965, 283). In the absence of clearly defined commands that specify criminal actions and prescribe penalties, the subject must live in perpetual fear of arbitrary punishment. Inevitably, this condition of insecurity and uncertainty directly contradicts the original purpose of the social contract: self-preservation. Therefore, Hobbes’s conception of a state “based on law and order in which the boundaries and limits of the state’s power to punish, as well as the rights of subjects, are defined, set down, and fixed” generates a secure environment in which one’s self-preservation can be fully realized (Hüning 2007, 229).

Finally, there are a series of provisions that result from the establishment of penal laws (i.e., laws that determine what punishments will be carried out for offenses against the civil law). First, punishments must be executed in strict accordance with the dictates of pre-established penal law. Hobbes clarifies this stance in his description of the essential duties of the sovereign: “To the Sovereign is committed the Power of Rewarding with riches, or honour; and of Punishing with corporall, or pecuniary punishment, or with ignominy every Subject according to the Law he hath formerly made” (Hobbes, Leviathan, II.xviii, 235) [emphasis added]. Thus, punishment is not a function of the arbitrary will of the sovereign. Rather, it must be legally instituted and executed with consistency (Yates 2012, 145).

Furthermore, the establishment of a system of penal law presupposes the principle of equity in punishment. To this end, Hobbes contends that those who are harmed, “more than others were punished for the same Crime,” are deliberately deceived by the law and therefore the victims of an act of hostility (Hobbes, Leviathan, II.xxvii, 339). In a broader sense, the general principle of equity, contained in the Laws of Nature, instructs judges of controversy to deal impartially in all situations. If a man observes inequality in judgment, he will be deterred from using adjudicative means of resolution and thus revert to the state of war (Hobbes, Leviathan, I.xv, 212).

By establishing penal laws that prescribe punishments, Hobbes also introduces the concept of “proportionality,” which dictates that punishments must account for the differing severity and character of criminal actions (Hüning 2007, 225). In this respect, Hobbes separates himself from the ancient Stoics, who taught that all crimes are equally punishable offenses against the natural order. For example, these philosophers were said to make no distinc-
The Degrees of Crime are taken on divers Scales, and measured, First, by the malignity of the source, or cause; Secondly, by the contagion of the Example; Thirdly, by the mischiefe of the Effect; and Fourthly, by the concurrence of Times, Places, and Persons. (Hobbes, Leviathan, II.xxvii, 347)

Hobbes proceeds to offer hypothetical examples of proportionality for each of these categories. In terms of the “malignity of the source,” those crimes that result from an arrogant assumption that one’s wealth, power, or personal connections are superior to sovereign coercion are subject to greater punishment than those who commit offenses with an evident awareness of their inferiority to sovereign force. According to Hobbes, those that violate the law with fearful “apprehension” display a greater respect for sovereign authority and are therefore more disposed to future obedience. Second, crimes that result from the erroneous instruction of teachers or public officials are subject to lesser punishment than violations of the law that stem from the private reason of the individual. In Hobbes’s assessment, crimes resulting from the errors of one’s instructors maintain a “resemblance” to the established law and do not display excessive contempt for sovereign authority. Conversely, offenses that are rationally calculated in full awareness of the law constitute a blatant act of defiance. The severity of a criminal offense is also contingent upon the number of instances in which the sovereign has made a public display of punishment for a given violation of the law. More expressly, “The same Fact, if it have been constantly punished in other men, is a greater Crime, than if there have been many precedent Examples of impunity” (Hobbes, Leviathan, II.xxvii, 348). Thus, if the sovereign has offered public exemption to criminals for certain offenses, the subject will invariably possess a “presumption of mercy,” which encourages him to commit the offense. Therefore, the sovereign cannot “reasonably charge the offender with the whole” (Hobbes, Leviathan, II.xxvii, 348).

Furthermore, Hobbes offers a clear distinction between crimes of passion and premeditated offenses. Those violations of the law that result from instantaneous and uncontrollable emotion are, according to Hobbes, a “common infirmity of human nature” (Hobbes, Leviathan, II.xxvii, 348). Although crimes of spontaneous passion are never fully exempt from punishment, they lack the calculated thought and rationality necessary to make them acts of deliberate defiance. Oppositely, when the offender takes the time to dwell “on the Law, on the punishment, and on the consequence thereof to human society” he displays a clear contempt for the legal order and openly spurns sovereign authority. In the same chapter, Hobbes proceeds to offer a peculiar example of proportionality resulting from a contradiction between established law and the “manifest signs” of sovereign will. Essentially, one cannot be fully punished for contravening an established law when the words and actions of the sovereign contradict said law. In an attempt to further explicate this potential discrepancy, Hobbes provides a hypothetical scenario: if there exists a law prohibiting duels between private citizens, but the sovereign openly scorns those who refuse duels, then the subject cannot be “rigorously punished” for violating the pre-established law (Hobbes, Leviathan, II.xxvii, 349).

In this instance, Hobbes acknowledges the possibility of sovereign error and offers protection to subjects against such erroneous contradictions. When the sovereign creates a situation in which, “there are Punishments consequent, not only to the transgression of his Law, but also to the observing of it,” the individual cannot be held fully culpable (Hobbes, Leviathan, II.xxvii, 349).

Finally, Hobbes distinguishes between the severity of offenses by measuring the “mischiefe of their effects” and by noting the concurrence of “person, time, and place.” For instance, an offense that engenders both present and future harm (by the example set by the offense) is labeled a “fertile Crime, and multiplies to the hurt of many” (Hobbes, Leviathan, II.xxvii, 350). Therefore, crimes committed by public preachers or educators are subject to greater punishment than those of private citizens due to their multiplicative effect on the future health of the commonwealth. Similarly, Hobbes specifies that, “Acts of hostility against the present state of the Common-wealth, are greater Crimes, than the same acts done to private men: For the damage extends its self to all” (Hobbes, Leviathan, II.xxvii, 350).

Specific examples of this principle include: 1) offering state secrets to an enemy, 2) attempting to physically harm the sovereign, 3) stealing directly from the state treasury, and 4) counterfeiting state authority. Ultimately, because these offenses directly threaten the peace and stability of the commonwealth, they must be subject to a heightened level of punishment. Hobbes concludes his discussion of proportionality by detailing the effects of “person, time, and place” on the aggravation/mitigation of legal violations. For example, murdering one’s father or mother is a graver offense than committing the same act of violence against another individual because “the Parent ought to have the honour of a Sovereign” (Hobbes, Leviathan, II.xxvii, 352). Other aggravating effects can include stealing from a poor man or committing offenses against the law in the “Time, or Place appointed for Devotion” (Hobbes, Leviathan, II.xxvii, 352). Ultimately, by applying Hobbes’s legal theory to his conceptualization of punishment, one can begin to observe both the limits to sovereign coercion and the numerous individual rights implicit in his restriction of punishments to “violations of the law.”

The Subject’s Inalienable Right to Self-Preservation and the Sovereign’s Right to Punish

As briefly discussed above, the scope and character of the subject’s right to self-preservation and its relationship to the sovereign’s right to punish has engendered long-standing debate among Hobbes scholars. Because of punishment’s pivotal role in Hobbes’s theory of sovereign rule and the civil state in general, it is essential to assess its
character in relationship to the subject’s inalienable right to self preservation detailed in Chapter 21 (among other places). Thus, before a conception of the true purpose of punishment can be reached, one must attempt to determine the extent to which these seemingly paradoxical rights do (or do not) threaten the viability of Hobbes’s artificial commonwealth. In his discussion of contracts in Chapter 14, Hobbes asserts the following:

A Covenant not to defend my selfe from force, by force, is always void. For (as I have shewed before) no man can transf erre, or lay down his Right to save himself...For man by nature chooseth the lesser evil, which is danger of death in resisting; rather than the greater, which is certain and present death in not resisting. (Hobbes, Leviathan, I.xiv, 199)

Although the majority of scholars acknowledge the presence of this right in Hobbes’s thought, there is great disagreement as to its importance and relative influence. On one end, the right to self-preservation is presented as ineffective and inconsequential in the face of sovereign authority. Sreedhar (2013, 205) contends that a right to self-preservation is only a grant of “permission” or liberty, and thus fails to obligate others (most namely the sovereign) to observe it. Although Hobbes grants certain “true liberties” to subjects by which they are permitted to disobey sovereign command (e.g., no self-inflicted punishment, no abstention from the necessities of life, no self-incrimination, etc.), he places no congruent obligation on the sovereign to abstain from punishing these individuals in accordance with established law (Hobbes, Leviathan, II.xxi, 268-269). In this light, the subject’s right to self-preservation appears significantly limited in scope (i.e., only to immediate threats of death and injury) and fails to provide the possessor with any added security or legal prerogatives (Sreedhar 2013, 207; Baumgold 1988, 29-30). Under this interpretation, the only legitimate purpose of observing one’s self-preservation right is to maintain “moral innocence” when defying sovereign punishment, regardless of the fact that such a right has no bearing on the “moral correctness” of the sovereign’s decision to punish (Sreedhar 2013, 206). Thus, Martel (2000, 34) admits that such a liberty, “May only amount to the right to kick and scream on the way to the gallows,” while Carl Schmitt (1938, 46) argues that, “Resistance as a ‘right’ is in Hobbes’s absolute state...factually and legally nonsensical and absurd. The endeavor to resist the Leviathan...is practically impossible. “ In essence, those who prescribe to this interpretation see self-preservation rights as a negligible threat to Hobbes’s civil state.

Conversely, various theorists view the right to self-preservation as a significant restraint on sovereign punishment (and sovereign authority in general) and thus a serious threat to the legitimacy of Hobbes’s civil state. Schrock (1991, 886) contends that it is logically impossible for a prospective sovereign to obtain a right to punish from an individual (or individuals) with an inalienable right to resist punishment. In other words, if the contracting subject cannot possibly forfeit their right to resist punishment, how can they be said to grant (or consent to) the sovereign’s right to inflict them with punishment? Although Hobbes claims that, “Every Subject is Author of every act the Sovereign doth” (Hobbes, Leviathan, II.xxi, 265), the inalienability of one’s right to self-preservation pre-empts any possible authorization of their own punishment (regardless of their will to do so). Thus, for Schrock, the inability of these rights to logically co-exist upends Hobbes’s theory of the state in its entirety and causes the Leviathan to be “still-born” from its inception (Schrock 1991, 886). Ryan (1996, 241) and Hampton (1996, chap. 7) go so far as to contend that Hobbes allows (whether intentionally or inadvertently) for a right to full-scale collective revolution by significantly diminishing the potency of “political obligation.” Similarly, Burgess (2001, 74) asserts that Hobbes’s failure to understand the implausibility of using consent theory to “bridge the gap” between a natural state of absolute freedom and a civil state of absolute obligation causes him to unintentionally formulate a resistance theory that undermines his entire civil state. Thus, whether the right to self-preservation is viewed as impotent or a significant threat to the sovereign’s right to punish, most theorists have been wholly unwilling to admit that these seemingly antithetical rights can co-exist in equal import.

However, by applying the analysis of the limits of sovereign punishment offered above, one can attempt to reconcile these rights and place them on equal footing. As discussed hitherto, the laws of nature (which bind in foro interno in man’s natural state) are appended to the civil law with the establishment of sovereign authority and thus made binding in foro externo via sovereign punishment. Furthermore, the sovereign remains bound to the natural law in foro interno and his reason compels him to follow such laws as the most expedient means of establishing peace and stability. In other words, the sovereign is confined by the natural duties implicit in the laws of nature, which serve as the origins of the “limits on the proper exercise of authority” (Carmichael 1990, 9). Thus, when the second law of nature acknowledges that, “A man cannot lay down the right of resisting them that assault him by force, to take away his life, because he cannot be understood to ayme thereby, at any good to himself” it places a natural duty on the sovereign to respect the subject’s right to self-preservation. Thus, when the sovereign harms a subject for observing this right, it cannot properly be termed “punishment” because his action violates the natural law. Although the sovereign retains his absolute authority (i.e., power) to harm those who exercise this right, he cannot justify such an action as punishment proper (Carmichael 1990, 9). Furthermore, Hobbes includes the right to self-preservation in his enumeration of “things which though commanded by the Sovereign, he [the subject] may nevertheless, without Injustice, refuse to do” (Hobbes, Leviathan, II.xxi, 268) [emphasis added]. As detailed above, injustice is simply the act of violating established law. Because the exercise of one’s right to self-preservation can never be unjust (regardless of sovereign command) it stands to reason that the sovereign must respect it, lest he commit an act of hostility by “punishing” (i.e., harming) an innocent subject. In sum, 1) any and all decisions to exer-
cise one’s right to self-defense are just, non-criminal acts that are not subject to punishment and 2) the sovereign’s authority remains absolute, but limited by its proper use as prescribed in the laws of nature (i.e., it cannot be properly employed to punish acts of self-defense) (Carmichael 1990, 10).

If one were to take this formulation of the character and scope of self-preservation rights as Hobbes’s definitive conclusion on the matter, it would appear to validate the claims of those theorists who view such a right as fundamentally dangerous to the preservation of the commonwealth. However, one must not forget the subject’s own obligation to the laws of nature and the fundamental law of nature in particular: “Seek peace and follow it” (Hobbes, Leviathan, I.xiv, 190). As a result of this self-evident natural dictate, the law-abiding citizen is compelled to forgo their right to resist unless faced with the immediate and certain threat of death. Because each individual is bound in foro interno by the command to “seek peace and follow it,” their reason will dictate that life in the civil state is exceedingly more peaceful and stable than any possible condition in the state of nature. More expressly, a rational Hobbesian subject who violates the law will be more inclined to submit to a legally sanctioned penalty (which has already been shown to be just, equitable, and predictable) then to re-enter the natural state of war (in which there is no predictability or standard of justice/equity). According to Hobbes, “Man by nature chooseth the lesser evil...” (Hobbes, Leviathan, I.xiv, 199). Therefore, in the vast majority of cases (save the threat of immediate death) acceptance of one’s punishment would constitute the lesser evil and thus be the rational choice (Heyd 1991, 127; Van Mill 1995, 453-454). Ristroph (2014, 12) contends that, “humane and limited punishments are actually a service to the condemned rather than threats to their self-preservation.” Although it has been demonstrated that the sovereign cannot properly “punish” those who exercise their right to self-preservation, the individual electing to resist runs the very plausible risk of being “harmed” by sovereign force as they leave the commonwealth. Therefore, the rational subject will not be inclined to abuse their rights by resisting non-life threatening penalties.

Conversely, in the case of capital punishment, there is no rational incentive for submission. The harm done to oneself by accepting the death penalty far outweighs the ills of life in the state of nature (i.e., assured death vs. the prospect of death). However, if submitting to capital punishment is never a rational choice for the Hobbesian subject, why would those party to the social contract allow the sovereign to possess this degree of authority? Surprisingly, the rational, law-abiding citizen stands to benefit more from the presence of the death penalty than one might believe. Each contractor allows the sovereign to carry out capital punishments, knowing full well that they have no obligation to submit to such punishment on the rare chance that they are threatened with it in the future (Heyd 1991, 127). Ultimately, the rational subject (whose goal it is to seek peace) has no intention of ever breaking the law (let alone committing an offense egregious enough to merit the death penalty). However, by permitting the sovereign to carry out capital punishments, the law-abiding citizen can rest assured that unjust criminals will either be killed by the sovereign or compelled to return to the state of nature.

Ultimately, the subject’s inalienable right to self-preservation and the sovereign’s authority to punish can co-exist without compromising the legitimacy of Hobbes’s civil state or denying the potency of the individual’s personal liberty. In essence, these rights are able to function alongside one another due to the fact that the sovereign and his subjects possess the same basic motive: the achievement of peace as a means to ensure self-preservation. With this having been established, it is now appropriate to turn to an analysis of the purpose of punishment with the aim of demonstrating its importance to the security and stability of the commonwealth.

The Purpose of Punishment

Hobbes concludes his definition of punishment by clearly delineating the end to which all penalties should be directed: “That the will of men may thereby the better be disposed to obedience” (Hobbes, Leviathan, II.xxviii, 353). In his use of the phrase “better disposed to obedience,” Hobbes fashions punishment as a forward-looking practice, with the aim of shaping the criminal, and others by observation, into law-abiding subjects. In doing so, he simultaneously invalidates the legitimacy of “punishments” motivated by a desire for revenge or retribution. As a direct result of this conception of the purpose of punishment, Hobbes proceeds to claim that, “All evil which is inflicted without intention, or possibility of disposing the Delinquent, or (by his example) other men, to obey the Lawes, is not Punishment; but an act of hostility” (Hobbes, Leviathan, II.xxviii, 355). Thus, Hobbes accepts correction and prevention as valid applications of punishment, while rejecting all penalties that fail to acknowledge the best interests of the offender or the subjects of the commonwealth (Cattaneo 1965, 229). On the surface, Hobbes appears to advocate for a strict deterrence-based penal theory.

In order to better understand Hobbes’s rejection of revenge and retribution as viable ends of punishment, one must return to his discussion of natural law. Stemming directly from the fundamental dictate to “Seek peace and follow it,” the seventh law of nature specifies that:

Revenge without respect to example, and profit to come, is a triumph, or glorying in the hurt of another, tending to no end; (for the End is always somewhat to Come:) and glorying to no end, is vain-glory, and contrary to reason; and to hurt without reason, tendeth to the introduction of war. (Hobbes, Leviathan, I.xv, 210)

It is important to note that Hobbes does not reject revenge on the basis of any notion of virtuous or moral action. Rather, he simply views such acts as antithetical to the goal of achieving a peaceful civil state. By seeking retribution for past wrongs, the sovereign commits an irrational act of
harm that tends to weaken the commonwealth, rather than promote its stability (Tuckness 2010, 722). Punishing on the basis of a misguided notion of “justice” fails to promote any future good (either for the criminal or the subjects of the commonwealth) and in extreme cases “tendeth to the introduction of war” (Hobbes, Leviathan, I.xv, 210; Shuster 2010, 45). Rather than holding men accountable for their wrongs long after they have been committed, Hobbes asserts (in the 6th law of nature) that: “Upon caution of Future time, a man ought to pardon the offenses past of them that repenting, desire it. For Pardon is nothing but granting of Peace” (Hobbes, Leviathan, I.xv, 210).

Ultimately, Hobbes’s disavowal of retributive punishment and his exclusive focus on the future health of the commonwealth has led the majority of scholars to brand him as a strict deterrence theorist and a precursor to the utilitarian penal reformers of the 18th and 19th century (e.g., Becarria, Bentham, Montesquieu, etc.). Although there is evident validity to this conventional interpretation (as will be demonstrated), it ultimately provides an incomplete picture of the purpose of punishment in Hobbes’s political thought. However, before this deficiency can be understood, it is necessary to depict the mainstream interpretation of Hobbes as a proto-utilitarian deterrence theorist.

Within the existing contemporary scholarship on Hobbesian punishment theory, Mario Cattaneo (1965) is the first thinker to offer an account of Hobbes as a precursor to modern utilitarian-deterrence theorists. In short, Cattaneo contends that Hobbes’s notion of the end of punishment (“That the will of men may thereby the better be disposed to obedience”) distills the fundamental principles of a utilitarian penal theory (a system which would not see its inception until the work of Becarria and Bentham years later). Furthermore, Cattaneo attempts to establish a direct connection between Hobbes’s enumeration of the characteristics of proper punishment (e.g., the evil inflicted must exceed the benefit gained, evils inflicted with no thought to future benefit cannot be labeled punishment, etc.) and the principles of his utilitarian successors. While Cattaneo is unwilling to assert that Hobbes’s punishment theory contains all the necessary elements of a utilitarian-deterrence model, he is the first thinker to suggest that Hobbes “Opened up the road to a liberal concept of criminal law” (Cattaneo 1965, 291).

In recent years, many scholars have employed Cattaneo’s basic thesis as a foundation upon which to construct a more complex picture of Hobbes as a deterrence theorist with clear utilitarian motives. Hüning (2007, 227) seeks to demonstrate Hobbes’s understanding of deterrence as a form of psychological coercion by which the mere notion of potential punishment renders the proposed criminal act “psychologically impossible” for the rational subject to commit. In truth, Hobbes’s claims that, 1) “The ayme of punishment is not a revenge, but terrorour” (Hobbes, Leviathan, xxviii, 335) and 2) “that by terror there-of, he [the sovereign] is enabled to forme the wills of them all, to Peace…” (Hobbes, Leviathan, xvii, 227), comport with Hüning’s contention that punishment (and the threat of punishment) “direct[s] men’s actions to the Common Benefit” by significantly outweighing the advantages to be gained by engaging in criminal behavior (Hüning 2007, 227; Hobbes, Leviathan, ll.xvii, 227). Thus, those irrational individuals who elect to break the law in full awareness of the disadvantages are punished both as a means of promoting their personal correction and shaping the wills of all other citizens through sustained mental coercion (Hüning 2007, 227-228; Hobbes, Leviathan, I.xv, 210).

Similarly, Hughes (2012, 89) claims that, “He [the sovereign] punishes…to manipulate [the subject’s] individual fear in such a way as to make them more likely to be compliant with the law.” Thus, in Hughes’s estimation, rational human beings possess a healthy fear of harm and death that allows them to carefully weigh the advantages and disadvantages of committing a crime (Hüning 2012, 89). Because Hobbes acknowledges that, “if the harm inflicted be lesse than the benefit, or contentment that naturally followeth the crime committed, that harm is not within the definition [of punishment],” it is clear that all proper penalties must be sufficient enough to deter the rational individual (Hobbes, Leviathan, Il.xxviii, 355; Shuster 2010, 49). In truth, both Hüning (2007, 227) and Hughes (2012, 89) reaffirm Hobbes’s claim that “Of all Passions, that which enclineth men least to break the Lawes, is Fear” (Hobbes, Leviathan, I.xxvii, 343). Ultimately, interpretations of Hobbes’s punishment theory as strictly deterrence-based tend to emphasize constant and ubiquitous fear as a prerequisite for the formation of law-abiding citizens (Van Mill 2002, 25; Lloyd 1997, 60). This view portrays human beings as individually-motivated opportunists who are constantly calculating the advantages and disadvantages of obedience to the law (rather than, as will be argued, choosing consistent obedience as the most expedient path to peace and stability). Thus, if the fear engendered by the threat of punishment is not sufficiently overt or prolonged, it fails as a deterrent force and causes the subject to view criminal behavior as potentially advantageous.

Shuster (2010, 46-59) demonstrates that each of the limits on sovereign punishment implicit in Hobbes’s definition serves to promote its deterrent force by firmly establishing the certitude and exactitude of legal penalties. If the sovereign was permitted to punish arbitrarily and inconsistently, punishment would no longer serve as an effective deterrent force due to the subject’s inability to know if (and to what extent) they would be punished. For example, 1) ex post facto laws would fail to deter criminal actions because the illegality of the act (along with its corresponding penalty) would be unknown and therefore unable to instill fear, 2) punishments without public trial could not deter future crime because the perpetrator (and all other subjects) would be unable to know which law was actually violated, and 3) punishments that exceeded or fall short of the requisite penalty prescribed by penal law would compel the criminal to risk unlawful action in hopes of receiving a mitigated sentence. Thus, by eliminating unpredictable, unjustified, and inconsistent punishments, the deterrent effect of legal penalties becomes more immediate and legitimate. In short, the would-be criminal has the means to know the particulars (where, why, and how) of their prospective punishment, rather than being left...
to speculation (which often inclines the potential criminal to take irrational risks). Therefore, “the effectiveness of punishment depends on its certainty just as much as its severity” (Shuster 2010, 50).

Although these scholars successfully demonstrate the presence of deterrence elements in Hobbes’s penal theory, they ultimately provide an incomplete account of the true purpose of punishment in Leviathan. In order to recognize the deficiencies in this popular interpretation, it is necessary to consider Hobbes’s implicit distinction between two forms of obedience: 1) obedience driven by fear of prospective punishment and 2) obedience motivated by an awareness of the vital role of legal punishments in maintaining a peaceful civil state (Koritansky 2011, 99). Although each of these motives engenders obedience, they serve to differentiate between those subjects who are truly just (i.e., inclined to be law-abiding) and those who are fundamentally unjust (but coerced to commit just actions out of fear of punishment). Hobbes explains this distinction in his discussion of “justice” in Chapter 15:

A Just man, therefore, is he that taketh all the care he can, that his Actions may be all Just: and an Unjust man, is he that neglecteth it. And such men are more often in our Language stiled by the names of Righteous, and Unrighteous; then Just, and Unjust; though the meaning be the same. Therefore, a Righteous man, does not lose that Title, by one, or a few unjust Actions, that proceed from sudden Passion…nor does an Unrighteous man, lose his character, for such Actions, as he does, or forbears to do, for feare: because his Will is not framed by the Justice… (Hobbes, Leviathan, I.xv, 206-207)

Thus, those with a conscious understanding of why the civil law and legal punishments are essential to their continued self-preservation allow themselves to be “framed” by justice in such a way that obedience becomes a “moral” choice (moral in the sense that it conforms to the fundamental law of nature to “seek peace”). Yates (2012, 73-74) demonstrates that the majority of citizens are inclined to be just, not out of reverence for the law in-and-of itself, but as a result of their awareness of the peace and stability engendered by such laws. For this group of individuals, the fear instilled by the threat of sovereign punishment is only faintly experienced due to their conscious commitment to obedience. In essence, the deterrent effect of legal punishment on the just majority is merely a peripheral element of life in the commonwealth.

For the unjust few, however, the threat of punishment serves as a means to curb the irrational behavior prompted by a wealth of internal passions (most notably that of vainglory) (Cooper 2010, 10-11). The unjust are, by nature, inclined to disobey the law and sovereign authority out of an overestimation of their natural abilities (or any other motive contrary to self-preservation). Therefore, the fear of impending punishment serves as an immediate and overwhelming deterrent force that compels the unjust individual to commit just actions. Because the unjust few fail to adhere to the fundamental command to “seek peace,” their potential criminal acts must be held in check by a fear of violent punishments and/or death. Thus, the orthodox interpretation of sovereign punishment as a fear induced “psychological” deterrent is accurate, but only applicable to a small subset of the population.

If this is the case, the purpose of punishment cannot be strictly limited to its deterrent force, which only seriously affects the unjust few. Therefore, one must return to man’s natural condition to elucidate the primary end of punishment in the civil state. When describing the principle causes of war in the state of nature, Hobbes highlights “diffidence” as an individual’s inclination to use violence to protect their property and person from potential invaders. At the core of this motivation is a deep-seated, rational mistrust of others, which stems from man’s inability to truly know the character and intentions of another human being (Ristroph 2014, 30). Additionally, the fact that each person is equally vulnerable to harm and death at the hands of those around them (regardless of their personal strength) makes the feeling of diffidence common to all. Hobbes attempts to convince his readers of the universal presence of diffidence in the following example:

Let him therefore consider with himselfe, when taking a journey, he armes himself, and seeks to go well accompanied; when going to sleep, he locks his dores; when even in his house he locks his chests…what opinion he has of his fellow Citizens, when he locks his dores; and of his children, and servants, when he locks his chests. Does he not there as much accuse mankind by his actions…[?] (Hobbes, Leviathan, I.xiii, 186-187)

Because men lack “direct epistemic access” to the particular intentions of others, they are rationally inclined to be skeptical of those around them (including their own children) at all times (Yates 2012, 79). Thus, when subjects enter into a commonwealth via the social contract, their reason compels them to establish a power by which to curb the pervasive feeling of diffidence. In the absence of such a coercive force, an individual can have no guarantee that his neighbor will keep his covenant, and thus no rational motive to do the same (Ristroph 2014, 31; Hobbes, Leviathan, I.xiv, 196-197). In this new light, punishment serves as an assurance to each subject that his/her neighbor will be penalized if they chose to violate the established covenant. Ristroph (2014, 31) demonstrates that Hobbes’s system of punishment, “serve(s) as a kind of psychological safety net, a reassurance from the sovereign to the person who is willing to keep his promises.” By authorizing sovereign punishment, the just majority can effectually alleviate feelings of diffidence by making the established law (including the laws of nature) binding en foro externo. When each individual consents to the institution of sovereign punishment, they make a public display of their trustworthiness. Conversely, those who refuse to submit expose themselves as irrational, unjust, and ultimately untrustworthy. For this group of just subjects, the utility of punishment is not located in its ability to deter, but rather in its capacity to offer the peace of mind necessary to fully commit to one’s covenant (Ristroph 2014, 30).
Thus, by illuminating the dichotomy between just and unjust citizens, one can recognize that the end of punishment is not solely limited to its deterrent effect. Although fear of punishment is essential to the maintenance of the commonwealth, it only exerts an active force on the unjust few. For the majority of citizens, however, punishment serves to alleviate feelings of diffidence and reinforce the rational character of the social contract. In this respect, punishment better disposes the “wills of men” to obedience by reassuring the individual that just behavior is the most expedient means to self-preservation.

The Essential Role of Statewide Education

As demonstrated above, there are clear limitations to sovereign coercion (e.g., freedom of consciousness, no ex post facto laws, no arbitrary punishments) that render the institution of punishment inadequate when it comes to “forming the wills” of men and making them “better disposed to obedience.” In truth, the sovereign’s duty to maintain a peaceful and secure state cannot be achieved solely via the implementation of punishment (and threats of punishment) as an assurance and deterrence measure (Van Mill 2002, 25; Flathman 1993, 149). According to Teresa Bejan (2010, 615), sovereign punishment “cannot be relied upon consistently to provide the kind of constant, overwhelming inducement to obedience…requisite for peace.” Hobbes states clearly that, “the source of every Crime, is some defect of the Understanding; or some error in Reasoning, or some sudden force of the Passions” (Hobbes, Leviathan, II.xxvii, 337). Thus, if ignorance, irrationality, and lack of self-control are the sources of all legal violations, then those who are able to achieve a certain level of knowledge, reasonableness, and self-discipline will become “better disposed to obedience.” Furthermore, Hobbes asserts that the grounds and rationale for these behaviors, “have the rather need to be diligently, and truly taught; because they cannot be maintained by any Civil Law, or terror of legal punishment” (Hobbes, Leviathan, II.xxx, 377) [emphasis added]. With this consideration in mind, Hobbes endeavors to generate and maintain a just, law-abiding majority through a system of statewide civic education.

The Fundamental Motivation of Subjects

In order to understand the essential role of education in engendering obedience, one must first elucidate Hobbes’s understanding of man’s fundamental aim, which necessarily affects the motives and mindsets of those residing in the commonwealth. Contrary to popular assumption, Hobbes does not claim that human beings view the achievement of peace and stability as an ultimate “good” to be desired in-and-of itself. Rather, such a condition is merely the most efficient means to the true end of human existence: felicity (Owen 2005, 134). Hobbes describes felicity as “Continual success in obtaining those things which a man from time to time desired, that is to say, continuall prospering…” (Hobbes, Leviathan, I.vi, 129). Furthermore, he explains that:

Felicity is a continuall progresse of the desire, from one object to another; the attaining of the former, being still but the way to the later. The cause whereof is, That the object of mans desire, is not to enjoy once onely, and for one instant of time; but to assure for ever, the way of his future desire. (Hobbes, Leviathan, I.xi, 160-161)

For Hobbes, human beings cannot achieve this condition by fixating on some notion of a Finis ultimus (utmost aim) or a Summum Bonum (greatest good). Rather, “the voluntary actions, and inclinations of all men, tend, not only to the procuring, but also to the assuring of a contended life” (Hobbes, Leviathan, I.xi, 161). It is important to note that a “contented life” in Hobbes’s understanding is not, as the phrase appears to indicate, a condition of ultimate fulfillment or satisfaction because “Felicity…consisteth not in the repose of a mind satisfied” (Hobbes, Leviathan, I.xi, 160). Rather, it is simply the ability to enjoy “continuall progresse” without undue impediment.

Thus, if the end goal of human existence is a perpetual, unrestricted movement from desire to desire, the condition of absolute authority and liberty offered in the state of nature seems (on the surface) highly conducive to achieving this aim. However, as a result of this unqualified liberty, men are forced to live, “without other security, than what their own strength, and their own invention shall furnish them withal!” (Hobbes, Leviathan, I.xiii, 186). In this perpetual state of war, human beings are unable to attain even a modicum of felicity due to the ubiquitous threats of invasion, violence, and death that define each individual’s daily existence (Owen 2005, 134). Hobbes clearly disassociates the achievement of felicity from man’s natural condition in the following passage:

In such a condition, there is no place for Industry; because the fruit thereof is uncertain: and consequently no Culture of the Earth; no Navigation…no commodious Building; no Instruments of moving, and removing such things as require much force; no Knowledge of the face of the Earth; no account of Time; no Arts; no Letters; no Society; and which is worst of all, continuall feare, and danger of violent death; And the life of man, solitary, poor, nasty, brutish, and short. (Hobbes, Leviathan, I.xiii, 186)

Therefore, man’s inability to continually fulfill his desires in a state of absolute liberty compels him to pursue a condition of peace and security via the social contract. By mutually forfeiting their absolute right and consenting to be ruled by sovereign authority, each subject willingly limits the quantity and scope of their desires. In doing so, they generate a condition of peace and security in which such desires that are permitted under the commonwealth can be actively pursued without constant fear of injury or death (Owen 2005, 133-134).

Although this decision appears logical, one might question the extent to which the subject can actually attain a state of felicity under sovereign authority. Hobbes ad-
dresses this potential objection in his claim that: “By Safety here, is not meant a bare Preservation, but also all other Contentments of life, which every man by lawfull Industry, without danger, or hurt to the Commonwealth, shall acquire to himself” (Hobbes, Leviathan, II.xxx, 376). Furthermore, Hobbes explains that the aim of sovereign authority (in his implementation of law and punishment), “is not to bind the people from all voluntary actions, but to direct and keep them in such a motion as not to hurt themselves by their own impetuous desires, rashness, or indiscretion” (Hobbes, Leviathan, II.xxx, 388). Thus, “a Law [or Punishment] that is not needful, having not the true end of Law is not Good” (Hobbes, Leviathan, II.xxx, 388). From these passages, it is clear that the desires of subjects will only be restricted to the extent that they threaten the peace and security of the commonwealth. Harmless desires, however, can be continuously pursued one after another without fear of injury or death.

Hobbesian Education: A Response to the Limitations of Sovereign Punishment

Now that the subject’s fixation on felicity has been illuminated, one can begin to observe the essential relationship between statewide education and obedience to the law in light of the evident limits to sovereign punishment. As detailed previously, Hobbes contends that the majority of subjects are rational individuals who are more inclined to obey sovereign-made law than risk their self-preservation by returning to the state of nature. According to S. A. Lloyd (1997, 39), the majority “[has] what they can see in their own terms to be good and sufficient reasons for obeying their effective Sovereign…” However, if one’s decision to be just is contingent upon an internal cost-benefit analysis of life under sovereign authority (as compared to life in the state of nature), two potential concerns might be raised: 1) What if the individual’s memory of the state of nature and/or their awareness of the central role of law and punishment fades over time and 2) How will subjects born after the inception of the commonwealth possess sufficient knowledge of the state of nature and/or a cognizance of the vital function of Civil and Penal law? In order to prevent the just majority from becoming disobedient and dispose new members of the commonwealth to be law-abiding, Hobbes appends the task of facilitating statewide education to the list of sovereign duties:

It is annexed to the Sovereignty, to be Judge of what Opinions and Doctrines are averse, and what conducing to Peace… and what, men are to be trusted withall in speaking to Multitudes of people; and who shall examine the Doctrines of all books before they are published. For the Actions of men proceed from their Opinions; and in the well governing of Opinions, consisteth the well governing of mens Actions, in order to their Peace, and Concord. (Hobbes, Leviathan, II.xviii, 233)

From this statement, it is clear that punishment (or the threat of punishment) is not the primary director of men’s opinions. Rather, in keeping with the principle of freedom of conscience, it is the sovereign’s duty to continually demonstrate to his subjects that obedience is in their best interest. Although punishment is certainly necessary for those who refuse to be persuaded, it is not an effective means of achieving true “Peace and Concord” on the state level. Hobbes explains that those who refuse to acknowledge the rationale for obedience “take [Punishments] but for an act of Hostility which when they think they have strength enough, they will endeavor by acts of Hostility to avoid” (Hobbes, Leviathan, II.xxx, 377). Thus, in the absence of a statewide system of education that provides frequent instruction on the benefits of obedience and the horrors of the state of nature, the irrational sentiments of the unjust few will begin to infiltrate the opinions of the just majority (whose memories of the state of nature will have become vague or non-existent). In this situation, punishment would serve as the only means of compelling obedience. However, because the subject would be ignorant of punishment’s essential function as an arbiter of peace, such corrective acts would be viewed as illegitimate and hostile (Anderson 2003, 101).

Acknowledging this possibility, Hobbes calls for education to be administered at three distinct levels of society: the university (for the educated), the pulpit (for the common people), and the home (for children) (Hüning 2007, 219). Although he admits that the content taught in each of these settings must be altered to meet the educational abilities of each group, Hobbes highlights two core teachings that should serve as the foundation for the sovereign’s curriculum: 1) an account of and justification for “the essential rights of Sovereignty” and 2) a detailed dissemination of sovereign made law (Lloyd 1997, 40). Legal promulgation, as described above, is essential to maintaining a just populace because subjects cannot adequately obey the law if they are unaware of its contents or uncertain that it stems directly from sovereign authority. Of equal importance is the sovereign’s duty to provide a description of, and rationale for, his essential rights. According to Hobbes, “It is against his [the sovereign’s] Duty, to let the people be ignorant, or mis-in-formed of the grounds, and reasons of those his essential Rights; because thereby men are easy to be seduced, and drawn to resist him…” (Hobbes, Leviathan, II.xxx, 377). These “essential rights” include (but are not limited to): 1) possessing sole legislative authority, 2) making war and peace, 3) authorizing teachers, 4) appointing “ministers and officers,” 5) raising money via taxes, and 6) examining and selecting acceptable doctrines (Hobbes, Leviathan, II.xxx, 377). Rather than compelling subjects to acknowledge these rights unquestioningly, the sovereign must appeal to each individual’s reasoning faculties by offering a justification for his authority (Bejan 2010, 104). Because sovereign authority is in the best interest of the subject, Hobbes concludes that, “In the instruction of the people in the essential rights… of Sovereignty, there is no difficulty” (Hobbes, Leviathan, II.xxx., 379).
Although education in the law and the rights of sovereignty is universal to all, Hobbes clearly distinguishes between both the content to be taught and the particular instructional methods to be employed at each level of society. By closely examining Hobbes's educational prescriptions for universities, churches, and the home, one can observe how each specific program promotes the goal of generating and maintaining a just, law-abiding populace.

At the university level, Hobbes calls for a fundamental reformation of the present curriculum, which he believes to be dominated by “vain philosophy” and doctrines subversive to sovereign authority. According to Hobbes, true philosophy (i.e., the use of reason to generate practical knowledge with earthly utility [Hobbes, *Leviathan*, IV.xlvi, 682]) was overshadowed by a fixation on the “absurd” and “bewildering” teachings of Aristotelian philosophy (Bejan 2010, 612). More specifically, Hobbes disdained Aristotle’s opinions on the separation of bodies and souls, universal moral good, and the proximity of monarchy to tyranny (Hobbes, *Leviathan*, IV.xlvi, 691; 696-697; 699). According to Bejan, Hobbes believed that the “Aristotelity” of the universities filled the minds of students with “insignificant speech” and led them to fixate on ideas/doctrines repugnant to peace and stability (Bejan 2010, 611-612). Furthermore, Hobbes sought to lessen the influence of classical Greek and Roman texts on the opinions of impressionable students by authorizing “discrete masters as are fit to take away their venime” (Hobbes, *Leviathan*, II.xxix, 369-370). These books were, in Hobbes’s opinion, notorious for engendering disobedience by teaching the following adverse doctrines: that sovereignty could be shared or forfeited, that each individual can correctly judge “right and wrong,” that rejection of internal convictions is impossible, and that individuals possess a fundamental right to property (Hobbes, *Leviathan*, II.xxx, 384; Button 2008, 62-63).

Because he viewed the universities as “Fountains of Civill, and Morall Doctrine” from which preachers, officials, and all other educated individuals would go forth and share their knowledge with the common people, Hobbes was aware that the maintenance of a just, law-abiding populace would “dependeth wholly, on the right teaching of Youth in the Universities” (Hobbes, *Leviathan*, ‘A Review and Conclusions,’ 728; II.xxx, 384). With this in mind, Hobbes formulates a new system of university instruction centered on the teaching of his natural philosophy and political thought as detailed in *Leviathan*. In doing so, the sovereign can ensure that his core principles will not be forgotten or disregarded in favor of unjust and seditious doctrines. Additionally, the sovereign should teach attend the universities, the church pulpit serves as the primary location for public instruction. Although some scholars (e.g., Johnston 1986, 89) attempt to argue that Hobbes intended *Leviathan* to be read by all subjects, the fact that he explicitly outlines the doctrines that should be taught to the “people” renders their assertions implausible (Bejan 2010, 617). More accurately, Hobbes conceptualizes public education as a form of pseudo-religious instruction in the most basic tenants of his natural and political philosophy. In truth, most of Hobbes’s discussions on public education found in *Leviathan* emphasize themes of preaching and/or religious instruction (Lloyd 2013, 170-171). In Chapter 30, Hobbes instructs the sovereign to teach the essential postulates of his work as a direct comparison to the 10 Commandments. In doing so, the people are afforded a digestible list of dictates that they can easily commit to memory. If one looks closely at what Hobbes believes to be the most essential principles of his thought, it becomes evident that his educational system (and his entire theory of the state in general) is solely fixated on securing the conditions necessary for peace and security by forming a just, law-abiding populace.

First of all, the people are taught, “not to be in love with any form of Government they see in their neighbor nations...For the prosperity of a people ruled by an Aristocraticall, or Democraticall assembly, commeth not from Aristocracy, nor from Democracy, but from Obedience, and Concord of the Subjects...” (Hobbes, *Leviathan*, II.xxx, 380). Thus, by valuing other governments (i.e., gods) above that of their own sovereign-ruled state (i.e., God), the people dispose themselves to disobedience by maintaining the false assumption that peace and stability is contingent upon a particular form of rule rather than their own just/unjust actions. Analogous to the second and third commandments (i.e., no false idols and no use of God’s name in vain), the people are to be instructed not to place private men above the sovereign or speak “evil” of him (Hobbes, *Leviathan*, II.xxx, 380-381). Ultimately, these actions are not to be labeled as ‘moral wrongs’ or sins against a higher power. Rather, they are denounced for their tendency to engender unjust behavior by bringing the sovereign into “contempt with his people” and “slacken[ing]” their obedience (Hobbes, *Leviathan*, II.xxx, 381).

Subsequently, Hobbes uses the biblical command to honor the Sabbath as an analogy for the necessity of establishing pre-determined times for instruction:

It is necessary that some such times be determined, wherein they may assemble together, and...hear those their Duties told them, and the Positive Lawes, such as generally concern them all, read and expounded, and be put in the mind of the Authority that maketh them Lawes. To this end had the Jewes every seventh day, a Sabbath... (Hobbes, *Leviathan*, II.xxx, 381)

By conceiving of public instruction as a ritualistic event, the sovereign can ensure that his core principles will not be forgotten or disregarded in favor of unjust and seditious doctrines. Additionally, the sovereign should teach...
the importance of honoring one’s parents as a life-long obligation, which cultivates obedience and prepares the subject for life under sovereign authority. Finally, Hobbes amalgamates commandments 6-9 (i.e., no murder, no adultery, no theft, no bearing of false witness) to teach the people “not to deprive their Neighbors, by violence, or fraud, of anything which by the sovereign authority is theirs. Of things held in propriety, those that are dearest to a man are his own life, and limbs; and in the next degree, (in most men,) those that concern conjugal affection; and after them riches and means of living” (Hobbes, Leviathan, II.xxx, 382-383). This short (yet involved) directive can be further simplified by citing Hobbes’s preferred axiom: “Do not that to another, which thou wouldest not have done to thy selfe;” (Hobbes, Leviathan, I.xv, 214). Through these teachings, the people will be shown the basic rationale for abstaining from the property and person of others: the stability and preservation of their own property and person. In addition to these core principles (made directly analogous to religious doctrine), subjects will also be offered (as explained above) a detailed account of, and justification for, the law and the essential rights of sovereignty.

On the lowest level of Hobbes’s educational system, the home serves as the primary setting for the education of early adolescents. More specifically, parents are tasked with introducing their children to the concept that, “originally, the Father of every man was also his Sovereign Lord, with power over him of life and death” (Hobbes, Leviathan, II.xxx, 382). In this respect, the home functions as a small-scale representation of life under sovereign authority, which allows for the child to develop an obedient disposition. Ultimately, the father operates as a surrogate sovereign until the time when the child can rationally consent to the true sovereign authority (Chapman 1975, 85). Although children do not yet possess full command of their reasoning faculties, and thus cannot truly comprehend the rationale for obedience, this early education serves to “habituate” them to conditions of existence under sovereign authority (Bejan 2010, 619). Once the child reaches an age when their rational abilities are sufficient enough to comprehend the importance of obedient behavior, they will already be well disposed to act as such (Chapman 1975, 86).

Potential Objections to Hobbes’s Educational System

Although one might argue that Hobbes’s system of universal education constitutes forced ideological coercion, it is important to emphasize the sovereign’s duty to provide adequate justification for his teachings, laws, and essential rights. Although public education is (by all indications) compulsory, the people are in no way expected to accept the sovereign’s dictates with unquestioning obedience. Because Hobbes respects subjects as reasoning beings and acknowledges their freedom of conscience, his educational system makes no effort to coerce belief. Rather, public instruction can be viewed as “an activity only of persuasion” (Lloyd 1997, 51).

What may be more difficult to justify is Hobbes’s ostensible support for the suppression of dissenting doctrines. Ultimately, this potential objection can be counteracted with two distinct arguments. First of all, on two separate occasions, Hobbes insinuates that not all “unorthodox” teachings should be prohibited (Lloyd 1997, 48). When discussing the dangers presented by the study of ancient texts (described above), Hobbes does not go so far as to ban them outright. Rather, he simply claims that “the correctives of discreet Masters” should be employed to mitigate the influence of these works on the minds of impressionable youth. Again, Hobbes prescribes persuasion rather than coercion in an effort to acknowledge the autonomy of human belief and opinion. In another example, Hobbes condemns the attempts of the Inquisition to suppress “True Philosophy” and in turn calls for “the truth [to] be first examined by competent Judges, or confuted by them who pretend to know the contrary” (Hobbes, Leviathan, IV.xlvi, 703; Lloyd 1997, 48). Although it is difficult to gauge the extent to which the sovereign will be open to new ideas and doctrines, this passage (in the least) opens the door to the possible acceptance of unconventional ideas.

The second potential response to the issue of sovereign censorship takes a more pragmatic approach. Because the majority of subjects are rational individuals, they will acknowledge sovereign authority and civil law as the most expedient means to achieving a peaceful existence in which their desires can be continually pursued. As a result of this awareness, the majority will also accept that individual liberties must be sacrificed if they threaten the health and security of these institutions. Therefore, the majority will not object to the suppression of dissenting doctrines if such teachings clearly threaten peace and security (which, in Hobbes’s opinion, is the only justifiable grounds for prohibiting the expression of ideas) (Van Mill 2002, 26). Ultimately, those who view Hobbesian education as an illiberal system of forced mind control fail to acknowledge that every sovereign mechanism (i.e., law, punishment, education, etc.) is directed toward one end: peace. Anything outside the realm of preserving order and stability is of no apparent concern to the state. Therefore, all doctrines, theories, and opinions that do not pose a threat to state stability can be studied and disseminated at will.

Finally, one might argue that Hobbes’s statewide system of education reinforces his ultimate disdain for the concepts of individual wisdom and objective truth by promoting the standardization of beliefs and opinions in accordance with the sovereign’s arbitrary dictates. In truth, most of Hobbes’s thoughts on wisdom offered in Leviathan pertain to men who overvalue their mental capacities and choose to defy rational obedience in an act of intellectual vanity. However, in his chapter on “imagination” Hobbes appears to acknowledge a certain form of wisdom, which might be attained through a careful study of his teachings on perception:

But evil men under pretext that God can do anything, are so bold as to say anything when it serves their turn, though they think it untrue; It is the part of a wise man, to believe them no further, than right reason makes that which they say, appear credible.
If this superstitious fear of Spirits were taken away, and with it, Prognostiques from Dreams, false Prophecies... men would be much more fitted than they are for civill Obedience. And this ought to be the work of Schooles... (Hobbes, Leviathan, I.ii, 93)

In this passage, Hobbes offers a depiction of a wise man who possesses knowledge that is both objectively true and useful (i.e., it leads to rational obedience). Ultimately, this individual is able to achieve such wisdom by learning, from Hobbes's natural philosophy, how to differentiate between the various forms of perception (e.g., real experience, imagination, dreams, visions, hallucinations, etc.). By employing “right reason” to separate appearance from reality, the wise man not only acquires objective knowledge, but he also becomes better equipped to reject the existence of ghosts, spirits, and other non-corporeal abstractions. Thus, the wise man (with his true knowledge of reality) is able to resist the influence of evil teachers who stir up dissention by preying on the irrational superstitions of the common people. Furthermore, one should not disregard Hobbes's assertion that this study “ought to be the work of Schooles.” From this claim, it is logical to assume that such teachings will have a place in Hobbes's educational system (whether they be limited to the universities or disseminated more broadly). Although this example does not conclusively demonstrate Hobbes's support for individual wisdom or objective truth, it certainly opens the door to such a possibility.

Ultimately, Hobbes’s system of statewide education is neither completely hostile to, nor entirely compatible with, liberal principles (i.e., tolerance, freedom of speech, etc.). Due to the inability of sovereign punishment to maintain a just, law-abiding populace, systematic education serves the essential function of persuading each subject that obedience is in their best interest. Although one cannot deny that certain doctrines and teaching will be censored under such a system, the narrow goal of civic education (i.e., engendering obedience) dictates that such censorship will be limited to direct threats to peace. In this respect, Hobbes's educational system is entirely consistent with the goals and intentions of all other state institutions (i.e., the preservation of peace and stability through the cultivation of an obedient populace).

A Reconceptualization of Hobbes’s Sovereign

A Response to the Orthodox Interpretation

Now that Hobbes’s punishment theory and its relationship to state wide education has been carefully examined, one can utilize this analysis as the foundation for a new, more complex depiction of Hobbes’s sovereign. As stated above, the orthodox portrayal of the sovereign emphasizes his use of cruel and arbitrary punishment as a means to suppress the wills of subjects and significantly restrict their individual liberties. Furthermore, terror, fear, and pervasive threats of violence are employed to serve his tyrannical ends by compelling absolute, unquestioning obedience. In this light, life under sovereign authority appears terrifying and fundamentally oppressive. However, (as previously explained) the character of sovereign punishment is significantly limited by its stated purpose as a deterrence and assurance measure. The fact that punishments must be publicly justified, established prior to a criminal act, carried out by public authority, and directly connected to a violation of promulgated law (among other things) signifies the very limited ends to which sovereign punishment is directed (i.e., the preservation of peace and stability).

Ultimately, the traditional interpretation of sovereign punishment as cruel, arbitrary, and oppressive stems from a failure to acknowledge Hobbes’s essential distinction between subjects as human beings and the sovereign as an artificial institution. In order to demonstrate this key demarcation, one must first consider Hobbes’s account of the sovereign’s inception. If one recalls, Hobbes believes felicity (a perpetual movement from desire to desire) to be the ultimate end of human existence. Additionally, each individual possesses unique desires and appetites, “which ariseth partly from the diversity of passions, in divers men; and partly from difference of the knowledge or opinion each one has of the causes, which produce the effect desired” (Hobbes, Leviathan, I.xi, 161). In this respect, each individual is narrowly focused on fulfilling their personal desires, which consist of accumulated goods and the temporary gratification of personal appetites. Because human beings cannot adequately pursue their desires in the volatile state of nature, they make a conscious decision to seek a condition of peace via the social contract. It is at this moment that the artificial institution of sovereignty is generated. Each prospective subject is said to:

Conferre all their power and strength upon one Man, or upon one assembly of men, …to beare their Person; and every one to owne, and acknowledge himself to be the Author of whatsoever he that so beareth their Person, shall act or cause to be Acted, in those things which concerne the Common Peace and Safetie… (Hobbes, Leviathan, II.xvii, 227)

In this passage, one can begin to observe Hobbes’s evident distinction between the ultimate end of the sovereign and that of his subjects. While each individual pursues peace as a means to a greater end (i.e., felicity), the sovereign is a man-made institution established for the sole purpose of maintaining a peaceful and secure commonwealth. According to Hobbes, “The office of the Sovereign (whether it be a Monarch or Assembly) consisteth in the end, for which he was trusted with the Soveraign Power, namely the procuracion of the safety of the people; to which he is obliged by the law of nature” (Hobbes, Leviathan, II.xxx, 376). Thus, the sovereign is not, in any way, motivated by the fulfillment of his personal desires or appetites. Rather, all of his actions must (as specified by the law of nature) be directed toward the end for which he was created (i.e., to secure the requisite conditions for the achievement of felicity). All other motivations fall outside of its purview. Therefore, according to Owen, “the scope or authority of [sovereign] power, that is, its legitimate end or purpose, has
been narrowed or limited by Hobbes to an unprecedented extent” (Owen 2005). In acknowledging the sovereign as an artificial entity, it becomes clear that his acts of punishment cannot (by nature of his pre-established function) be arbitrary, cruel or inequitable. Thus, the limitations placed on sovereign punishment are not specifically designed to hold his personal desires and motives in check because “the ‘true’ subject of sovereignty in Hobbes is the office of government,” rather than a passionate, self-absorbed human being (Chwasczca 2012, 124) [emphasis added]. In actuality, these restrictions are merely the rational components of a penal system that Hobbes believes to be most conducive to the attainment of a peaceful and secure commonwealth.

Those scholars who view the sovereign as a significant threat to the basic rights and liberties of subjects [i.e., Shakar (1989); Okin (1989); Gautheir (1995)] seem to ignore Hobbes’s claim that, “the greatest pressure of Sovereign Governors, proceedeth not from any delight, or profit they can expect in the damage, or weakening of their subjects, in whose vigor, consisteth their own selves…” (Hobbes, Leviathan, II.xviii, 238). Thus, the sovereign’s ability to achieve his stated purpose is limited when his subjects are weakened by an excessive suppression of their rights and liberties. If the peace and stability of the commonwealth is contingent upon the just behavior of subjects (which, in turn, is compelled by the individual’s rational conviction that such obedience will promote an environment conducive to felicity), the unnecessary restriction of freedoms and liberties would significantly limit the subject’s ability to pursue their desires; thus rendering obedience irrational. In such a situation, mass rebellion would inevitably ensue. Therefore, the sovereign is only obligated to limit those rights and liberties that jeopardize peace.

For the rational subject, the moderate curtailment of rights will be acknowledged as legitimate and necessary. Conversely, in all situations where the law is silent, the subject possesses a right/liberty to pursue his personal desires as they see fit. In Hobbes’s estimation, these conditions are most favorable to the maintenance of a vigorous and well-ordered populace. This sentiment is echoed in Van Mill’s claim that, “the best way to maintain a peaceful commonwealth is to leave people alone unless they are transgressing the laws that preserve peace” (2002, 32). The fact that Hobbes believes “a plain husbandmen” to be “more Prudent in the affairs of his own house, then a Privy Counsellor” implies that the rights and liberties most valued by rational subjects (i.e., the freedom to continuously obtain goods, pursue desires, and order their personal affairs) will be rather extensive (Hobbes, Leviathan, I.viii, 138).

Furthermore, thinkers who attempt to demonstrate the tyrannical/despotic nature of Hobbes’s sovereign ([Thomas 1929]; (Ridge 1998)] incorrectly claim the influence of individual motives and desires on his actions (i.e., cruelty, arbitrary displays of power, etc.). However, Hobbes presents the sovereign as an artificial institution created by subjects for the sole purpose of preserving peace. In truth, there is little (or no) evidence of any personal motives ascribed to the sovereign in Hobbes’s text. Additionally, Hobbes never provides an account of the ideal qualities/traits that a sovereign should possess or feels compelled to offer advice to prospective sovereigns on how to best subdue their passions and desires. This is further supported by the fact that Hobbes almost always refers to the sovereign as either an individual or an assembly of men. Finally, Hobbes does not concern himself with the particulars of how an individual can best acquire rule. Rather, at the end of Part II, Hobbes implies that his text is not intended as a guidebook for obtaining sovereignty. Rather, he merely wishes, “that one time or other, this writing of mine may fall into the hands of a Sovereign, who will consider it…” (Hobbes, Leviathan, II.xxxi, 408). Ultimately, the lack of focus on the natural person obtaining and maintaining the office of sovereignty speaks to Hobbes’s intent to emphasize its institutional character.

Additionally, it is important to demonstrate how Hobbes’s conception of the sovereign as an artificial institution fails to comport with classical characterizations of the tyrant as a cruel and malevolent individual motivated by an insatiable desire to fulfill his baser impulses. More precisely, Kinch Hoekstra (2001, 425) explains that, “The traditional conception of one who exercises rule tyrannically is of a sovereign…who rules arbitrarily, according to his own will rather than according to law…; who is unjust; who rules for his own advantage rather than that of his subjects; or who rules cruelly.” In truth, many thinkers prior to Hobbes (from classical antiquity through the Renaissance) offer depictions of tyranny that closely align with Hoekstra’s definition. In Book IX of The Republic, Plato describes the internal disposition of a tyrant as such:

But once a tyranny was established by love, what he had rarely been in dreams, he became continuously while awake. He will stick at no terrible murder, or food, or deed... (Plato, The Republic, IX.574 d-e, 255)

In such a state it dares to do everything as though it were released from, and rid of, all shame and prudence. And it doesn’t shrink from attempting intercourse...[or] any foul murder at all, and there is no food from which it abstains. And, in a word, it omits no act of folly or shamelessness. (Plato, The Republic, IX.571c, 252)

Thus, Plato’s notion of tyranny is intimately connected with the unruly passions and appetites of the individual (i.e., the “tyrannical soul”). In this sense, every decision made by the tyrant (whether it concerns politics, economics, religion, etc.) is motivated by his understanding of some personal benefit to be gained.

Similarly, Aristotle claims that, “Tyranny, as has often been said, looks to nothing common, unless it is for the sake of private benefit. The Tyrant’s goal is pleasure... Hence, of the objects of aggrandizement, material goods are characteristic of tyranny (Aristotle, Politics, V.x.1311a, 155). Again, the tyrant is portrayed as possessing no higher motivation than fulfilling his appetite for material goods and physical pleasure. Aristotle further clarifies this point in his catalog of actions from which the tyrant should abstain if he wishes to maintain his rule. For example, he should
not 1) make public displays of lavish spending, 2) appear excessively cruel, 3) engage in public displays of sexual gratification, 4) neglect to provide for the basic needs of citizens, 5) take property from his subjects, or 6) issue punishments with intent to “slight” rather than correct with a “paternal spirit” (Aristotle, Politics, V.xi.1314a-1315b, 164-166). By instructing the tyrannical ruler to refrain from such actions (i.e., to act less tyrannical), Aristotle indirectly offers an image of the self-indulgent, lascivious disposition of a typical tyrant. Ultimately, both Plato and Aristotle acknowledge that the tyrannical individual is a slave to his baser cravings. Thus, his ability to direct the affairs of the state and provide for the needs of citizens is significantly limited. In those areas where his personal needs do not intersect with those of the state (e.g., public welfare, health, education, etc.), the tyrant will display a fundamental indifference. Such notions of tyranny as rule by a violent and self-absorbed individual persist through the Roman era in the writings of Cicero (among others). Ultimately, Cicero held that there was “no creature more vile or horrible than a tyrant…for though he bears a human form, yet he surpasses the most monstrous of the wild beasts in the cruelty of his nature” (Cicero, De Re Publica, II.xvii, 157). By emphasizing the animalistic nature of the tyrant, Cicero implies that such rulers are guided solely by their cruel instincts and lust for personal power, rather than right reason or prudent thought. In the medieval period, St. Thomas Aquinas echoed this sentiment in his harsh criticism of tyrannical rulers:

The malice of their impenitence is increased by the fact that they consider everything licit which they can do unresisted and with impunity…tyrants are often prevented from obtaining even the temporal goods which they covet, subjected to many dangers, and worse still, deprived of eternal happiness. (Aquinas, De Rigo, chap. 12)

In truth, this depiction of a self-serving, rapacious tyrant appears fundamentally consistent with the preceding interpretations of the ancient Greeks and Romans. Ultimately, this traditional conception of tyrannical rule was not considerably altered until the publication of Machiavelli’s The Prince in 1532. In this text, Machiavelli disarms the concept of a morally corrupt tyrant in his assertion that the primary motivation of princes (he rarely, if ever, uses the word ‘tyrant’) is the successful attainment and preservation of power through any prudent means. In this respect, Machiavelli does turn away from the image of a tyrant as one ruled by ignoble passions and appetites. Nevertheless, he still describes a self-serving individual who is purely motivated by a desire to gain and maintain political power. Nowhere in the text does Machiavelli explicitly instruct the prince to support the common good or benefit his citizens for any other reason than to strengthen his own rule. For example, in providing rationale for the fair treatment of subjects, Machiavelli asserts that, “A prince can easily secure himself by avoiding being hated and despised, and by keeping the people satisfied with him, which it is most necessary for him to accomplish” (Machiavelli, The Prince, XIX). Furthermore, his assertion that, “[H]atred is acquired through good deeds as well as bad ones; and so, as I said above, a prince who wants to maintain his state is often forced not to be good” demonstrates the prince’s willingness to take any actions necessary to promote his own personal power, regardless of whether, “that community of which you judge you have need to maintain yourself is corrupt” (Machiavelli, The Prince, XIX, 77) [emphasis added]. Although Machiavelli’s Prince does not fit the traditional conception of a tyrant, the fact that he is not truly concerned with the promotion of the common good or treating his subjects justly (unless it serves to bolster his power) demonstrates his opportunistic, self-interested nature.

Ultimately, this cursory sketch of the traditional understanding of tyranny serves to further reinforce the non-tyrannical nature of Hobbes’s sovereign. Although Hobbes equips his sovereign with substantial rights (i.e., the making of laws, the distribution of punishment, the censoring of doctrines, the authority to declare war, etc.), there is no indication in the text that he will be inclined to abuse such rights in a tyrannical manner for his own personal gain. Although Hobbes acknowledges that, “A man may here object, that the condition of subjects is very miserable; as being obnoxious to the lusts, and other irregular passions of him, or them that have so unlimited power in their hands,” such a concern fails to separate the classical conception of a tyrant as a human being (with passions, desires, etc.) from the artificial, man-made character of the sovereign (Hobbes, Leviathan, II.xviii, 238). In response to this objection, Hobbes makes a rather definitive claim [emphasis added]: “A law may be conceived to be Good, when it is for the benefit of the Sovereign; though it be not necessary for the People; but it is not so. For the good of the Sovereign and the people, cannot be separated” (Hobbes, Leviathan, II.xxx, 388). Because he believes the aims of the people and the sovereign to be one and the same (i.e., peace), Hobbes effectively rejects the legitimacy of a tyrannical system of rule.

Furthermore, one must recall that the sovereign has an in foro interno obligation to comply with the laws of nature. This leads Hobbes to claim that, “for whatsoever is not against the law of nature, may be made law in the name of them that have the Sovereign power” (Hobbes, Leviathan, II.xxvi, 333; Van Mill 2002, 35). Thus, by not permitting the sovereign to act against these self-evident dictates, Hobbes invalidates many forms of behavior that are indicative of a traditional tyrant. For example, the laws of nature prohibit 1) injustice (i.e., the neglect of one’s covenant or duty), 2) ingratitude, 3) non-“compleasance” (i.e., “striving to retain those things which to himselfe are superfluous, and to others necessary”), 4) refusal to grant pardons for “offenses past,” 5) inflicting punishment for the purpose of revenge, 6) declaring hatred or contempt for another, and 7) inequity (Hobbes, Leviathan, I.xv, 207-216). Taken together, Hobbes characterizes these laws as “true doctrines” that constitute the “True Morall Philosophie” (Hobbes, Leviathan, I.xv, 216). By obligating the sovereign to conform his actions to these directives, Hobbes provides conclusive evidence for the non-tyranni-
A New Image of Life Under Sovereign Authority

Having arrived at a reformed understanding of the sovereign as an artificial, non-tyrannical institution motivated entirely by an obligation (under the law of nature) to promote the peace and security of the commonwealth, one can now offer a depiction of life under sovereign rule that is far less dismal and restrictive than that of the traditional interpretation. In this new light, Hobbes’s civil state can be seen, not as a regime driven by active fear and the subjugation of human will, but as a polity conducive to the pursuit of individual felicity and commodious living.

For the rational majority, who accept obedience to the law as the most expedient means to peace and security, the threat of sovereign punishment (although present) will not engender a condition of constant fear and terror. Because the subjects themselves generate the artificial sovereign with the formation of the commonwealth, they must be aware of both his essential rights and his limited purpose (as previously explained, this awareness will need to be reinforced through education). Thus, by understanding that the artificial sovereign possesses no intentions or desires independent of his duty to promote peace and security, the rational subject can rest assured that they will not face interference from the state if they abstain from non-peaceful (i.e., unlawful) actions. This confidence is augmented by the fact that sovereign punishment offers assurance to the just subject that the unjust (irrational) few will be penalized for violating the law. Furthermore, the significant limitations placed on punishment as a result of the positive nature of sovereign-made law eliminate the terror inducing prospect of arbitrary penalties and allow the subject to be fully aware of the areas in which they are free to act according to their own discretion. In truth, each facet of Hobbes’s definition of punishment serves to promote the confidence of subjects by assuring each individual that the sovereign (by nature of his limited purpose) will not behave in an inconsistent or capricious manner.

As detailed previously, the sovereign must 1) publically justify punishment, 2) promulgate the law, 3) set down punishments in the law prior to an offense, 4) allow for freedom of conscience, 5) establish the “certitude” of the law (i.e., no ex post facto laws), and 6) account for proportionality in punishment (i.e., exemption and mitigation). These requirements significantly reduce the subject’s fear of sovereign punishment by offering each individual precise guidelines and incentives for avoiding unjust (i.e., illegal) actions. In essence, Hobbes’s conception of punishment (and the law more broadly) acknowledges that the rational subject simply desires to be left alone with as much freedom (i.e., lack of impediments to motion) as is possible to possess under conditions of peace and security. Thus, it is not in the sovereign’s nature to interfere in the types of non-threatening affairs that are most important to rational human beings: the accumulation of goods, the “Desire of Ease, and Sensuall Delight,” the “desire of leisure,” etc. (Hobbes, Leviathan, I.xi, 161-162). On the other hand, the sovereign will use punishment (and the threat of punish-
the sovereign as an artificial, non-tyrannical institution with a predetermined end, this study has altered the pervasive notion of life in Hobbes's civil state as void of freedom and individual rights. As a result, the commonwealth (under sovereign authority) appears to generate conditions ideal to both the maintenance of state security and the pursuit of individual felicity.

Although this conclusion might lead one to offer a definitive statement denouncing all interpretations of Hobbes's commonwealth as limiting and oppressive, such an assertion would not be sufficiently convincing. In truth, this analysis draws attention to two particular aspects of Hobbes's political theory that require additional study before any claim of this sort can be advanced. First, although Hobbes conceives of the sovereign as an artificial institution with a fixed purpose, he cannot escape the fact that a natural person (or group of natural people) must inhabit this office. Thus, it is questionable as to whether the true end of sovereignty (which admits no personal motives or desires) can be carried out by a natural person with intentions, motives, and desires of their own. This evident quandary raises a few additional questions: 1) Does Hobbes allow for enough limitations to sovereign action that the personal desires and motives of the natural individual will not interfere with the ends of the office? 2) Can one actually expect the sovereign to hold himself to the laws of nature (which only bind in foro interno) seeing as the office is inhabited by natural individuals (who, according to Hobbes, are inevitably prone to error and selfishness), 3) More broadly, does Hobbes's theory of sovereign rule have real-world practicality or is it merely a theoretical exercise? These questions, which are essential to understanding the validity and feasibility of Hobbes's political theory, should serve as an impetus for future research.

Second, although it has been demonstrated that Hobbes's sovereign promotes security and in doing so cultivates an environment conducive to "felicity," one must question both the type and quality of life that Hobbes's theory actually grants. In order to do so, it is important to assess the validity of his conception of human nature and the ultimate end of human life (i.e., felicity). If the object of human existence is truly a continual movement from desire to desire—desires which, in Hobbes's estimation, are very immediate and physical (i.e., material goods, bodily pleasure, gratification of appetites, etc.)—then Hobbes's theory accomplishes a great deal in the way of suppressing human pride and exposing the frivolity of attempts to pursue "higher" knowledge or truth. By exposing the "vain philosophy" of Aristotle and other thinkers who direct men's thoughts to senseless concepts (i.e., the separation of bodies and souls, universal moral good, etc.), Hobbes offers his readers practical knowledge regarding the best means of securing one's physical, earthly "happiness." In doing so, this teaching curbs human pride and allow students of Hobbes to direct their thoughts and efforts to what truly matters. Conversely, if Hobbes's conceptions of human nature and the ultimate end of human life are fundamentally flawed, then his proposed regime would appear both restrictive and degrading. In other words, if the quality of human existence is not truly contingent upon the continual fulfillment of physical desires and the avoidance of death, but is, in fact, dictated by the attainment of higher truth, moral perfection, or some other Summum Bonum, then Hobbes's political theory is unquestionably misguided. Ultimately, it is beyond the scope of this article to offer any conclusions to this line of inquiry. Rather, such an analysis must be treated with greater detail and precision in a future project.

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Introduction

It is often debated what the best solution is to prevent campus crime and keep college communities safe. One of the most controversial solutions is the possibility of allowing college students and faculty with concealed-carry licenses to carry their firearms on campus property. Students and faculty at colleges and universities have mixed attitudes about this type of policy. Some believe more firearms will lead to more crime and a dangerous learning environment, but others believe it will lead to less crime and provide safety and security for those around them. It is important to implement the best method of keeping our students and faculties as safe as possible. In order to do this, universities and other institutions that have already implemented campus-carry should be further studied to measure the effectiveness of the policy and to determine whether or not it should be continued. Much of this thesis relies on research conducted by John R. Lott, Jr. College students and faculty with concealed-carry licenses should be permitted the legal right to choose to carry a concealed firearm on their college campuses for self-defense.

Abstract

This thesis examines both sides of the debate and constitutionality of students and faculty being allowed to carry a concealed firearm on college campuses for self-defense and provides an argument in favor of such. District of Columbia v. Heller (2008) and McDonald v. City of Chicago (2010) have determined a right to self-defense and extended it to the states. Statistics show college campuses are generally safer than many other places, however crime still does occur. Data shows that concealed-carry permit holders are some of the most law-abiding citizens. Also, “shall-issue” laws allow more permits to be issued, which in turn, reduces crime. Some states have already passed a campus-carry policy for public institutions, with more on the way. It is important to implement the best method of keeping our students and faculties as safe as possible. In order to do this, universities and other institutions that have already implemented campus-carry should be further studied to measure the effectiveness of the policy and to determine whether or not it should be continued. Much of this thesis relies on research conducted by John R. Lott, Jr. College students and faculty with concealed-carry licenses should be permitted the legal right to choose to carry a concealed firearm on their college campuses for self-defense.

Concealed-Carry on College Campuses: The Legal Right of Students and Faculty to Bear Arms
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Second Amendment and Law

To be clear, this thesis is not questioning the morality or fundamentalism of the right in the Second Amendment. Instead, the argument posed in this paper presents itself based in legality and supported by empirical evidence. Justification for this legal basis lies in past Supreme Court decisions along with publications of several law review articles. The Second Amendment states: “A well regulated Militia, being necessary to the security of a free State, the right of the people to keep and bear Arms, shall not be infringed” (U.S. Constitution). Courts in the United States have consistently argued over the interpretation of the Amendment. Until 2008, there was no set precedent for the legal right to self-defense within one’s home. Prior to this, a previous Second Amendment landmark court case had ruled that the right to bear arms only coincided with service in the militia. In recent years, however, the Supreme Court has moved towards a more “individual right”
interpretation, giving regular citizens the right to bear arms as well.

The significant court case that originally limited the Second Amendment for much of history was U.S. v. Miller, 307 U.S. 174 (1939). In this case, Miller was indicted for transporting an unregistered “shotgun having a barrel of less than eighteen inches in length” (U.S. v. Miller, 307 U.S. 174 (1939)). This violated the National Firearms Act of 1934, which a federal district court said violated the Second Amendment. The Supreme Court ruled that, because the shotgun was not part of normal militia equipment, the Second Amendment does not protect the right to keep and bear such a weapon (U.S. v. Miller, 307 U.S. 174 (1939)). The Court decided that the Second Amendment “protects the right to keep and bear arms only as that right pertains to state militias; it does not grant individuals the right to own guns. Therefore, the amendment does not stand as an obstacle to government attempts to regulate firearms” (Epstein, Lee, and Walker, 2007). This ruling stood in place for the next sixty-nine years.

Next, the most important case involving the advancement of the Second Amendment has been D.C. v. Heller (2008). Thanks to a D.C. law, citizens of the area were prohibited from owning unregistered handguns and also prevented from registering handguns. Thus, this law effectively banned handguns from the district. The police chief was able to issue one-year licenses to citizens, but even then the firearm was required to be in a non-functional state or bound by trigger lock or other device, rendering the resource useless in situations that would require the use of self-defense. These lock devices could include trigger locks, chamber locks, cable locks, or smart guns, which attempt to prevent unauthorized use by utilizing built-in devices like fingerprint recognition. The issue with these devices is that, often times, the firearm can still be loaded with the device attached, and disengaging the lock will require handling the firearm in the trigger vicinity, thus making the firearm even more dangerous. Therefore, requiring residents to use these locks would be putting an undue burden on them because of the impracticality of use in self-defense situations and the disregard for personal safety. In a 5-4 decision, Justice Scalia gave the opinion of the Court that D.C.’s law was incompatible with the Constitution. Along with this, the Court’s opinion revealed an in-depth explanation of the Second Amendment for the first time. The Court explains both the Amendment’s prefatory and operative clauses and the relationship between them, as well as the history behind their interpretation involving drafting history and various state constitutions that included the right to bear arms.

However, the opinion of the Court is clear to insist that the right is not “unlimited” and that citizens do not have “a right to keep and carry any weapon whatsoever in any manner and for whatever purpose,” specifically citing laws on concealed weapons and laws involving firearms and “sensitive places” (D.C. v. Heller, 554 U.S. 570 (2008)). “Thus, we do not read the Second Amendment to protect the right of citizens to carry arms for any sort of confrontation, just as we do not read the First Amendment to protect the right of citizens to speak for any purpose” (D.C. v. Heller, 554 U.S. 570 (2008)). At the same time, Justice Scalia’s opinion makes it clear in its explanation of the prefatory clause, that a citizen’s right to self-defense is the “central component” of the Amendment (D.C. v. Heller, 554 U.S. 570 (2008)). In Blackstone’s Commentaries (as cited in D.C. v. Heller, 554 U.S. 570 (2008)) it is explained that “…Americans understood the ‘right of self-preservation’ as permitting a citizen to ‘repel[l] force by force’ when ‘the intervention of society in his behalf, may be too late to prevent an injury.’” The Court also cites several state constitutions written before the Second Amendment that specifically mention a right to bear arms, which the Court interprets the intention to be for “defensive purposes” (D.C. v. Heller, 554 U.S. 570 (2008). Even more states adopted Second Amendment language after the Amendment passed through Congress in 1789. According to Justice Scalia, the fact that at least seven of these states “unequivocally protected an individual citizen’s right to self-defense is strong evidence that that is how the founding generation conceived of the right” (D.C. v. Heller, 554 U.S. 570 (2008)). This lends further support to the potentially wide scope of the Amendment.

Justice Stevens wrote the dissenting opinion in the Heller decision, relying heavily on the decision from U.S. v. Miller, 307 U.S. 174 (1939). The dissenting Justices strongly believe that the language used in the Second Amendment, especially “bear arms,” pertains to military functions alone. They viewed the Amendment as a collective right gained from participation in a state militia, rather than an individual right that encompasses every citizen. To the dissent, Justice Breyer adds that the Amendment allows for the governing of state interests. “Thus, irrespective of what those interests are—whether they do or do not include an independent interest in self-defense—the majority’s view cannot be correct unless it can show that the District’s regulation is unreasonable or inappropriate in Second Amendment terms” (D.C. v. Heller, 554 U.S. 570 (2008)). The Court ultimately decided that D.C.’s law was unconstitutional and that the Second Amendment protects the right to keep and bear arms for self-defense in the home. This effectively disregarded the decision in Miller. Instead of viewing the Second Amendment as a guarantee that does not grant individual citizens the right to own firearms, the Court now took on the position that the Amendment no longer pertains to military personnel alone.

Another court case that further spread the effects of the Second Amendment is McDonald v. City of Chicago, 561 U.S. 742 (2010). In this case, laws in Chicago and Oak Park effectively ban handgun possession. Essentially, the laws at issue are the same ones as in Heller; however, Chicago argues that the Second Amendment only applies to the federal government and not the states. Therefore, the Defendant argues, their laws are constitutional. The Petitioners are of the opinion that the Privileges and Immunities Clause in the Fourteenth Amendment protects their right to keep and bear arms. Also, to further strengthen their claim, they believe that the Due Process Clause of the Fourteenth Amendment incorporates the Second Amendment. The Majority in this case relies on their decision from Heller two years prior, reaffirming that “the Second
Amendment protects the right to keep and bear arms for the purpose of self-defense,” and thus “hold that the Second Amendment right is fully applicable to the States” (McDonald v. City of Chicago, 561 U.S. 742 (2010)). According to Justice Alito, the result of this case, as with any incorporation of a right, is that the “legislative freedom of the States” will be limited. “Incorporation always restricts experimentation and local variations, but that has not stopped the Court from incorporating virtually every other provision of the Bill of Rights” (McDonald v. City of Chicago, 561 U.S. 742 (2010)). Therefore, by ruling that the Due Process Clause in the Fourteenth Amendment incorporates the Second Amendment, states are still able to regulate firearms as long as they are not taking away a citizen’s right to self-defense. With the Supreme Court taking on the Heller and McDonald cases, the legality of the Second Amendment has become front and center. Because the Chicago law attempted to challenge the decision in Heller, this shows that the Heller case was not the end of the line. The Second Amendment will continue to be taken seriously in the years to come as states continue to regulate firearms, taking care not to intrude on the right proclaimed in Heller.

An analysis of several law review articles reveals a greater substance and support for Second Amendment rights and concealed-carry on campus. On one side of the aisle, Jordan E. Pratt takes a look at the “sensitive places” mentioned in Heller. In a law review article, titled “A First Amendment-Inspired Approach to Heller’s ‘Schools’ and ‘Government Buildings,’” Pratt analyzes the term “sensitive places” and explores the question “did the Court intend to leave undisturbed gun bans in primary and secondary schools only or also on university campuses” (Pratt 2014, 537-585)? Pratt’s review concludes that a narrow interpretation of Heller’s schools and government buildings should be adopted, and that “courts should subject broad gun bans on university campuses...to some form of heightened scrutiny” (Pratt 2014, 543), as well as sets a reminder of the Court’s strong allusion to the right of self-defense outside the home.

Another law review article by Joan H. Miller, titled “The Second Amendment Goes to College,” argues that, under the Constitution, public colleges and universities are allowed to ban firearms on their campuses, and that regulations against firearms on campuses should withstand strict scrutiny review. Miller believes that college campuses fit the definition of Heller’s “sensitive places,” thereby implying that a gun-free zone implemented by a college or university is constitutional (Miller 2011, 253). She also references a Virginia Supreme Court case in which it held that public colleges and universities fit the definition (Miller 2011, 249). Miller argues that these educational institutions have to provide regulation in the interest of public safety and to ensure academic freedom and the free exchange of ideas. She first covers the issue of public safety. Her article cites that “from May 2007 to August 10, 2011, 359 private citizens and eleven law enforcement officers have been killed by concealed-carry permit holders” (Miller 2011, 257). This attempts to illustrate that not all concealed-carry permit holders are law-abiding citizens. Miller makes note of the fact that the atmosphere on college campuses are different than many other public places. “…binge drinking and drug use are prevalent on college campuses; adding guns to that mix could have dire consequences” (Miller 2011, 259). Next, in regards to academic freedom, Miller states that a professor at the University of Utah, where the state passed legislation making it illegal for public universities to ban concealed-carry on their campuses, feels “particularly vulnerable to the weapons policy” when “[p]assing out poor grades, especially when students often react in a heated manner” (Miller 2011, 261). The national advocacy organization for concealed-carry on college campuses, Students for Concealed Carry on Campus (SCCC), would argue that a professor should not be anxious about passing out a grade to a student who would prefer to carry a firearm legally, as opposed to illegally. “ Feeling safe or unsafe is not the same as being safe or unsafe” (SCCC 2012). Miller’s final comments regard residence halls on campus. In the dicta of the Heller decision, citizens were given the right of self-defense within the home. Miller states, “If a state legislature were to pass a statute defining a dorm room as a “home,” that may be damaging to a college’s ability to ban guns from residence halls” (Miller 2011, 262). Miller defends a complete prohibition on guns on campus because she believes that this regulation allows a college to achieve its interest in the public safety and creates an environment that provides academic freedom.

In a law review titled “Don’t Take Your Guns to School (in Nebraska): Assessing the Constitutionality of the Private Universities’ Exemption from the Concealed Handgun Permit Act,” Joe W. Eden examines several court cases, including Heller and McDonald, that have upheld and rejected concealed handgun law. Some lower court cases that Eden mentions have rejected a “good cause” requirement for obtaining a concealed weapon permit in San Diego County, rejected an Illinois law that banned the possession of concealed firearms, and, on the other side, upheld a New Jersey law requiring a “justifiable need” for obtaining a concealed weapon permit (Eden 2014, 116-126). The remaining sections of Eden’s review is dedicated to exploring the constitutionality of the private post-secondary educational institution exemption of Nebraska’s Concealed Handgun Permit Act (CHPA), a law that is similar in several states (Hultin 2016). This law allows concealed carry permit holders to carry almost anywhere in the state. “One exception to the statutory guarantee prohibits permit holders from carrying a concealed handgun on publicly or privately owned school property, including universities and postsecondary professional schools” (Eden 2014, 114). Due to this law, these areas are unable to create their own policies to deal with student and faculty concealed-carry. Eden argues that, after the Heller and McDonald cases, these provisions in the CHPA can’t pass “constitutional muster” (Eden 2014, 114). He also cites from the Heller decision that the Court “placed emphasis on the right to bear arms for purposes of self-defense” and they never explicitly limited “their understanding of confrontation to those occurring only within one’s home” (Eden 2014, 130).
Eden also asserts that the language used in the Court’s opinion from the Heller decision referring to “sensitive places” should not include post-secondary schools because “[s]tudents wishing to carry concealed handguns in post-secondary schools therefore could not possibly be categorized as youth whose interests must be weighed...” (Eden 2014, 135). “Sensitive” schools are those schools where students have not yet reached the age required to obtain a concealed carry permit, which is 21. Even though the entire student population has not reached this age, Eden still does not consider colleges and universities as “sensitive” schools, because at least some have reached the target age. Eden believes that prohibiting citizens from carrying concealed weapons for the purpose of self-defense effectively destroys the right that the Heller decision created. He also states that the Court has acknowledged that “confrontations often occur outside the home” as well (Eden 2014, 137). Finally, Eden concludes by stating that “to ban them (firearms) in any location where education takes place is to tear away from Americans the very liberties that the Second Amendment was designed, not merely suggested to protect” (Eden 2014, 144).

Concealed-Handgun Permit Holders and the Laws

The following section argues that concealed-carry permit holders are actually very responsible and law-abiding citizens. Empirical evidence now exists to support this claim. John R. Lott, Jr., is a “world recognized expert on guns and crime,” the founder and current president of the Crime Prevention Research Center, and a pro-gun rights advocate (Crime Prevention Research Center 2016). In his book, More Guns Less Crime, Lott assesses the questions of 1) whether “allowing citizens to carry concealed handguns mean that otherwise law-abiding people will harm each other”, 2) “will the threat of self-defense by citizens armed with guns primarily deter criminals”, and 3) “[i]n general, do concealed handguns save or cost lives” (Lott 1998 2010, 11)? To be clear, concealed-carry is carrying a firearm in a concealed manner, in which the firearm is not easily noticeable to the public eye. Open-carry, on the other hand, means that the weapon is in plain sight to any observing person. States have differing laws as to whether or not the firearm may be loaded and as to how concealed the firearm must be. Concealed-carry obviously gives the carrier the tactical advantage in situations where the adversary would be unaware that the carrier is armed. With open-carry, the adversary can target the carrier, since they know they have a firearm. John Lott’s argument for concealed-carry over open-carry is based on this idea that criminals gain an advantage by knowing in advance who is carrying, allowing criminals to identify the stronger and weaker victims (Lott 1998 2010, 6). With concealed carry, criminals are unaware whether their victim is armed or defenseless. It acts as a deterrent in this manner. For example, if one taxi-cab driver defends himself or herself with a concealed handgun, that will have a “spillover effect,” making other criminals more wary of victimizing cab drivers (Lott 1998 2010, 6). This makes concealed-carry a better choice for those who want to protect themselves.

Currently, there are over 12.8 million people in the United States with a concealed-carry permit (Lott, Whitley, and Riley 2015, 13). In order to acquire the permit necessary to legally conceal a firearm, one must follow the laws set by his or her state regarding concealed-carry licensing. Each state sets its own requirements, and many states accept the permits of other states as well, allowing a resident of Illinois with a concealed-carry permit to carry a concealed firearm in the state of Wisconsin, for example. These requirements usually involve participating in a firearm safety and proficiency training session, in which the participants learn about “liability issues associated with carrying a firearm, gun safety issues, home defense strategies, ways to defuse confrontational situations, and practicing how to handle a firearm with or without actually firing the weapon” (Sulkowski and Lazarus 2011, 343). Aside from those, one must also pass the eligibility requirements set by his or her state. In Wisconsin, for example, some of these requirements are that one must be twenty-one years of age or older, must not have been convicted of a felony in Wisconsin, and must not be prohibited from owning a firearm. An important part of these requirements is understanding the difference between “may-issue” and “shall-issue.” “‘May-issue’ laws typically require license applicants to demonstrate a need to carry a concealed handgun...with designated officials...being given the discretion to determine who would receive a license,” whereas “‘shall-issue’ laws stipulate that designated law enforcement officials must issue a CHL to any applicant who meets relevant legal criteria regardless of demonstrable need” (Bouffard et al. 2012). As of 2015, there were only eight “may-issue” states, including the District of Columbia and 43 “shall-issue” states (USA Carry 2015). States have slowly been moving towards the “shall-issue” laws, as there were only 38 states with “shall-issue” laws in 2010, and even 20 fewer states in 1994 (Bouffard et al. 2012).

One of the arguments directed towards concealed-carry license holders, even gun ownership in general, is that violent crime will increase as more guns are put on the streets in the hands of the public (Duggan 2001). On the contrary, those who have gone through the training and application process in order to carry a concealed firearm are among the nation’s most law-abiding citizens. In a 2015 news article from the Washington Times, it was reported that “[s]ince 2007, the number of concealed handgun permits has soared from 4.6 million to over 12.8 million, and murder rates have fallen from 5.6 killings per 100,000 people to just 4.2, about a 25 percent drop” (Howell 2015). This statistic regards the same question as the first question posed by Lott in his book of whether law-abiding people with permits will commit crime. The fact is that they are even more law-abiding than police officers according to one of Lott’s recent studies.

According to this 2015 study by Lott, Whitley, and Riley, there were 103 crimes committed per 100,000 police officers, while the entire United States population had a crime rate of 3,813 per 100,000 people (Lott, Whitley, and Riley 2015, 13). Lott, Whitley, and Riley found that 158 permit holders in Texas were convicted of crimes in 2013;
in other words, a rate of 22.3 per 100,000. From October 1, 1987 to June 30, 2015, Florida nullified 9,999 concealed-carry licenses due to misdemeanors and felonies, or 12.8 per 100,000 license holders (Lott, Whitley, and Riley 2015, 13). Texas and Florida data for license holders combined comes out to less than one-sixth the rate for police officers (Lott, Whitley, and Riley 2015, 13). These results could be because permit holders realize that they have a lot to lose if they do something wrong. According to Lott ([1998] 2010), so far not one concealed-carry licensee has turned his or her weapon on a police officer, and there have even been several cases in which licensees were able to save some officers’ lives with their firearms (Lott [1998] 2010, 13). This contradicts Joan Miller’s statement that 11 officers had been killed by permit holders (Miller 2011, 257). Overwhelmingly, the type of person who decides to spend hours at training and spend the amount of money necessary for the application process, a process in which one must already be found to be an upstanding citizen in order to pass through, is typically a responsible person who would be hesitant to jump into conflict and cause unnecessary trouble.

Crime and Concealed-Carry

John R. Lott, Jr., argues in his book, that because “[c]riminals are motivated by self-preservation...handguns can therefore be a deterrent” (Lott [1998] 2010, 5). This begins to address the second question posed in his book concerning self-defense as a deterrent to crime. He uses the empirical evidence from “hot burglaries,” or burglaries that occur while the owner is present, in Canada and Britain compared to the hot burglaries in the United States. Lott chooses to compare Canada and Britain because these two countries have very strict gun laws in comparison to the United States. In his study, Lott finds that nearly 50% of burglaries in Canada and Britain are hot burglaries, whereas the United States’ hot burglary rate was only 13% (Lott [1998] 2010, 5). Lott compares this to what is known in the world of economics as the ‘substitution effect.’ An example of the substitution effect is when the price of apples rise compared to the price of oranges, more people will buy oranges, thus substituting their choice of produce for something cheaper. This is similar to how criminals will substitute their prey by attacking the weaker victims (Lott [1998] 2010, 6).

These questions led to Lott and Mustard’s initial study in 1997. John R. Lott, Jr. and David B. Mustard conducted a study which concerned the effect allowing law-abiding citizens to carry concealed handguns has on crime and whether or not concealed-carry acts as a deterrent or provokes more crime. Their study uses “annual cross-sectional time-series county-level crime data for the entire United States from 1977 to 1992” (Lott and Mustard 1997, 5). The FBI crime report lists seven types of crime: murder, rape, aggravated assault, robbery, auto theft, burglary, and larceny. The first four crimes are considered violent crimes and the last three are considered property crimes. Their results conclude that states with “shall-issue” laws had fewer violent crimes, but higher property crimes, illustrating a substitution, possibly due to the enactment of the concealed weapon laws (Lott and Mustard 1997, 18). Accidental handgun deaths were measured as well. In 1988, there were 200 total accidental handgun deaths in the United States, 22 of which were in concealed-carry states and the other 178 were in states without concealed-carry laws (Lott and Mustard 1997, 19). Their results found that, with “shall-issue” laws, more murders were possibly prevented than accidental deaths occurred, even though it’s unknown whether or not accidents could be more likely to happen with more people carrying a concealed handgun (Lott and Mustard 1997, 62). Lott and Mustard concluded that “[a]llowing citizens without criminal records or histories of significant mental illness to carry concealed handguns deters violent crimes and appears to produce an extremely small and statistically insignificant change in accidental deaths” (Lott and Mustard 1997, 64). This left Lott’s final question of whether concealed-carry laws save lives or result in more deaths open, but likely to be in favor of concealed-carry. If his results are true that citizens’ self-defense deters violent crime and it doesn’t have a huge impact one way or the other in regards to accidental deaths, then the conclusion is that more lives would naturally be saved by the enactment of “shall-issue” laws.

Obviously, this study was conducted almost twenty years ago, and the United States has changed a lot since then. It’s a fact that crime is generally on a downward trend, so maybe Lott and Mustard’s study does not represent the United States as the country stands today. However, if a similar study were conducted by taking a look at some states that more recently switched to allowing its residents and non-residents to carry concealed firearms, one may find that violent crime in those states decreased, while property crime rose. Table 1 includes Arizona, Kansas, Wisconsin, and North Carolina, each a “shall-issue” state from a different area of the country in order to account for regional attitude differences, illustrating each state’s amount of violent and property crimes one year before and one year after their respective concealed-carry laws went into effect. Arizona’s law went into effect in 2010 (USA Carry 2015), Kansas in 2007 (Schmidt 2016), North Carolina in 1995 (Cooper 2015), and Wisconsin in 2011 (WI Department of Justice 2013).

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<td>Crime in Four States Before and After the Enactment of Concealed Carry Laws</td>
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The data does not seem to indicate that the introduction of concealed-carry laws had a significant impact on crime in those states. After gathering research from the Uniform Crime Report, it can be concluded that crime is still following its historically downward trend. Both violent and property crime decreased after the enactment of the concealed-carry laws, which is in part contradictory to Lott and Mustard’s results from 1997, in which they found there to be an increase in property crime. The only exception among these four states that follows Lott and Mustard’s results is North Carolina, which had an increase in property crime of 2,360. This possible substitution from violent crime to property crime is not necessarily a bad thing. While criminals are committing property crimes instead of violent crimes, people’s lives are not put at as great of risk as before. Arizona, which had the smallest decrease in violent crime, already had an open carry law previously in place before passing its concealed-carry law (Lott [1998] 2010, 54). This could explain why it has the smallest decrease in violent crime out of the four states. Not only does this research show that the increased number of citizens with concealed firearms probably did not help in bringing down the crime rate, it also supports that it did not contribute to increased crime rates.

Among the many critics to Lott’s research is Mark Duggan. Duggan’s article, More Guns, More Crime, takes a look at the correlation between gun ownership and crime, and re-examines the study conducted by Lott and Mustard in 1997. Duggan claims that his own “findings contradict the results from recent work suggesting that legislation allowing to carry concealed weapons (CCW) caused a significant decline in violent crime” (Duggan 2001, 1088). Duggan (2001) conducts robustness tests on Lott and Mustard’s (1997) results. In his conclusion, Duggan states that the robustness test “cast[s] considerable doubt on the hypothesis that CCW legislation had any effect on crime rates” (Duggan 2001, 1112).

Another critic, Albert W. Alschuler (1997), offers a lawyer’s perspective on the conclusions drawn by Lott and Mustard (1997), rather than a criticism of the pair’s methodology. He first describes the fact that Lott and Mustard (1997) used a regression to the mean analysis on their data set, which according to Alschuler has become less popular among researchers in the political science and sociology fields than it was 20 years ago (Alschuler 1997, 367). Alschuler’s (1997) argument overall, following each result reached by Lott and Mustard (1997), is that the results are too good to be true and are, therefore, difficult to swallow. For example, “[t]he most common street crime is robbery, and although many robberies do occur off the streets, it is surprising that Lott and Mustard report only a weak deterrent effect for robbery, weaker than for any of the other violent crimes they consider. Might something be wrong” (Alschuler 1997, 369)? John Lott often dismisses these types of criticisms as attacks by left-leaners attempting to push for gun-control.

Crime on Campus

Accurate data regarding college campuses is difficult to obtain. The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, or the “Campus Security Act” (CSA), “requires all colleges and universities to collect and disclose information about campus crime if they receive federal funding” (Sulkowski and Lazarus 2011, 341). With this, we are able to view the data based on the type of crime and the type of location on campus where the crime occurred, such as a residence building or parking lot. However, according to Sulkowski and Lazarus, institutions hardly comply with this act, even though the U.S. Department of Education can impose up to $27,500 for violations (Sulkowski and Lazarus 2011, 341). Another issue arises when students and faculty make the decision not to report a crime or some may not consider themselves a victim, like those who successfully defend themselves against sexual assault. However accurate the statistics may be, colleges and universities still continue to debate solutions to make their campuses as safe as possible. Many campuses have undertaken several prevention approaches, such as installing updated security technology, metal detectors, and automatic door locks. However, prevention is not enough. Campuses can go through all the necessary steps to prevent a school shooting, and the tragedy can still occur. According to Students for Concealed Carry on Campus, prevention and preparedness go together.

Preventive measures, such as teaching students and faculty to watch for the warning signs of mental illness and providing counseling to disturbed students, can work hand in hand with preparative measures, such as developing campus alert systems, providing additional training to campus police, and allowing the same trained, licensed adults who legally carry concealed handguns when not on college campuses to do so on college campuses (SCCC 2012).

Institutions use the data collection tool, called the Campus Safety and Security Survey, which is conducted by the Office of Postsecondary Education of the U.S. Department of Education. Data from 2014, the most recent year the data is available, shows that about 12 million college students were enrolled on 11,611 post-secondary institutions campuses across the United States there were only 41 murders (NCES 2016) (Campus Safety and Security Survey 2014). The statistics reveal that there were 4,464 incidents of rape, 1,259 incidents of robbery, and 2,235 incidents of aggravated assault for a grand total of 7,969 incidents of violent crime (Campus Safety and Security Survey 2014). More simply put, a population of 12 million college students committed just 7,969 violent crimes, or 66.4 crimes per 100,000 students. To put this in perspective, compare this statistic to a state’s crime statistics. Kentucky, for example, has a population of about 4.4 million people and had 9,676 instances of violent crime being committed, or 219.9 crimes per 100,000 people (UCR 2014). Just one state had more violent crime than all of the higher education institutions combined and the results are similar in other states across the country. This makes sense, however. The populous of college campuses are staff, faculty,
and poor college students who make for unlikely robbery targets (SCCC 2012). This illustrates that the collegiate environment is one that is generally safer than other public spaces, but at the same time, crime happens on every college campus each year, not to mention the community surrounding the institutions, and students are unable to arm themselves in self-defense.

However, recent studies show that when asked how they feel about allowing concealed-carry on campus, students had mainly negative opinions towards handguns and allowing fellow students to carry on campus (Thompson et al. 2013) (Cavanaugh et al. 2013). In a study conducted by Thompson et al. 2013 from various universities, 1,649 students from fifteen public Midwestern universities were surveyed about their opinions on allowing concealed-carry on campus. In response, 79% of the students said they would not support a concealed-carry policy on campus (Thompson et al. 2013, 245). 93% of the students reported feeling safe on their campuses, and 81% did not believe they would become a victim on campus (Thompson et al. 2013, 245). Cavanaugh et al. found similar results in another study. This study drew its sample from an undisclosed public university in southeastern Texas, 1,317 respondents, and another in eastern Washington, 375 respondents. Cavanaugh et al. concluded that students at the Washington university were three times more likely to say that they were “not at all comfortable” with having a concealed-carry policy, whereas the Texas students were only twice as likely (Cavanaugh et al. 2012, 2246). Because of this data, they believe that students see the post-secondary institution as a “unique environment in terms of concealed handgun carrying” (Cavanaugh et al. 2012, 2246). Faculty of the institutions seem to see it this way as well. In another study conducted by Thompson et al. 2012, 791 faculty from 15 randomly chosen state universities in five Midwestern states (Michigan, Ohio, Indiana, Illinois, and Wisconsin) were surveyed. An overwhelming 97% of the faculty responded that they felt safe on their campuses, and 82% did not believe they would become a victim on campus. These are very similar numbers compared to the results from the students in the first survey (Thompson et al. 2012, 368). 94% of faculty said they would not support carrying concealed handguns on campus and 84% said they would not support concealed-carry off-campus either (Thompson et al 2012, 368).

These studies give some insight into the perceptions of those who are constantly in the college campus environment. However, many who look at a college campus this way are being too idealistic. Currently campus concealed-carry has already been authorized on over 150 campuses nationwide (SCCC 2012). Blue Ridge Community College in Weyers Cave, VA has allowed campus carry since 1995; that’s about 1,500 semesters. “Not one of these campuses has seen a single resulting act of violence (including threats) or a single resulting suicide attempt” (SCCC 2012).

Clearly, crime statistics for college campuses are extremely low compared to its surroundings, but just because crime does not occur often, does not mean it does not occur at all. Or in other words, “It makes no sense to limit licensed concealed carry to areas where danger is likely or imminent, because reasonable people tend to avoid places where danger is likely or imminent. Concealed handgun license holders carry guns in case danger finds them where they had no reason to expect it” (SCCC 2012).

Conclusion

This thesis studied the different perspectives on the arguments towards allowing the carrying of a concealed firearm on college campuses. The thesis statement, “[c]ollege students and faculty with concealed-carry licenses should be permitted the legal right to choose to carry a concealed firearm on their college campuses for self-defense,” had a solid legal foundation supporting it, backed by empirical data and arguments by John Lott. It also had arguments originating from law review articles and other journals that attempted to refute those legal bases.

The legal basis that this thesis heavily relies on stems from the recent court cases D.C. v. Heller (2008) and McDonald v. City of Chicago (2010). Since U.S. v. Miller (1939), the Court has held that the Second Amendment does not allow for an individual’s right to own a firearm. However, the Heller decision set the precedent that U.S. citizens have a right to self-defense within the home. The McDonald decision further expanded that right to the states. The language in the Heller decision excludes “schools,” but there is an argument as to what the definition of a school is, and higher education institutions do not fit the Court’s definition of “sensitive places,” as set forth in the Heller decision.

This thesis then analyzed several studies conducted by John Lott, including one study that examined the effects of “shall-issue” laws on crime. Lott, Whiteley, and Riley (2015) concluded that concealed-carry permit holders are among the most law-abiding citizens in the United States. In another study by Lott and Mustard (1997), they studied the effects of “shall-issue” laws on crime using county-level data, concluding that as more concealed-carry permits are issued, the fewer violent crimes are committed, thus concealed-carry permit holders act as a deterrent to violent crime. By utilizing the Uniform Crime Report, crime statistics from four states with concealed-carry “shall-issue” laws were unable to show a significant replication of Lott and Mustard’s (1997) data from a statewide perspective, but at the same time also supported the fact that the enactment of concealed-carry laws did not cause an increase in violent crime.

Data supplied by the Campus Safety and Security Survey, as required by the Campus Security Act, revealed that higher education institutions are generally safer than the rest of the surrounding areas. At the same time, violent crime can and does still occur in these areas, not including the surrounding community the campuses are located in which most likely are not gun-free zones. While few crimes occur, studies conducted by Thompson et al. in 2012 and 2013 show that students and faculty feel relatively safe on their campuses and would not feel safer if they were allowed to conceal a firearm on campus for their
protection. However, just because they would feel safe, does not mean they would be safe.

This thesis had supporting arguments based on law and empirical data. In the years to come, more data should eventually become available from the higher education institutions that have already implemented concealed-carry policies, as to the effectiveness of concealed firearms on campus. Those who oppose firearms on campus believe that the policy will create a hostile environment for the campus community, but this is not true. More empirical research still needs to be conducted in correlation with new data in order to sufficiently answer the question of whether or not firearms do more harm than good in a collegiate atmosphere. A re-creation of Lott’s work from 1997 that matches his conclusions from two decades ago would help to solidify the benefits of carrying a concealed firearm, in general. As of today, there is limited data that is available in order to make a formal conclusion. Therefore, it is unknown whether allowing concealed-carry on college campuses will be a viable policy that would safely deter violent crime on college campuses and help to keep college students and faculty safe. However, to draw a conclusion from what is known, it is their constitutional right to protect themselves against others who intend to do them harm. Creating a gun-free zone will only disarm the law-abiding citizens with concealed-carry permits, not the criminals who will carry a firearm regardless of an institution’s policy on firearms, thus leaving our college students and faculty defenseless in situations that may require a firearm, quick thinking, and action. It may be impossible to say what may have happened had someone else been armed in active shooter situations, but it is inarguable that there is a better chance of survival when the victim is armed against an assailant as well.

The concealed-carry on college campuses debate is an important one. Due to individual college weapons policies, students with concealed-carry licenses who travel away from home for college are unable to store their firearm on campus property, i.e. their dorm room, or even in their parked car in a campus-owned parking lot, under threat of disciplinary action. However, as illustrated, many crimes occur in the vicinity surrounding campuses as well, but law-abiding citizens are unable to have their firearm on them on campus at anytime because of institutions’ anti-concealed-carry policies. Therefore, students may fall into situations where they are defenseless, whereas a criminal can do what they want.

What this thesis expresses is that reliable evidence exists, both legally and empirically, which supports the legal right for college students and faculty who have a concealed-carry permit to be able to carry their firearm on campus. It adds a supportive stance to the literature on concealed-carry that hopes to educate others on the benefits of concealed-carry and hopefully convinces some of the important reasons as to why college students and faculty should be allowed to carry concealed firearms on their campuses. The debate on whether to allow firearms on college campuses is likely to continue for years to come. However, just as states have gradually transitioned from no concealed-carry laws, to “may-issue” laws, and finally to “shall-issue” laws, the same can begin to be seen occurring within states’ higher education institutions, most likely due to the rapidly increasing “gun culture” in the United States. In the years to come, many more higher education institutions will be implementing concealed-carry policies allowing for more data from different regions of the country. As this data becomes available and is seen to be positively in favor of allowing concealed-carry on campuses, campuses will quickly follow suit.

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U.S. Constitution

U.S. v Miller, 307 U.S. 174 (1939)

Degree programs in the Division of Natural and Social Sciences prepare students to be leaders, innovators, and caregivers in a complex and rapidly changing world. This division is home to several active research groups that invite students to expand on coursework and contribute to professional disciplinary and cross-disciplinary scholarship.
The Potential Influence of MUC5B on Streptococcus mutans ropA Expression and Trigger Factor Function

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Abstract

MUC5B is a salivary mucin that has been observed to decrease the adherence and virulence capabilities of Streptococcus mutans (S. mutans) 5 times more than any other similarly structured glycoprotein. In S. mutans, the ropA gene encodes a molecular chaperone known as trigger factor, which promotes P1 structural maturation, allowing for the bacterium to optimally adhere to teeth. Given that MUC5B-S. mutans interactions and ropA inactivation yield similar effects on the bacterium, as well as the consideration that both mechanisms are unresolved, it is hypothesized that the mucin and ropA are directly related. Through pulldown and chromatin immunoprecipitation assays, possible connections between MUC5B and ropA will be explored, with the expectation that the mucin will bind to an S. mutans membrane protein to initiate a downregulatory signal towards ropA. Regardless of the outcome, the information extracted from this investigation will be applicable to the broader field of ECM-cell interactions.

Research Question

Do MUC5B and ropA directly interact, and if so, how does such a relationship present itself mechanistically?

Hypotheses

Experimental Hypothesis: MUC5B downregulates the expression of ropA by binding to a plasma membrane protein and initiating a signaling pathway that inhibits ropA expression, leading to decreased S. mutans virulence.

Alternative Hypothesis: MUC5B directly downregulates the expression of ropA through the binding of the mucin to the ropA gene itself.

Alternative Hypothesis: MUC5B binds to the translated ropA gene product, trigger factor, rendering the protein dysfunctional.

Null Hypothesis: MUC5B and ropA are not related in any capacity.

Specific Aims

Specific Aim 1: Identify any potential S. mutans membrane proteins to which MUC5B can bind.

Salivary mucins are a series of glycoproteins secreted by goblet cells in the oral cavity (Frenkel and Ribbeck 2015). Salivary mucin MUC5B has been documented to decrease the virulence of S. mutans within the human oral cavity (Frenkel and Ribbeck 2015). Within the S. mutans genome, ropA has been identified as a gene that is essential for the binding capacity of the bacterium (Wen et al 2005). This gene encodes trigger factor, a molecular chaperone that promotes the proper folding of P1, a structural adherin that facilitates bacterial binding to hydroxyapatite (Wen et al 2005). Without P1, S. mutans is essentially non-adherent to hydroxyapatite, the mineral form of calcium apatite that plays a major structural role in bone and teeth (Wen et al 2005).

Despite this knowledge, the mechanisms behind both MUC5B-S. mutans interactions and the regulation of ropA expression remain unclear (Frenkel and Ribbeck 2015) (Wen et al 2005). The next step in this field of investigation would inquire about a potential connection between the mucin and ropA. Thus, it is hypothesized that MUC5B binds to a protein associated with the S. mutans membrane in order to initiate an interaction with ropA. No experiments to date have yet examined such a connection, creating a strong source of novelty in this investigation.

This hypothesis will be tested over the course of 3-4 weeks. Simply an overnight incubation period is required to grow S. mutans cultures, and once this is achieved, the membrane proteins on the bacterium will be removed using the appropriate precipitation chemicals (Renye et al 2004). The affinity each membrane protein has for MUC5B will be analyzed through a pulldown assay and SDS PAGE analysis. A limitation to this methodology is that several proteins might display similar affinities to the mucin, although this issue can be remedied through further isolation methods.

Given the immense side chain diversity within MUC5B, and thus its vast binding potential along the membrane, it is difficult to anticipate a particular outcome. Due to the qualitative nature of this experiment, no statistical analyses will be implemented for this aim.
Specific Aim 2: Determine the level of trigger factor expression in S. mutans, based on whether MUC5B is present.

Trigger factor is a molecular chaperone that is encoded by the ropA gene of S. mutans, and it functions as a peptidyl-prolyl cis/trans isomerase to promote the correct folding of structural adherin P1 (Wen et al 2005). S. mutans has a high virulence potential, which is the ability of the bacterium to colonize and cause damage to its host. Although it is understood that MUC5B decreases the virulence of the bacterium, and that P1 is essential for the binding and eventual manifestation of such virulence, it is not known whether MUC5B influences the production of trigger factor (Frenkel and Ribbeck 2015) (Wen et al 2005). In order to further understand this topic, an inquiry of the potential relationship between trigger factor and the mucin is necessary. For this experimental aim, it is hypothesized that trigger factor production is directly linked to MUC5B levels. The levels of expression of the ropA gene product have not yet been analyzed in the presence of mucins, confirming the innovation of this aim.

The timeline of examining this aim will require 1-2 months. Although S. mutans only requires overnight incubation to grow adequately for experimentation, the creation of a negative control via PCR ligation-mutation could potentially require 4-6 weeks to complete. S. mutans aliquots will be exposed to various concentrations of MUC5B for varying periods of time, and the cells will be lysed. The expressed trigger factor protein will then be isolated through size exclusion chromatography and later quantified through a Western Blot and densitometry analysis. This timeline could potentially be limited by having to first determine the approximate rate of trigger factor degradation within the cell.

Based on the hypothesis that the presence of MUC5B will decrease the production of trigger factor, the densitometry outputs are expected to decrease as the concentration of MUC5B interacting with S. mutans increases. The higher the absorbance value measured, the greater the amount of trigger factor was produced. The results of this aim can be statistically analyzed first through an ANCOVA test, then followed by the appropriate post-hoc tests depending on the particular outcomes of the ANCOVA. An n = 7 will be used, as 7 separate Western Blot analyses will be utilized for the statistical component of this aim.

Specific Aim 3: Identify any direct, physical interactions between MUC5B and the ropA gene itself.

In addition to the experimental evidence that MUC5B decreases the virulence capabilities of S. mutans, the mucin is also known to have nucleoid-tagging potential (Nath et al 2015). However, it is not yet known if MUC5B has a direct influence on ropA expression, particularly through transcriptional regulation. This aim pertains to the alternative hypothesis that MUC5B binds directly to the ropA gene, thus preventing the expression of trigger factor and leading to a decrease in S. mutans pathogenicity. The timeline required to perform this procedure would likely require 1-2 months of experimentation. This aim will be examined through a chromatin immunoprecipitation (ChIP) assay, followed by DNA footprinting. The ChIP assay will be performed with variable MUC5B concentrations and incubation times, and DNA footprinting will either deny or confirm if ropA becomes bound to the mucin in the ChIP assay. This aim could potentially be limited by possible chromatin degradation during the incubation period. In conjunction with the alternative hypothesis that MUC5B binds to ropA to inhibit the transcription of the gene, it is expected that when MUC5B is present in the sample, a clear area on the footprint gel will appear at the appropriate location based on their size. A positive control will be constructed to assess the binding affinity between Sigma X-inducing peptide and the comR gene of S. mutans, two components of high binding affinity (Song et al 2013). The negative control will involve ComE protein and the comX gene, which have little affinity for one another (Song et al 2013). Since the presence or absence of a footprint is merely qualitative, no statistical analyses will be needed for this aim.

Specific Aim 4: Determine whether MUC5B and trigger factor have the potential to physically interact.

The structure of MUC5B is known to be composed of 80% carbohydrate and 20% peptide, with galactose, mannose, and N-acetylglucosamine serving as the three primary sugar residues within the glycoprotein (Wickstrom et al 2008). Through the metabolism of the carbohydrate chains of the mucin, drastic structural changes are imposed onto MUC5B, thus diversifying the already wide variety of sites available for ligand binding of both the polar and non-polar varieties (Takehara et al 2013). Trigger factor exists with a large, flexible cavity that has the binding capability with a wide variety of hydrophobic substrates (Hoffman et al 2010). However, it remains to be seen whether MUC5B and trigger factor have the potential to bind to one another. For this aim, it is hypothesized that the mucin binds to the trigger factor protein, thus impairing the functionality of the peptide and preventing P1 from folding correctly. Such an inquiry will be tested with the help of the innovative HaloTag procedure.

The timeline of this protocol could vary between several weeks to a couple of months. The overall procedure will involve the use of an SDS PAGE analysis of the binding of MUC5B and trigger factor. The mucin will be isolated as in aim 1, but the trigger factor protein will be isolated by HaloTagging. This aim could potentially be limited or delayed by difficulties in isolating trigger factor. This is because the HaloTag method has documented troubles in extracting full length proteins for analysis (England et al 2015).

Following the alternative hypothesis that MUC5B binds to trigger factor protein, it is expected in this aim that the mucin-trigger factor interaction exhibits a PAGE output similar to that of carolacton-CcpA, a positive control composed of 2 compounds of high binding affinity (Sudhakar et al 2014). Due to the fact that binding affinity will be determined based on whether 1 or 2 gel bands
are present, no statistical analyses will be required for this qualitative output.

**Introduction**

Salivary mucins, the glycoproteins that provide the structural components to mucus, function to protect teeth from acid erosion by both removing and reducing the pathogenicity of the bacteria of the oral cavity (Frenkel and Ribbeck 2015). One of the predominant mucins is MUC5B, a polymeric glycoprotein that prolongs the planktonic state, or unbound, state of the microbe (Reny et al 2004). When in the planktonic state, the bacteria remain suspended within the salivary liquid medium of the mouth as individual cells, rather than agglomerating onto a surface, in a complex known as a biofilm (Reny et al 2004). When *S. mutans* is not in the planktonic state, however, the bacteria adhere to hydroxyapatite, the primary chemical compound of tooth surfaces, and deposit acidic metabolic waste products (Loesche 1986). The prolonged presence of this acidity causes breakdowns within the teeth, leading to caries, or what is more commonly known as dental cavities. (Loesche 1986).

For *Streptococcus mutans*, a gram-positive bacterium that is known as the primary cariogenic agent found in the human oral cavity, MUC5B functions to significantly nullify the pathogenicity of the microbe. The mucin, also commonly referred to as MG1, somewhat paradoxically also has the ability to suffice as a nutritional substitute in environments devoid of essential amino acids or carbohydrates (Mothey et al 2013). In these suboptimal nutrient environments, MUC5B has been speculated to provide *S. mutans* with a sugar source of predominantly galactose, in order to supplement the existing growth patterns of the bacterium (Mothey et al 2013). It has also been suggested that *S. mutans* can potentially cleave the peptide backbone of the mucin to metabolize the amino acids of MUC5B, although this has yet to be experimentally confirmed (Mothey et al 2013).

When bacteria are able to attach to a surface, they continue to adhere and grow on top of one another, forming a complex of cells known as a biofilm (Zeng and Burne 2016). *S. mutans* has the ability to derive its nutrients from a variety of polysaccharides, with sucrose being the carbon-source most conducive to biofilm development (Zeng and Burne 2016). When sucrose or glucose is high in abundance in the *S. mutans* environment, fructose 1,6-bisphosphate, an intermediate metabolite of glycolysis, is also at high concentration (Busuioc et al 2010). The presence of fructose 1,6-bisphosphate promotes the activity of lactate dehydrogenase, leading to the eventual conversion of pyruvate into lactic acid (Busuioc et al 2010). Thus, when sucrose or another sugar is metabolized by the bacterium, the lactic acid that is generated as a by-product causes the pH of the area inhabited by *S. mutans* to decrease to 5 or below (Loesche 1986). The increased acidity of the oral environment contributes to the demineralization of tooth enamel, leading to the development of dental caries (Loesche 1986).

Despite its increasingly acidic habitat, *S. mutans* endures its harsh surroundings through a self-regulated survival mechanism known as the adaptive acid tolerance response (ATR) (Yung-Hua et al 2001). The ATR is induced as the environmental pH drops below 5.5, while the bacterium is in the planktonic state (Yung-Hua et al 2001). Such an increase in acidity has been observed to activate a quorum-sensing peptide pheromone signaling system in order to improve the genetic competence and overall survival potential of *S. mutans* (Yung-Hua et al 2001). As the acidity of the bacterial environment increases below a pH of 5.5, *S. mutans* becomes aware that its cell growth has become too dense (Yung-Hua et al 2001). The bacterium responds by releasing competence stimulating peptide, a protein that communicates with the other bacteria in the biofilm, in order to modulate the growth of the entire cellular community (Yung-Hua et al 2001). Without the ATR, the acidic waste generated by the bacterium would become suicidal, especially given the need for *S. mutans* to withstand pH fluctuations from neutral to pH 3 in as little as 20 minutes (Matsui and Cvitkovitch 2010). A more rapid ATR response is generated if the cell density within the biofilm increases more dramatically, particularly when the environmental pH decreases well beyond the critical point of 5.5 (Yung-Hua et al 2001).

Although sucrose is the preferred nutrient source for *S. mutans*, the bacterium must often compensate for nutrient deficiencies through the consumption of salivary mucins. When sucrose or essential amino acids are absent from the medium, mucins can often act as an adequate substitute to supply the nutritional requirements for further growth (Mothey et al 2013). MUC5B is a heavily glycosylated glycoprotein, composed of roughly 80% carbohydrate and 20% peptide at about 100 kDa in size (Wickstrom et al 2008). Three of the primary carbohydrate residues found in the mucin, galactose, mannose, and N-acetylglucosamine, are readily consumed by *S. mutans* during periods of nutrient deprivation (Mothey et al 2013).

Galactose is metabolized by the bacterium via both the tagatose and Leloir pathways (Zeng et al 2010). In the tagatose pathway, galactose is phosphorylated and eventually converted into glyceraldehyde 3-phosphate, where it is then fed into glycolysis (Zeng et al 2010). In the Leloir pathway, galactose is converted into glucose 1-phosphate through a series of phosphorylation exchanges, until it is finally fed into the glycolytic pathway as glucose 6-phosphate (Abranches et al 2004).

When mannose enters the cell, it is phosphorylated into mannose 6-phosphate by hexokinase, then subsequently converted into fructose 6-phosphate (Sharma et al 2014). The resulting fructose 6-phosphate is then shuttled into glycolysis (Sharma et al 2014).

N-acetylglucosamine, upon entry into *S. mutans* as N-acetylglucosamine 6-phosphate, has the potential to serve both catabolic and anabolic functions (Moyle et al 2014). The phosphorylated compound can be deaminated and eventually converted into fructose 6-phosphate in order to feed into glycolysis and act as a source of energy for the bacterium (Moyle et al 2014). The breakdown of this amino sugar can also provide *S. mutans* with a source of nitrogen to be used for a variety of structural purposes.
N-acetylglucosamine can also serve essential anabolic functions for the cell. One of its primary anabolic roles is acting as one of the primary monomeric units of peptidoglycan, the glycoprotein found within bacterial cell walls to provide structural strength for the cell (Moye et al. 2014).

Each of these three sugars is transported into the bacterium by constitutive phosphoenolpyruvate-dependent phosphotransferase systems (PTSs) (Zeng et al. 2014). These transport systems are of great importance to the catabolism of MUC5B by S. mutans, because the bacterium otherwise lacks any sort of high-affinity transport mechanism for these three sugars found in the mucin (Zeng et al. 2014). A PTS is composed of two non-specific enzymes known as Enzyme I and HPr, as well as a series of substrate-specific permeases known as Enzyme II (Zeng et al. 2014). In all PTSs, Enzyme I phosphorylates HPr using a phosphate group from phosphoenolpyruvate, an intermediary product of glycolysis (Moye et al. 2014). The HPr protein will in turn pass on this phosphoryl group to one of a variety of Enzyme II permeases (Moye et al. 2014). The Enzyme II complex then catalyzes the internalization of the sugar for which it is structurally specific through the phosphorylation of the saccharide itself (Moye et al. 2014).

In order for the mucin to undergo what is predominantly an O-linked glycosylation process, numerous variable number tandem repeat (VNTR) sequences of proline, serine, and threonine are required (Frenkel and Ribbeck 2015). During O-linked glycosylation, sugar molecules are added to the oxygen atoms of an amino acid. The VNTR sequences allow for an increased diversity of carbohydrate side chains on the mucins by varying the spacing between glycosidic bonds as well as promoting more stable folding conformations within the mucin (Gerken 1993).

Although bacterial biofilm development can be supplemented with MUC5B, the mucin does not support bacterial growth in a minimal chemically defined medium (MCDM) (Mothey et al. 2013). Rather than supporting the exponential growth phase as the primary carbon or nitrogen source, MUC5B simply provides a modest increase in S. mutans growth rate while already in the presence of another energy source (Mothey et al. 2013). Such an effect is a result of an upregulation of the pdh operon during the sugar-starved stationary phase of the growth phase of the bacterium (Mothey et al. 2013). The pdh operon is a selectively expressed complex of three enzymes: pyruvate dehydrogenase, dihydrolipoyl transacylase, and dihydrolipoyl dehydrogenase (Busuioc et al. 2010). When the complex is upregulated by S. mutans while in the presence of oxygen, the pyruvate produced through glycolysis can be converted into acetyl-coenzyme A (acetyl-CoA), which is subsequently converted into acetate as ATP is produced (Busuioc et al. 2010). Under anoxic conditions, however, the PDH complex facilitates the conversion of pyruvate into acetyl-CoA and formic acid (Carlsson et al. 1985). However, the exact role of the PDH complex in regulating mucin metabolism by S. mutans remains to be solved.

While exactly how the PDH complex is integrated into the metabolism of S. mutans in sub-optimal nutritional environments is not yet known, it is understood that having limited environmental carbon sources leads to increases in glycoside hydrolase activity within the bacterium (Inui et al. 2015). Glycoside hydrolase encompasses a broad family of enzymes that contribute to the hydrolysis of glycosidic bonds within complex sugars, such as those located in the carbohydrate portion of MUC5B (Kiyohara et al. 2012). Along with this enzyme family, S. mutans also produces a variety of proteases to aid in the metabolism of its nutrient environment (Wickstrom et al. 2009).

While S. mutans grows optimally when metabolizing sucrose, any commonly-occurring oral carbohydrate provides the necessary nutrition for the bacterium (Wickstrom et al. 2008). However, different saccharides induce varying effects upon S. mutans, as the growth cycle of the bacterium experiences an increase in the planktonic growth phase when grown in the presence of glucose (Wickstrom et al. 2008). In addition to the tendency for S. mutans to upregulate the transcription of the pdh operon in media with suboptimal nutrition, the activity of several other proteases also increases in such an environment, such as the Clp protease family (Kajfasz et al. 2010). Long term survival assays have demonstrated a reliance of the bacterium on the activity of these proteases in order to withstand the stresses associated with suboptimal nutrition as well as high acidity (Kajfasz et al. 2010).

In addition to increasing protease activity in response to nutrient deprivation, S. mutans elicits a similar response when other strains of oral bacteria are introduced to the same environment (Wen et al. 2010). When grown in a dual-species or multi-species environment, the bacterium experiences a reduction in its abilities to form biofilms (Wen et al. 2010). Such an observation is attributed to the tendency for S. oralis and other bacteria to occupy the hydroxyapatite binding sites used by S. mutans (Wen et al. 2010).

Although changes in the protease activity of S. mutans is of undoubtedly immense importance to the overall virulence of the bacterium, it is by no means the exclusive causative factor to changes in its pathogenicity. Glucosyltransferase (Gtf) enzymes utilize sucrose as a substrate in order to synthesize a compound known as glucan, a polysaccharide that provides binding sites for S. mutans on hydroxyapatite (Bowen and Koo 2011). When forced to grow and interact with other strains of oral bacteria, Gtf expression and activity has been observed to compensate accordingly (Wen et al. 2010). In a dual-species experimental model of S. mutans and L. casei, for example, gtfB expression was decreased 40-fold when compared to its expression in a single species S. mutans culture (Wen et al. 2010). This response to a dual-species model is a contributory factor to the significantly decreased acid tolerance of S. mutans in such an environment (Wen et al. 2010). Given that over 700 different bacterial species are known to colonize the oral cavity, the competitive consequences of such a vast microbial diversity exacerbate the decreases in S. mutans virulence observed in a simplified dual-species model (Aas et al. 2005).

As a method of collecting more nutrients from an environment that is often not only deficient but also ultra-competitive, S. mutans encodes several different
membrane transporters for the influx of oligopeptides and amino acids. The primary transportation route of mono- and disaccharides into the bacterium utilizes several PTS systems, which involve a variety of permeases to allow the carbohydrate sources into the cell (Moye et al. 2014). The bacterium also encodes several ABC binding cassette (ABC) transporters to allow for the influx of larger, more complex oligosaccharides, in addition to its regulatory functions in the multiple sugar metabolism (msm) system (Moye et al. 2014).

While the diverse array of carbohydrates that can be imported via these transporters indisputably contributes to the high pathogenic potential of S. mutans, it also expands the intrigue of what metabolically useful substances can achieve influx into the bacterium. Carbohydrate catabolite repression (CCR) is a metabolic regulatory procedure in which the bacterium pauses its metabolism of suboptimal carbohydrate sources when more preferable nutrients are available (Moye et al. 2014). This process is modulated by the binding of catabolite control protein CcpA to an enzyme known as HPr kinase, which downregulates the transcription of the genes that predominantly control suboptimal carbohydrate metabolism (Moye et al. 2014). The mechanism of CCR is also largely connected to the inhibition of the PTS processes of carbohydrate influx, as HPr comprises part of the non-specific components of the PTSs previously explained (Zeng et al. 2014). Additionally, HPr kinase is allosterically activated by the intermediates of the glycolysis of these preferred carbohydrate sources (Moye et al. 2014). However, when HPr kinase is in the inactive conformation, the metabolism of less-ideal nutrients is permitted, after these sugars are imported into the bacterium (Moye et al. 2014).

Although the most commonly metabolized carbohydrate sources gain entry into S. mutans through the PTS or ABC transport systems, additional putative transport systems for the influx of other sugars and inorganic nutrients exist (Ajdic et al. 2002). Almost 15% of the total open reading frames (ORFs) in the bacterium encode transport system-associated proteins, although many of these influx and efflux machines lack an identified compound of transport (Ajdic et al. 2002). Given that MUC5B is a less than optimal nutrient source that is consumed by S. mutans, in addition to its exact pathway into the cell remaining unknown, it is fully conceivable that the mucin could be imported by one of these uncharacterized membrane transport systems (Ajdic et al. 2002), (Frenkel and Ribbeck 2015).

In addition to the mystery of how S. mutans incorporates MUC5B intracellularly as part of its metabolism, the exact mechanistic interactions between the bacterium and the mucin that contribute to changes in the pathogenicity of S. mutans also remain largely misunderstood. It has been speculated that in order to elicit its virulence-decreasing effects, MUC5B could possibly both physically repel S. mutans with its heterogeneous glycan chains and also directly downregulate genes associated with bacterial pathogenicity (Frenkel and Ribbeck 2015).

From a physical interaction standpoint, the glycan chains of MUC5B have been observed to vary from 2 to 40 mono-saccharide residues in length (Veerman et al. 2003). These residues are known to increase the viscosity of the salivary medium and thus hinder the adherence of S. mutans to hydroxyapatite during its early stages of growth (Frenkel and Ribbeck 2015). In particular, the biofilm development of the bacterium is largely dependent on the α(1,3) and α(1,6) glycosidic linkages between GtB and GtF (Klein et al 2015). These linkages, however important, are susceptible to cleavage through the addition of sugar-digesting enzymes (Klein et al. 2015).

Although MUC5B increases the viscosity of the microbial environment and thus lowers the ability for S. mutans to adhere to hydroxyapatite, it is by no means the only compound known to elicit such an effect. Methylcellulose, another known viscosity-increasing compound, also decreases S. mutans tooth adherence, albeit to a much lesser extent than the mucin (Frenkel and Ribbeck 2015). Other mucins located in the oral cavity, such as MUC7 and MUC4, are also able to increase the viscosity of the salivary medium (Frenkel and Ribbeck 2015). MUC7 and MUC4, along with the total of 17 other different mucins that have been identified, are also composed of O-linked oligosaccharides and VNTR sequences (Cao et al. 2012). Thus, all of the characterized salivary mucins are known to comprise a similar structure (Cao et al. 2012).

However, none of these other proteins is able to decrease bacterial-hydroxyapatite binding as significantly as MUC5B (Frenkel and Ribbeck 2015). In fact, MUC5B has been noted to decrease S. mutans biofilm development 5 times more than any other salivary mucin (Frenkel and Ribbeck 2015). Given that all mucins are similarly structured glycoproteins, this glaring disparity between the effects of MUC5B on bacterial biofilms and the effects of other mucins suggests the involvement of MUC5B-specific effects (Cao et al 2012). Additionally, the seemingly paradoxical nature of the ability of the mucin to both nutritionally supplement S. mutans growth and decrease the virulence capabilities of the bacterium demands further investigation into the genetic influence of MUC5B (Wickstrom et al. 2009). Due to the established physical mechanisms through which the mucin decreases the virulence of S. mutans, compared to the relatively unresolved potential of a putative genetic mechanism, this investigation will focus primarily on the genetic possibilities of an MUC5B-S. mutans interaction.

Upon the reexamination of S. mutans metabolism, a simple increase in protease and glycoside hydrolase activity would undoubtedly play a large role in the S. mutans process of metabolizing MUC5B (Wickstrom et al. 2009). However, given the discrepancy between the effects of MUC5B on S. mutans biofilm development compared to the effects of other mucins, another, more intricate interaction is likely a contributing factor (Frenkel and Ribbeck 2015). If the only method of metabolizing MUC5B was through the extracellular secretion of protease and glycoside hydrolase enzymes by the bacterium, a decrease in biofilm development 5 times greater than any other mucin would likely not be observed. Thus, a method of internalizing the protein through one of the many uncharacterized membrane transport systems appears to be a feasible ex-
planation (Ajdic et al. 2002). Through the influx of MUC5B, the basis of a possible genetic interaction would be revealed, along with an explanation of the MUC5B-specific effects observed when interacting with S. mutans (Frenkel and Ribbeck 2015).

One potential mechanism of such MUC5B-specific effects on the virulence of S. mutans is the possibility of the mucin acting as a transcriptional regulator for a gene associated with the pathogenicity of the bacterium. The glycoprotein has been documented to have nucleoid-tagging potential, as evidenced by its role as a transcriptional modulator in pancreatic cancer (Nath et al. 2015).

It is known that the adherence and biofilm development of S. mutans largely depends on the presence of a structural adherin protein known as P1, as P1 mutants were observed to be entirely non-adherent to hydroxyapatite (Bowen et al. 1991). This adherin, encoded by the spaP gene, contains a 38-residue amino-terminus, 3, 82-residue tandem repeat regions that are rich in alanine, a 144-residue variable region, a central proline region, and a carboxy-terminal membrane spanning region (Crowley et al. 2008). It has been observed that S. mutans, when isolated from mouths with high incidences of caries, expresses significantly more P1 adherin proteins than bacterial isolates from caries-free environments (Perrone et al. 1997). The specific binding mechanism between P1 and hydroxyapatite involves the attachment of the adherin to immobilized salivary agglutinin (SAG), a glycoprotein complex composed primarily of scavenger receptor glycoprotein 340 within the salivary pellicle on the tooth surface (Sullan et al. 2015).

In addition to binding with SAG, P1 also has a strong affinity for collagen and fibronectin within the ECM (Sullan et al. 2015). Each of these binding partners interacts with the structural adherin protein through the carbohydrate binding trench of the β region of P1 (Sullan et al. 2015). Although the binding force between a single P1-SAG interaction is only 50 pN, the bacterium compensates through the use of a lateral association of several P1-gp340 complexes to create a stronger binding force of upwards of 500 pN (Sullan et al. 2015). A portion of the P1 protein is also known to exist in a non-covalently linked form, which has been speculated to compensate for times when the covalently linked component becomes non-functional (Heim et al. 2015).

The functionality of the P1 adherin protein is reliant upon the expression of ropA, a gene that encodes an essential molecular chaperone known as trigger factor (Crowley et al. 2008). This relationship between ropA, P1, and S. mutans adherence capabilities is depicted in Figure 1.

Although ropA does not directly encode P1, ropA expression is necessary for the adherin to be its most fully functional form, both in the covalently-linked and non-covalently linked portions of the protein (Crowley et al. 2008). This is because trigger factor promotes prolyl isomerase activity in P1, thus allowing the cis and trans isomers of proline-based peptide bonds to interconvert (Lyon and Caparon 2003). Given that the structure of P1 contains an entire region composed of predominantly proline residues, an absence of trigger factor significantly hinders the maturation of the adherin (Crowley et al. 2008). The stability of P1 is also enhanced through trigger factor involvement around its residues 989-1001, where critical folding patterns occur in the adherin (Heim et al. 2014). These tendencies are consistent among the majority of gram-positive bacterial strains (Lyon and Caparon 2003). The method in which ropA is regulated, however, remains to be understood (Wen et al. 2005).

The importance of ropA expression is not solely limited to its effects on P1, but its influence encompasses the entire growth potential and biofilm viability of S. mutans as well. Without trigger factor, the doubling time of the bacterium in a cariogenic oral environment was measured to be 27% longer than when the molecular chaperone was present (Wen et al. 2005). Also, S. mutans was observed to be 200 times less virulent when ropA was knocked out, in addition to demonstrating markedly decreased adherence abilities and a lower tolerance for the stress of high acidity (Wen et al. 2005). This relationship between ropA inactivation appears to mirror the repercussions observed when S. mutans is exposed to MUC5B; both situations result in significant decreases in the overall virulence and biofilm development potential of the bacterium. In addition, neither the exact mechanism governing how MUC5B elicits these effects on S. mutans, nor the detailed regulatory patterns of ropA expression and trigger factor production, have yet been discovered.

**Figure 1.** S. mutans adherence to teeth is governed by proper P1 folding. S. mutans adheres to teeth when structural adherin P1 binds to salivary agglutinin (SAG). P1 is only functional when trigger factor (TF) facilitates its proper folding. Trigger factor is encoded by the ropA gene.

**Figure 2.** MUC5B potentially decreases S. mutans virulence through ropA downregulation. MUC5B potentially binds to a membrane transport protein to initiate a downregulatory signal towards ropA. This decreases trigger factor (TF) production, which decreases the amount of P1 that folds correctly. With less fully functional P1, the surface adherence abilities of S. mutans decrease, thus decreasing bacterial virulence.
Given the established similarities between the effects of both MUC5B and ropA inactivation on S. mutans virulence, a proposed interaction between the mucin and ropA would be a reasonable investigative endeavor worthy of further exploration. Thus, the research question becomes obvious: Do MUC5B and ropA directly interact, and if so, how does such a relationship present itself mechanistically?

It is hypothesized that the mucin downregulates the expression of ropA by binding to an S. mutans membrane-associated protein, initiating an inhibitory signal towards ropA expression. Such an interaction would lead to a decrease in the amount of functional P1 product within the cell, thus decreasing the adherence and subsequent virulence capabilities of the bacterium. This proposed hypothesis is outlined in Figure 2.

**Why Do This Study?**

The novelty of this proposed experiment is evident, because the mechanisms behind how MUC5B and ropA inactivation contribute to decreases in S. mutans virulence have not been discovered. Also, no previous studies have investigated ropA expression in connection with MUC5B-S. mutans binding, thus further increasing the innovativeness of this inquiry.

**Methods**

The strain of S. mutans to be utilized for this investigation will be strain UA 159, mirroring what has been employed in the majority of studies involving S. mutans (Ajdic et al 2002). The bacterium will be grown at 37 °C in brain heart infusion medium containing 1% (wt/vol) sucrose and 1% glucose (Frenkel and Ribbeck 2015). 0.3% methylocellulose will be added after incubation in order to resuspend the S. mutans cells for subsequent procedures.

**Specific Aim 1:**

In order to pursue the first specific aim of identifying S. mutans membrane proteins that can bind with MUC5B, both the peripheral and transmembrane proteins within the bacterium must be isolated. To disrupt the peripheral membrane proteins of S. mutans, a salting-out procedure will be performed. 351 mL of ammonium sulfate per liter of experimental solution will be added to the solution of bacterial extract (Wingfield 2001). The precipitated proteins will be extracted through centrifugation, and re-solubilized upon the addition of HEPES buffer (Wingfield 2001). To isolate the remaining proteins from S. mutans, sodium dodecyl sulfate (SDS) detergent will be added to the bacterial aliquot (Palmer and Wingfield 2004). The proteins will then be separated from the SDS by diluting the solution with wash buffer (Palmer and Wingfield 2004).

Before any potential binding partners for MUC5B in the S. mutans membrane can be identified, the mucin must first be isolated and purified. To accomplish this, saliva can be collected and pooled together from a subject basis of 10 people, using a vacuum pump (Frenkel and Ribbeck 2015). The vacuum pump will create a constant source of suction to facilitate the extraction of saliva from the test subjects. Next the saliva will be diluted with 5.5 M sodium chloride, resulting in a final NaCl concentration of 0.16 M (Frenkel and Ribbeck 2015). Additional chemicals will be added, as performed by Frenkel and Ribbeck. Through the centrifugation of the resulting solution, followed by the ultrafiltration of the supernatant, MUC5B will be effectively isolated (Frenkel and Ribbeck 2015).

After purifying MUC5B and isolating all of the membrane-associated proteins from S. mutans, the mucin affinity for all of the isolated proteins will be analyzed through a pulldown assay. The purified MUC5B will first be immobilized with glutathione sepharose beads, and any unbound mucin protein will be washed away (Nguyen and Goodrich 2006). The peripheral and transmembrane proteins that were extracted from S. mutans will be added to the solution, and the solution will incubate for 15 minutes to allow for binding interactions to occur. Any unbound bacterial proteins will be washed away with the implementation of a wash buffer. The beads bound to MUC5B will then be removed through the addition of tris glycerol elution matrix (TGEM) buffer and subsequent centrifugation (Nguyen and Goodrich 2006).

The remaining MUC5B-membrane protein complexes will be heated to denature the bound proteins. These components will then be analyzed through SDS PAGE. In order to identify the proteins that had bound to the mucin, their approximate molecular weights can be determined by comparing the protein bands on the gel to that of the ladder. All of the S. mutans membrane-associated proteins of similar molecular weight, as identified on the RCSB Protein Data Bank, will then be isolated individually from the bacterium through an extra-long PAGE gel followed by band excision and purification. Each of these individual membrane proteins will then be introduced to MUC5B, and potential binding between the two compounds will be determined through another SDS PAGE gel. If two distinct bands appear on the gel for a particular MUC5B-membrane protein solution, it can be determined that the two compounds do not bind to one another. However, if only a single band is observed, then it will confirm that the two components do indeed bind to one another.

To establish a positive control, two proteins of known high binding affinity will be exposed to each other and then run on a gel, with the expectation to see 1 bold band on the gel. For this experiment, these two proteins will be MUC5B and an engineered anti-MUC5B antibody. For a negative control, lactoferrin and P1 would be exposed to each other and then run on a gel. Given their little to no binding affinity for each other, two clearly separated bands would be expected (Heim et al 2015). Since the results of these analyses are merely qualitative, no statistical methods will be utilized for this component of the project.

**Specific Aim 2:**

To work towards the second specific aim of deter-
mining the amount of *S. mutans* trigger factor expression based on varying levels of MUC5B expression, aliquots of the bacterium will be exposed to varying concentrations of the MUC5B isolate. For each MUC5B concentration to be tested, *S. mutans* will be grown and diluted to an OD675 of 0.1 (Mothey et al. 2013). *S. mutans* will be submitted to concentrations of the mucin of 5 mg/mL, 20 mg/mL, 35 mg/mL, and 50 mg/mL, given that the average MUC5B human salivary concentration is 23.3 mg/mL with a standard deviation of 14.6 mg/mL (Rayment et al. 2000).

After *S. mutans* and MUC5B are provided time to interact, the bacterial cells will be lysed through sonication. The incubation times for the bacterium with each mucin concentration will be performed for 20, 40, 60, and 90 minutes, and the prevalence of trigger factor will be measured after each of these intervals (Frenkel and Ribbeck 2015). Variable incubation times will be utilized, since the interaction dynamics between the mucin and bacterium, along with the degradation rate of the translated trigger factor protein, are not well understood. The amount of trigger factor present in each of the samples will then be quantified through the densitometry analysis of a Western Blot.

After lysing the *S. mutans* cells, each of the individual lysates will be run on an SDS PAGE gel, in order to allow for the separation of the bacterial proteins. Next, the gel will be transferred to a nitrocellulose membrane, to prepare for a Western Blot. A fluorescently-labeled anti-trigger factor antibody will be added, and the amount of trigger factor present in each cell lysate will be quantified through densitometry analysis, using the Band Analysis tools of ImageLab Software (Taylor et al. 2013). A total of 7 Western Blots will be prepared for each of the individual cell lysates, including those of both a positive and negative control. As a positive control, trigger factor will be isolated from an *S. mutans* aliquot that had not been exposed to MUC5B. A highly fluorescent output on the Western Blot would be expected, due to the high abundance of the expressed trigger factor protein. As a negative control, the protocol to isolate trigger factor from a line of *S. mutans ropA* knockout cells would be followed. It would be expected that this negative control would yield no fluorescence on the Western Blot, due to the lack of trigger factor protein present in the solution. To create this *ropA* knockout cell line, nucleotides 56-1205 of the *S. mutans* coding sequence would be replaced with an erythromycin resistance gene, through PCR ligation-mutation (Wen et al. 2005).

The densitometry results of all of the Western Blots will be statistically analyzed through an ANCOVA test, due to the co-variants of MUC5B concentration and incubation times. An n = 7 will be utilized, followed by the appropriate post-hoc tests based on the particular outcomes of the ANCOVA. For the statistical analysis, the levels of Western Blot fluorescence will be compared, based on the varying MUC5B concentrations and incubation times. This ANCOVA will utilize an alpha value of 0.05, a critical value of 12.59, and a confidence interval of 95%.

Specific Aim 3:
The methodology required to satisfy the third specific aim of identifying any direct interactions between MUC5B and the *ropA* gene will begin with a chromatin immunoprecipitation (ChIP) assay. To initiate a ChIP assay, *S. mutans* cells will be exposed to MUC5B at the variable concentrations and incubation times specified earlier. If the results from the Western Blot of specific aim 2 reveal particular MUC5B concentrations or incubation times as being more antagonistic to trigger factor production, only these specific concentrations and incubation times will be employed here. Next, formaldehyde will be added to the solutions as a cross-linking agent, in order to preserve any protein-DNA interactions already occurring (Lohse et al. 2016).

Through sonication, the *S. mutans* cells will be lysed, and its chromatin will be sheared and collected after the addition of restriction endonucleases (Lohse et al. 2016). DNA footprinting would then be implemented in order to locate where on the *S. mutans* genome the mucin had bound. The sheared bacterial DNA fragments would be labeled with radioactive ATP molecules, and then the pieces would be run on a gel. In the places where the DNA and MUC5B bound together, no band would be visible. Since the size of the *ropA* gene is 1,283 base pairs, if a footprint on the gel appears near this mark, it can be largely suspected that the DNA to which MUC5B had bound is indeed *ropA* (Adic et al. 2002). By analyzing the SDS PAGE output from a ChIP assay using the ropA-deficient negative control constructed earlier, these suspicions will be able to be either confirmed or denied.

Additional controls for this procedure will include another negative control as well as a positive control. For the positive control, Sigma X-inducing peptide, a protein in *S. mutans* that modulates the expression of the comR gene through binding inhibition, will be put through an identical ChIP procedure (Song et al. 2013). For the additional negative control, ComE protein and the comX gene will be utilized, as they have been confirmed to lack binding affinity for one another (Song et al. 2013).

Since the results of this procedure are merely qualitatively examining whether or not a footprint at roughly 1,300 base pairs appears on the gel, no statistical methods will need to be employed.

Specific Aim 4:
In order to work towards the fourth specific aim to determine whether MUC5B and trigger factor physically interact, a non-denaturing SDS PAGE analysis will be employed, similar to as described in the methodology for the first specific aim. MUC5B will be immobilized by adding glutathione sepharose beads, and isolated trigger factor protein will then be added to the solution.

In order to immobilize trigger factor from *S. mutans*, a HaloTag procedure will be employed. A trigger factor-specific HaloTag resin will be added to an *S. mutans* lysate, and a non-denaturing SDS PAGE gel will then be utilized to analyze mucin-trigger factor binding interactions. It is expected that the mucin-trigger factor interaction will exhibit an SDS PAGE output similar to that of carolacton-CcpA, a positive control composed of 2 compounds of high binding affinity for one another (Sudhakar...
et al 2014). The results of this aim will be qualitative in nature, since the presence of a single gel band will indicate binding between MUC5B and trigger factor, while two bands will denote that binding did not occur. Due to this fact, further statistical protocols will not be necessary.

**Anticipated Outcomes**

**Specific Aim 1:**

In regards to the first specific aim to identify any S. mutans membrane proteins to which MUC5B can bind, it is expected that MUC5B will bind with a transporter protein located within the bacterial membrane. This will be determined on the extra-long SDS PAGE gel by a single band in the lane in which this particular transporter protein has been added. It is the most likely that MUC5B will bind to an intermembrane transporter, given that the mucin has the ability to nutritionally fortify S. mutans growth when the bacterium is exposed to suboptimal nutrient conditions (Mothes et al 2013). Since MUC5B can act as a nutritional substitute for S. mutans, it is necessary for the mucin to have a method of entering the bacterium. It is also entirely feasible for S. mutans to express a transport system to import MUC5B that has yet to be identified; almost 15% of all of the ORFs in the bacterium are associated with transport systems, although many of these mechanisms still lack a confirmed compound that utilizes its machinery (Ajdic et al 2002).

**Specific Aim 2:**

For the second specific aim to determine how much trigger factor protein is produced based on the presence or absence of MUC5B, it is anticipated that the Western Blot densitometry outputs quantifying trigger factor will decrease as the concentration of the mucin increases. This expected result is the most reasonable for this aim, given the intricate relationship potential between MUC5B and S. mutans. The mucin has been noted to decrease S. mutans virulence 5 times more than any other salivary glycoprotein, thus suggesting a component of genetic specificity to this interaction (Frenkel and Ribbeck 2015). In addition, the exact mechanism governing the interplay between MUC5B and S. mutans remains to be elucidated (Frenkel and Ribbeck 2015). In regards to trigger factor expression, when ropA is not expressed, S. mutans is measured to be 200 times less virulent (Wen et al 2005). The regulation of ropA expression has also yet to be characterized (Wen et al 2005). Given the striking similarities between the effects of the addition of MUC5B and the inactivation of ropA on the pathogenicity of S. mutans, it is very much possible that this anticipated outcome outlines the connection between the mucin and trigger factor.

**Specific Aim 3:**

Upon consideration of the third specific aim to identify any physical interactions between MUC5B and the ropA gene, it is expected that a DNA footprint around the 1,300 base pair region will be apparent on the gel. This footprint will be indicative of mucin binding at the ropA locus on the S. mutans genome. This outcome is the most highly anticipated result for the third specific aim, since MUC5B has already been seen as a transcriptional regulator in pancreatic cancer cells (Nath et al 2015). Provided that the outcome of the first specific aim confirms the binding of the mucin to an intermembrane transporter, and outcome of the second specific aim indeed identifies MUC5B as a modulator of trigger factor production, it would be the most logical that MUC5B would bind to the ropA gene.

**Specific Aim 4:**

In regards to the fourth specific aim of identifying physical interactions between MUC5B and trigger factor, it is expected that a single band will appear on the SDS PAGE gel when the mucin and the chaperone protein are exposed to each other. This single band will suggest that MUC5B and trigger factor do indeed bind to one another. Such an expectation is likely, due to the structural similarities that the two proteins have with one another. Trigger factor has a sizable hydrophobic binding pocket, while MUC5B contains a wide variety of hydrophobic substrates based on its VNTR sequences (Takehara et al 2013, Hoffman et al 2010). This binding potential is increased by the fact that the intercellular metabolism of MUC5B by S. mutans generates an additional host of potential nonpolar binding sites (Takehara et al 2013). Based on their potentially complementary binding components, as well as the similarities in how MUC5B presence and ropA inactivation decrease S. mutans virulence, it is very logical to expect the mucin and trigger factor to bind together. The likelihood of the anticipated outcomes of both the third and fourth specific aims coming to fruition is slim. However, both of these expected results are the most logical and literature-supported rationales, thus both are designated as what is most anticipated to occur.

**Other Possible Outcomes**

**Specific Aim 1:**

Another possible result from the first specific aim is that a single SDS PAGE gel band will appear in a lane corresponding to an intermembrane signal transducing protein. If the mucin were to bind to one of these proteins, and ropA expression was observed to consequently decrease, then it would be suspected that MUC5B binding would initiate a downregulating signaling pathway towards ropA expression. In this outcome, the mucin would likely be acting as an agonist to an already established, unknown pathway. Although possible, it is less likely that MUC5B will bind to an intermembrane signal transducer rather than a transporter, since the mucin requires a method of entering S. mutans to fulfill its part-time role as a nutritional fortifier for the bacterium (Mothes et al 2013). An additional possible outcome for the first specific aim is that MUC5B does not bind to any S. mutans membrane proteins. This result is also less likely than the anticipated outcome,
because the two most likely mechanisms of the mucin’s virulence-modulatory effects require either an entryway into the bacterium or a binding partner to initiate a signaling pathway. Since this result would do neither, it is unlikely to be the true result of this component of the project.

**Specific Aim 1:**

A second possible outcome regarding the second specific aim is that the Western Blot densitometry outputs will not vary with the changing concentrations of MUC5B. Such a possibility would suggest that the mucin does not modulate trigger factor production. This would require further investigation to elucidate the mechanism of how MUC5B and S. mutans interact, in addition to looking deeper into how trigger factor production is controlled. Given the similarities of how MUC5B presence and trigger factor absence impacts the bacterium, it would be more likely that introducing the mucin would decrease trigger factor production (Frenkel and Ribbeck 2015). A third possible result from this aim would be that densitometry outputs increase as MUC5B concentration increases. This would imply that the mucin would promote trigger factor production, an outcome that entirely contradicts previous literature (Wen et al 2005). If such a result was observed, it would be critiqued as some sort of experimental flaw and subjected to further testing, rather than be accepted as a potential interaction mechanism between MUC5B and S. mutans.

**Specific Aim 2:**

One alternative outcome to this aim is that 3 bands appear on the non-denaturing gel, representative of bound MUC5B-trigger factor, along with unbound MUC5B and trigger factor left unbound in the experimental solution. Another possible outcome from the fourth specific aim is that two separate bands appear on the SDS PAGE gel when MUC5B and trigger factor are exposed to each other. This will imply that the mucin and the chaperone do not bind together. While this is also extremely possible, the structural similarities of MUC5B and trigger factor suggest that there is a stronger chance the two compounds will have binding affinity (Takehara et al 2013).

**Discussion**

**Specific Aim 1:**

The anticipated result for the tests investigating the first specific aim is that a single band will appear in the SDS PAGE gel lane containing a membrane transport protein and MUC5B, indicative of binding between the mucin and the transporter. Such a discovery would be highly significant, as it would reveal a clear method for the mucin to enter S. mutans. Given that the bacterium hydrolyzes the glycosidic bonds within MUC5B during periods of suboptimal nutrition, S. mutans would require such a method of MUC5B influx (Mothey et al 2013). While it could be argued that the breakdown of the mucin occurs outside of the bacterium by the activities of secreted glycosidase hydrolases, the concentrations of these hydrolase enzymes are significantly higher intracellularly (Inui et al 2015). In addition, N-acetylgalactosaminidase, the enzyme responsible for catabolizing the highly prevalent N-acetylgalactosamine in MUC5B, is the most abundant intracellular glycoside hydrolase in S. mutans (Inui et al 2015). Thus, the observed binding between MUC5B and a membrane-bound transport protein is understandable.

From a broader perspective, identifying a membrane transport protein with which MUC5B can bind is applicable to far beyond the oral cavity. Over 20 different mucin glycoproteins have been identified, and a majority of them have nutritional-supplementary potential for the organisms with which they interact (Flynn et al 2016). However, as is the case with MUC5B and S. mutans, metabolic mechanisms and defined pathways of mucin influx remain ambiguous for many of these interactions (Flynn et al 2016). For example, in the human gastrointestinal tract, mucins serve as the primary nutritional source for Akkermansia muciniphila (A. muciniphila), a key bacterial role-player in the regulation of organismal metabolism (Schneeberger et al 2015). However, the way in which this bacterium takes the mucin in order to fortify itself and help control the metabolism of its host organism is not well understood. The identification of this putative MUC5B transport protein would perhaps facilitate the discovery of other similar mucin influx systems within the field, such as in A. muciniphila.
connection between the mucin and S. mutans virulence patterns will be revealed. Although MUC5B has been measured to decrease the pathogenicity of the bacterium 5 times more than any other salivary mucin, no further details have been elucidated on the subject (Frenkel and Ribbeck et al 2015). By determining that trigger factor levels are modulated by the presence of MUC5B, another step would be taken to definitively ascertain the genetic relationship that the mucin has been alluded to have with S. mutans (Cao et al 2012).

This relationship mirrors several already established associations between a mucin and a gene product, such as the connection between MUC1 and cyclin D protein in epidermal cells (Chakraborty et al 2012). In this example, as the concentration of the mucin decreases, the levels of cyclin D increase (Chakraborty et al 2012). Information gleaned from this result could be applied to the broader field of extracellular environmental influences on cell activity. During osteocyte differentiation, for example, the varying composition of the ECM directly influences cellular maturation (Prideaux et al 2012). However, key questions remain unanswered regarding exactly how these maturation processes are regulated by extracellular components, thus making this result potentially relevant on a much broader context (Prideaux et al 2012).

**Specific Aim 3:**

The expected result for the tests of the third specific aim is that a DNA footprint will appear around the 1,300-base pair region of the gel, indicating that MUC5B binds to the ropA gene. By binding to ropA, MUC5B could potentially downregulate its expression and thus the production of trigger factor. Without trigger factor, structural adherin P1 would not fold correctly, and decreases in virulence would ensue, due to the inability of the bacterium to adhere to hydroxyapatite (Bowen et al 1991). The transcriptional-regulatory potential of MUC5B has already been observed in other organisms, as the mucin is noted to modulate the expression of the Cox-2 gene by binding to its PTGS2 promoter region in pancreatic cancer cells (Nath et al 2015). Given that MUC5B can somewhat contradictorily decrease S. mutans virulence while also serving as a nutritional supplement for the bacterium, the ability for the intact mucin protein to bind on the bacterial genome makes sense; the full protein will have already been imported, as earlier anticipated outcomes suggest.

This finding would apply more broadly to the field of extracellular gene expression modulators. Beyond the established mechanisms of mucin-induced transcriptional modulation, cell differentiation is highly influenced by a wealth of ECM proteins, and many of these interactions are poorly understood. For example, an ECM actin-binding protein was found to control the amount and variety of stem cell integrin proteins produced (Ahmed and Constant 2016). Once a mechanism is further elucidated regarding the results from MUC5B-ropA interaction assessments, information can potentially be applied to improve the understanding of the broader family of ECM-cellular interactions.

**Specific Aim 4:**

For the fourth specific aim, it is expected that a single band will appear in the SDS PAGE lane where MUC5B and trigger factor have been exposed to each other. Such a result is significant, as it implies that the mucin and chaperone are able to bind to one another. It could be argued that the HaloTag method of isolating trigger factor prior to analyzing its binding affinity for MUC5B could impact the conformation of trigger factor, which would in turn alter is affinity for the mucin. However, it has been noted that when the HaloTag is positioned onto the C-terminus of the protein, trigger factor conformation and functionality is unaffected, thus largely eliminating this concern (England et al 2015).

Upon entering the bacterium, MUC5B would be able to bind to trigger factor in the cytoplasm, with the largely hydrophobic residues of the mucin complementing the flexible hydrophobic binding cavity of trigger factor (Hoffman et al 2010). When bound to MUC5B, trigger factor would be unable to elicit the necessary structural changes on P1 to facilitate its folding into a fully functional adherin (Crowley et al 2008). This would result in the virulence of S. mutans decreasing, as it has been observed when MUC5B is present in the environment (Frenkel and Ribbeck 2015). Such an interaction would likely mirror the effects that mucin MUC1 has on beta-catenin in epithelial cells (Singh and Hollingsworth 2006). By binding to beta-catenin, the mucin controls the membrane localization of the adherin protein within the cell (Singh and Hollingsworth 2006). On a broader context, ECM proteins have a wide potential of intracellular binding, although in many cases very little mechanistic information has been revealed. Information obtained from MUC5B-trigger factor binding analyses can be applicable to this wider field.

If the experimental hypothesis is confirmed, and MUC5B does indeed bind to an S. mutans membrane protein to initiate a downregulatory signal towards ropA, then a more detailed mechanism would need to be solved regarding how P1 folding is impacted by MUC5B. Although the idea that increased concentrations of the mucin contribute to decreased P1 effectiveness has been established, it remains to be known at what amount of MUC5B the functionality of the surface adherin begins to significantly decline. To combat this issue, S. mutans can be exposed to varying concentrations of MUC5B, and the adherence capabilities of the bacterium will be assessed after knocking out all other surface adherin proteins other than P1. Another direction of future research would investigate the method by which S. mutans can at times be made less virulent by MUC5B as well as in other instances be nutritionally fortified by the mucin. Once the overall mechanism regarding the influence of MUC5B on the bacterium is better understood, the contrasting effects of the mucin on S. mutans will be examined. Based on the findings of this project, the future research will be guided to look for some sort of molecular switch or control system. Such a mechanism would permit MUC5B to elicit both sides of its seemingly paradoxical effects on the bacterium.
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Social Sciences

Through a curriculum that emphasizes personal attention by faculty mentors, hands-on learning, and early engagement with authentic research, students learn to think independently while working collaboratively to apply modern methods of scientific inquiry to the most pressing questions and challenges of the modern world.
Comparison of young and adult behavior with stray dogs in Yachay Tech University and Urcuquí.
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Abstract
The number of stray dogs is significant, and the increase of its population represents a concern. The purpose of the study is to establish if there exists a difference between the behavior or interaction of young people and adults in stray dog issues. The study has two parts and it was realized in Yachay Tech University—located in Urcuquí, Imbabura province—and in the central park of Urcuquí. The first part was the fieldwork that included the observation data, and the second part consisted of the surveys that represented the perception of the population about stray dogs. Those observations took place at the university’s campus and Urcuquí center, but the surveys were only done at Urcuquí. The results confirm differences between the behavior of young people and adults toward stray dogs. The data analysis shows good interaction, bad interaction, and no interaction between people and dogs. Young people demonstrate much concern, empathy, and good interaction with stray dogs. Nonetheless, adults exhibit no concern, apathy, and bad or no interaction with stray dogs; most of them think dogs are only house’s guardians. In conclusion, there is a differentiation between the behavior of young people and adults in stray dog issues.

KEYWORDS: Stray dogs; behavior; interaction; young people; adults.

Introduction
The quantity of dogs that live in Ecuador’s streets is difficult to estimate because no institution has made a study. However, it is known that the number of stray dogs is significant in each province of the country. Dogs who live on the streets mostly are starving and suffering from dehydration. They do not have a home or shelter, and they are victims of human abuse and, with the same importance, lack of affection. This condition is a major concern for governments, though, since indifference and apathy that people show when they see a stray dog is a huge problem as well.

According to Gueseova, (2013, pp. 3) dogs are part of the life of humans because they share personal experiences with their owners. This kind of relationship is based on mutuality, communication and interchange of emotions. It is known that dogs offer friendship, companionship and help as a therapy for children and elderly people. The interaction among humans and dogs has been studied, and it is influenced by behaviors (Byrd, 2012, pp. 4); nevertheless, studies of human behavior had not noted differences in age. A study is essential to determine if the age of people is related to their behavior and their empathy with stray dogs. The United Nations define ‘young’ as a person between the ages of 15 and 24 years (UNDESA, n.d.), and they defined 60+ years to refer to the older population (WHO, 2016).

Some differences have been observed in Yachay Tech University and Urcuquí parish, both located in Imbabura province. The interaction between dogs and humans on the university’s campus is better than the interplay in the city of Urcuquí. Broadly speaking, adult people have no interaction or a bad interaction with the animals because they are angry with this issue and sometimes they beat stray dogs. Numerous dogs stay around university’s campus, and some students have empathy and give them some food, but others simply ignore them.

The major subject of the research is the behavior of young and adult people with stray dogs in Yachay Tech University and Urcuquí center. The principal goal is to answer the following questions: does there exist some difference between the age of people and their behavior towards stray dogs? Can this behavior be explained by the opinions or prejudices they have about stray dogs? The hypothesis is that the behavior or interaction of young people is not different from the behavior or interaction of adults in stray dogs issue. Fieldwork and surveys were
required to answer these questions.

**Methods**

The present research is based on an observational study—without intervention by the researcher—and a cross-sectional survey—the data from different individuals at a particular point in time. The study was executed in April 2016, and the locations chosen for the study were Yachay Tech campus and the center of Urcuquí, Imbabura province. The first part includes the cross-sectional surveys realized in Urcuquí center for four days. The survey consists of the identification-information questions and has eighteen questions related to the problem of stray dogs. Most of the questions were closed-ended and four were open ended. The number of people polled in Urcuquí was 66. This sample includes female and male population of different ages, several levels of education and diverse professions.

The second part of this study consists of fieldwork and includes the observation data. Two observations—one in the morning and one at night during a week—were made at the two locations. In order to obtain the data for the observational study, Yachay’s campus was divided into five areas (figure 1: Scheme of the Yachay Tech Campus divided into 5 areas) plus the apartment area, and each area was covered by two students that wrote all the observations in a field-book [1]. The goal was to register with a code all kinds of interactions between humans and dogs or between dogs.

The behavior or interaction of young people and adults, toward stray dogs, was measured through observational study and surveys. Therefore, the data might help to determine if there exists any difference between the age of people and their behavior towards homeless dogs. The analysis of data was made to interpret the results of observations and surveys.

**Results**

For the purpose of the present study, the most important questions of the survey are shown as a result, and their data—obtained from the 66 surveys in Urcuquí—are presented below. Figure 2 (Number of people polled in Urcuquí) shows the number of people polled in Urcuquí classified in age ranges or classes [2]. The number of individuals from the 18-24 years old class is the highest with 18 individuals followed by the 25-30 years old class with 13 individuals. The 31-36 years old class has 8 people, the 43-48 years old class has 9 people and the rest of the classes have less than 7 people. According to the age range, the data was classified in three categories: young, adult, and elderly. The 27% corresponds to young (18-24 years old), 69% corresponds to adult (25-60 years old), and 4% corresponds to elderly (60+ years old).

The level of education of people who live in Urcuquí is shown in figure 3 (Level of education) [3]. Almost half of the people have secondary education followed by basic education with 33% and third level of education with 14%. The lowest percentage is fourth level, and the rest of people have no education. In the figure 4 (People who like dogs), it is clear that the 79% corresponds to people identified as a person who likes dogs [4]. The rest of people do not like dogs. In this case, only two young people do not identify as a person who likes dogs because they had bad experiences.

Figure 5 (The roles that dogs have in everyday life of Urcuqui citizens) illustrates the roles that dogs have in everyday life of Urcuquí citizens [5]. The highest percentages (24% and 23%) are related to the roles of companionship and pets/family members. In third place is role of care at home, with 21% followed by friendship with 17%. The lowest percentage (15%) is related with the hassle, no relationship, fear and other roles.

In response to the question “Is the presence of stray dogs in Urcuquí problematic for you?” 76% of people think the presence of dogs is a problem, but 24% think otherwise. People said the main reasons of why these animals do not represent a problem are that they do not bother anyone; they are friendly and people can play with them. Also, they can care for them at home, they do not have diseases, and humans are the problem instead of dogs. On the other hand, people who think stray dogs are a problem exposed the following reasons: The dogs are a hassle; the city is dirty and has a bad image because of dogs, there is poop and pee in the streets and the dogs throw the trash; the dogs are aggressive, fight between them and bite people; there are a lot of dogs that are in danger, some of them are hungry and sick.

In response to the question “Do you have one or more dogs at home?” 76% of those polled have at least one dog at home. The 24% of people do not have dogs at home.

Figure 6 (Main reasons to have a dog) shows information about the main reasons to have a dog [6]. The people, who said that home care and protection is the main reason, represent 26%. In second place is friendship and love with 20%. People that like dogs and consider them part of the family represent 16% each one. The 12% of people think that a reason to have a dog is to play. The 10% said that a reason is the companionship of a dog.

The percentage of people who are willing to adopt a stray dog in good physical condition is shown in figure 7 (People who are willing to adopt a stray dog in good physical condition) [7]. The people that would like to adopt a dog are 53%, and the 43% of these people are young. The 47% would not adopt a dog.

The data obtained from the observations in Urcuquí and Yachay’s campus are represented in the following figures. The figure 8 (Types of interactions in Yachay Tech) shows the types of interactions between dogs and humans, and among dogs in Yachay [8]. Forty observations do not show interactions (NI) between dogs and people. Good interaction between people and dogs (GIHD) was observed in 23 cases and between dogs (GID) in 11 cases. Three bad interactions between people and dogs were observed (BIHD). No bad interactions were found between dogs (BID).
Interaction GIHD includes the following situations: petting and playing with dogs, hugging dogs, feeding dogs (figure 9: Photo that shows good human-dog interaction: feeding dogs), being kind to dogs, and friendship [9]. Interaction BIHD includes situations in which dogs are scared when someone approaches them and one case in which a guy bothers a dog with his foot. Interaction GID includes situations when dogs play and run together or protect other dogs (figure 10: Photo that shows good dog-dog interaction: playing) [10].

Figure 11 (Types of interactions in Urcuquí) shows the types of interactions between dogs and humans, and among dogs in Urcuquí [11]. NI between dogs and people were found in 29 observations. There were seven cases of BIHD followed by two cases of GID. Also, GIHD and GID each have three cases.

No interaction (NI) includes situations when people ignore dogs (figure 12: Photos that show no interaction: ignoring the dog) [12]. Interaction GIHD are situations in which dogs are friendly to the students that made the observations, and in one case two people gave food to a dog. Interaction BIHD includes situations in which dogs were scared, two men beat dogs, owners of groceries and restaurants threw away the dogs from those places, drivers did not care about hitting dogs. Interaction GID includes situations when dogs play and run together or protect other dogs. Interaction BID includes situations in which dogs are afraid of other dogs.

Discussion

According to the results of the surveys, most of Urcuquí’s citizens like dogs, and the role that dogs play in their lives are related to companionship, friendship and the fact that pets are a family member. Another significant role for people is that dogs are necessary to care home. It is clear that the empathy for dogs has a high percentage, which could represent a good interaction between humans and dogs; however, some people only see dogs as a thing that can take care of their homes. Similar answers were obtained in the question about the main reasons to have a dog. On the other hand, these answers are not related to the interactions that were observed because just one of the three good interactions came from an Urcuquí citizen. It could mean that people like only their own dogs (the 76% of people polled have a dog at home), not the stray dogs.

Indeed, almost three-quarters of people think that stray dogs represent a problem in Urcuquí. The main reasons are related with the streets’ dirtiness that implies a bad image of the city and a hassle for people. Also, some polled people said that dogs are aggressive and bite people. This could be an indicator of the bad interaction between humans and stray dogs. Furthermore, almost 50% of people in Urcuquí said that they are willing to adopt a stray dog in good physical condition. This could be a good option to decrease the population of stray dogs in that zone.

According to data obtained in the fieldwork, it is clear that the interactions are different between Yachay Tech and Urcuquí, especially in three aspects. First, the number of good human-dog interactions in Yachay exceeds by about eight times the good interactions in Urcuquí. Second, the number of bad human-dog interactions in Urcuquí exceeds about two times the bad interactions in Yachay. Third, the number of good interactions between dogs in Yachay exceeds about four times the interactions in Urcuquí. These results could suggest that young people are more worried about the situation of stray dogs in Yachay because of the number of students that live in the university. In contrast, the adults from Urcuquí do not care about stray dogs. Additionally, the interaction between animals is good in the university because the environment is better. Broadly, the Yachay students’ interactions are different from Urcuquí citizen’s interactions.

Savvides, (2013, pp. 35, 36) in the study “Living with Dogs: Alternative Animal Practices in Bangkok, Thailand”, mention that the cruelty and kindness in the majority of human-dog relationships occur in the home of Western cultures. Also, people in Bangkok do not want to have a stray dog as a pet because they think that dogs are not well trained, are not healthy, fight among each other, and are a source of fear. However, the experiences of the author reveal friendly dogs but territorial.

The behavior of people towards dogs is complex and this might mean that the dogs are not safe even in their own homes. The cases in Bangkok are similar to the cases in Yachay and Urcuquí because dogs have similar characteristics that Savvides, (2013) mentioned. In fact, it is clear that stray dogs usually are friendly and sometimes the people have prejudices.

The hypothesis can be rejected due to the fact that more good interactions between human and dogs were observed in students -young people- of Yachay Tech, and it could answer the two questions set at the beginning. At this point, differences exist between the age of people and their behavior toward stray dogs because young people are worried about these homeless animals. Also, the behavior can be explained by the opinions or prejudices that people expressed in the surveys. In the major cases, people in Urcuquí see dogs as guardians of their homes, and it indicates some lack of sensitivity to the animals. Young people have more empathy and see dogs as friends or companionship. Likewise, students feel good with the presence of these animals because they are far from their families. The companionship that a dog can offer is associated with the alleviation of depression and the increase of self-esteem (Byrd, 2012, pp. 5).

The results must be interpreted with carefulness because the data is subjective. The limitations of the study are the time and the data for a limited number of surveys and observations. In addition, surveys may have been made in university, too. The diversity of opinions and the different way of thinking are limitations too.

Finally, the analysis of the data suggests that the behavior or interaction toward stray dogs of people that live or work in Yachay is different from the behavior or interaction of Urcuquí’s citizens. For this reason, differentiations in the human-dogs interactions, among young and adult people, are possible. The main differences can
be inferred as an outcome of the traditions and cultural baggage of older people, and the influence of trends of modern society in young people, for example, campaigns for the animal care that appeals their sensitivity.

References


Graphics

1. Scheme of the Yachay Tech campus divided in 5 areas: Yachay Tech campus divided in 5 areas. (The graphic shows the division of the University campus for the observations)

2. Number of people polled in Urcuqui: Number of people polled according to age ranges. (With the data collected in surveys, the people polled was classify in ranges of age to identify how many young, adults and elderly people participate)

3. Level of education: Percentage that represents the levels of education that people of Urcuqui has.

4. People who like dogs: Percentage of people that like dogs and do not like dogs.

5. The roles that dogs have in everyday life of Urcuqui citizens: Different answers about the roles that dogs have in the life of the people. (All the answers were classified in this categories)

6. Main reasons to have a dog: Graphic shows the main reasons to have a dog according with the answers of people polled. (All the answers were classified in this
7. People who are willing to adopt a stray dog in good physical condition: Percentage of people that are willing to adopt a stray dog. (The answers of the category “yes” was divided in young and adults)

8. Types of interactions in Yachay Tech: Graphic shows the types of interactions in Yachay Tech according to the number of observations. (*NI: No interaction, BIHD: Bad interaction human-dog, BID: Bad interaction dog-dog, GIHD: Good interaction human-dog, GID: Good interaction dog-dog.)

9. Photo that shows good interaction human-dog: feeding dogs: A student of Yachay Tech is feeding the dogs.

10. Photo that shows good interaction dog-dog: playing: Dogs are playing in Yachay Tech Campus.

11. Types of interactions in Urcuqui: Graphic shows the types of interactions in Urcuqui according to the number of observations. (*NI: No interaction, BIHD: Bad interaction human-dog, BID: Bad interaction dog-dog, GIHD: Good interaction human-dog, GID: Good interaction dog-dog.)

12. Photos that show no interaction: ignoring the dog: A woman did not pay attention to the dog.
The Effect of Applied Behavior Analysis on a Child Expressing Comorbidity of Selective Mutism and Autism Spectrum Disorder
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Abstract
This case study focuses on the effects of Applied Behavior Analysis (ABA) therapy on an individual with Autism Spectrum Disorder and Selective Mutism, the emphasis being on the amount of nonverbal protesting displayed by the child. ABA therapy was used to target the nonverbal protesting displayed during each therapy session. The treatment was implemented at home, using play and conversation as a vehicle for the programs provided by the ABA therapy. When nonverbal protesting was observed, the behavior plan was implemented to decrease the total amount of nonverbal protesting during the sessions. This case study showed that while the ABA therapy was not statistically significant in decreasing the nonverbal protesting, there was still a decline in total number of seconds nonverbal protesting. This shows that while the behavior plan is working, there are multiple confounding variables that lessen the plan’s effectiveness. In the future, research should be aimed at creating a behavior plan that is used across multiple settings to decrease the consistency of the nonverbal protesting.

Introduction
It is common for children with Autism Spectrum Disorder to have comorbid behaviors. For the purpose of this research, the focus is on selective mutism. Selective mutism is a curious disorder because treatment is challenging due to the fact that the child elects not to speak in certain situations, which makes it difficult to understand the nature of the child’s thought process. According to the DSM-5, selective mutism is a childhood disorder that occurs when a child neglects to speak in any social setting in which it is expected. This lack of speech must have a duration lasting longer than a month and impair the child’s educational achievement. Selective mutism must not be due to a lack of knowledge or comfort of a spoken language or explained by a communication disorder. This disorder alone is a complicated one to figure out due to the reasons motivating the mutism. It is most commonly coupled with an anxiety disorder and can also be comorbid with oppositional disorders (Cunningham, McHolm & Boyle, 2006).

This case study is focused on a client, C.S. whose selectively mute periods worsen the behaviors that he exhibits due to Autism. C.S. is a peculiar case because he was diagnosed with Autism in March of 2016; however, that was the second time he had been tested. The first time he was tested, they did not find sufficient symptoms to make a diagnosis. Crais et al (2014) states that even with early concerns, most families that have a child on the Autism Spectrum encounter difficulty receiving such a diagnosis. This is because the process is time consuming and circuitous. The parents of C.S. continued to fight for a diagnosis and he was enrolled in Applied Behavior Analysis (ABA) therapy to treat his problem behaviors. These problem behaviors consist of C.S. shutting down completely when a demand is placed on him. For example, one that commonly occurs is when C.S. is asked to say “hi” to someone. When he is “manded” to say hi, he will hide anywhere possible. If furniture is not available, he will lie on the ground on his stomach and cover his face with his arms. From there, his behavior plan is used. Although C.S. is not diagnosed as selectively mute, it has been suggested and is something that is tracked and worked on through (ABA) Therapy. C.S. also has difficulty sorting items by size, trouble with auditory processing, and lacks social thinking skills. These deficits are also worked on through ABA Therapy.

It is common for Autism to be comorbid with other disorders, complicating the treatment process. In the case of C.S., he receives eight hours of ABA therapy a week. This is not intensive, due to the fact that he does not express many of the traits of most Autistic children. C.S. expresses task avoidance on a daily basis, and this behavior is observed in every setting. In expressing task avoidance, C.S. becomes selectively mute. He shuts down verbally and will not communicate in any way. In the example given above, C.S. displays nonverbal protesting behavior when he is asked to say hi to another person. However, the task avoidance behavior also happens for things as simple as asking C.S. to complete a task such carry a toy truck to another room. C.S. has a specific behavior plan which aims to reduce these behaviors that are labeled as nonverbal protesting. Essentially, the demand is placed, and then if C.S. does not comply after five seconds, the
Selective Mutism is a rare disorder that is defined by the consistent failure to talk in social settings where one is expected to speak, despite speaking in other settings. This lack of speech must last for longer than a month and cannot be explained by a lack of knowledge or understanding of the spoken language or a communication disorder. The lack of speech must lead to disturbances in the educational setting as well as a lack of social communication. Once known as aphasia voluntaria, selective mutism was also known as elective mutism before being changed to the current title in the DSM-IV (Krysanski, 2003). The speech of children with selective mutism is indeed selective. Regularly, children will speak freely at home but fail to talk at all in a school or other form of social setting. According to Kearney and Vecchio, children with selective mutism are often characterized as shy, timid, sensitive, withdrawn, fearful, compulsive, anxious and depressed (2006). The etiology of selective mutism is unclear; however, different theorists propose arguments for what leads to it. Psychodynamic theorists view selective mutism as an outlet for unresolved conflict. Behavioral theorists see selective mutism as a learned behavior, which children use to manipulate their environment. Social anxiety is also linked to selective mutism (Krysanski, 2003).

Treatment of Selective Mutism

There are many ways to treat selective mutism. A few examples include speech therapy, pharmacotherapy in which the focus is primarily medications that help social phobia, psychodynamic therapy and behavioral therapy. The most frequent treatment for selective mutism is behavioral therapy. In a study done by Beth, Kratochwill, Sladezcek, and Serlin (2002) the best evidence synthesis was looked at. They compared studies that used interventions such as psychodynamic therapy, family therapy and behavioral therapy models such as applied behavioral analysis, modeling techniques, and cognitive behavioral therapy. It was discovered that behavioral therapy was better than no treatment at all. There was a lack of data on the other treatment types and no significant difference between the efficacies of the different models of behavioral therap. Schum (2006) suggests that cognitive behavioral therapy is the recommended treatment for selective mutism due to its ties with social anxiety disorders. In the case of C.S., ABA therapy has been implemented to help decrease the instances of selective mutism, which impact the therapy he receives for ASD.

Autism Spectrum Disorder

The DSM-V defines autism as a spectrum disorder that is characterized by deficits in social communication and interaction, as well as restricted and repetitive behaviors. These symptoms cannot be better explained by another disorder and must be present in early developmental stages. Jensen & Spannagel (2011) state that the autism spectrum is used to diagnose a broad range of functioning levels. The levels of severity of symptoms differ largely in

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each individual. Both positive and negative symptoms are considered and contribute to the spectrum. According to the Center for Disease Control, the prevalence of Autism Spectrum Disorder in 2012 was 1 in 68 children and is 4.5 times more common in boys than girls. Autism Spectrum Disorder is a heterogeneous condition that affects no two people in the same way (Lord et al, 2000). Diagnosing autism spectrum disorder has been proven to be more effective the earlier on in a child’s life that it occurs. In a study done by Charman and Baird (2002), they hypothesize that an early diagnosis helps to alleviate the negative symptoms shown by young children on the autism spectrum. A treatment plan is put into place earlier, allowing for greater adjustment of problem behaviors. Genetics also play a large role in autism spectrum disorder. Constantino, Zhang, Frazier, Abbacchi and Law (2010) show that in a sample population of 1,235 families, in 10.9% of them ASD was diagnosed in an additional child. This is important in the case of C.S., as it was aforementioned that two of C.S.’s brothers are both diagnosed on the autism disorder spectrum.

**Treatment of Autism Spectrum Disorder**

There are multiple ways to treat autism spectrum disorder. The most common means of treatment include behavioral, pharmacological, and classroom interventions, as well as programs to work on social skills. When looking at behavioral interventions, Applied Behavioral Analysis is found as the most effective. A more thorough explanation of this will be described later. Pharmacological interventions are used to improve the core symptoms of ASD such as anxiety, social skills, aggressive behaviors, assist in the effects of other interventions and provide a better quality of life for the child as well as their family (Cohen, Linden & Myers, 2010). Brunner and Seung (2009) discuss classroom interventions such as TEACCH (Treatment and Education of Autistic and Related Communication-Handicapped Children) and Project DATA (Developmentally Appropriate Treatment for Autism) generally focus on communication skills. TEACCH is a program developed to include structure, consistency and continuous intervention into the classroom environment while Project DATA focuses more on young children while using developmental and behavioral models. It is important to note that there is not a cure for Autism Spectrum Disorder. Certain interventions may be more advantageous than others in helping those with ASD cope with their symptoms, however, ABA is the method of treatment with the most empirical support (Cohen et al, 2010).

**Applied Behavior Analysis and Treatment Efficacy**

Applied Behavior Analysis is a form of behavior therapy that was developed in the 1960s by Ivar Lovaas. The purpose was to decrease severe challenging behavior and build communicative language. Lovaas is best known for his article entitled “Behavioral Treatment and Normal Education and Intellectual Functioning in Young Autistic Children.” This article signified that autistic children who received early intensive ABA had superior outcomes than those of similar children without ABA (Smith & Eikeseth, 2010). ABA focuses primarily on understanding the functional relationship between behavior and the environment. Concepts stressed in ABA include stimuli, positive and negative reinforcement, prompts, modeling, and extinction. (Ogeltree & Oren, 2001).

In creating a behavioral treatment plan, it is first important to recognize the problem behavior. This can also be referred to as the target behavior and includes any behavior that the therapist identifies as problematic. Once this occurs, it is crucial to interpret what the motivating operations are. Motivating operations are anything that would be the reason behind the client’s behavior. Understanding the motivating operations will help to establish a behavior plan that is most effective in treating the target behavior (Harvey, Luiselli, & Wong, 2009). Another aspect of ABA therapy is to detect antecedent variables, which are factors that may affect the efficacy of treatment. An example of an antecedent would be a client’s lack of sleep; if that is dealt with, then the client will most likely be more compliant during therapy. Recognizing possible antecedents allows for the understanding of triggers that may elicit problem behaviors and cause them to last for a longer duration.

To obtain the information described above, the therapist will do one-on-one work with the child, interview the parents, and obtain medical background of the client. Combining all of the material collected on the client, the next step is to ascertain a baseline. This is the collection of data on the target behavior without implementing the therapy. Once the baseline is formed, the therapy begins. A major aspect of ABA therapy incorporates Discrete Trial Teaching. DTT uses stimulus discrimination, prompting, shaping, reinforcement and data based programs to reach the mastery of a specific goal (Jenson & Sinclair, 2002). Within DTT, a demand is given or a stimulus is presented that cues the child to complete a certain behavior. A simple example of this would be to wave to the child. After completing the action, the therapist would wait for a response. If the child gives an inappropriate response such as a high five, or gives no response at all, then a consequence would be given. The consequence would be in the form of a statement, saying, “Try again” in a flat tone. To obtain a correct response, the child may need to be prompted. Prompts come in many forms including verbal, written, gestural or visual. In the case of waving, a gestural prompt would be given by the therapist waving again. Verbal prompting would include asking the child to wave back, and written response would include having the word wave written down to show the child. If the child gives an acceptable response, the therapist will praise the child by saying a positive comment, such as “awesome job!”, while smiling.

Recording data varies based on the behavior that is being targeted. For some behaviors, it is beneficial to know the duration of the behavior, such as the length of the nonverbal protest that a client with selective mutism exhibits. Another means of collecting data is to determine the specific number of occurrences of a specific behavior.
To use the example above, collecting data on this would be recording the number of times the child waves. Data can also be recorded in the way of showing correct, incorrect or prompted responses. This shows the number of times the activity was carried out and the number of times the correct answer was given. Collecting data is carried out in the same mode at each therapy session, and then graphed. The data is examined to determine if progress is being made due to the behavioral intervention.

ABA therapy is the most effective method when treating Autism Spectrum Disorder. Brunner and Sueng (2009) state, “The best available evidence indicates that the efficacy of ABA methods as an intervention for adaptive behavior and broadly defined language is well established” (p. 17). ABA is not without controversy though, as a number of issues are often debated. Many argue that the ABA approach is rigid and fails to push children with autism to act independently leading to a child that is prompt dependent (Simpson, 2001).

**Method**

**The Participant**

The participant in this study is a 10-year-old boy diagnosed with Autism Spectrum Disorder. He was selected for this case study because of his participation in ABA therapy. His background includes medical diagnoses such as epilepsy, static encephalopathy and a developmental delay. His neuropsychologist referred him to for behaviors such as shyness, deficient cognitive abilities and ADD and anxiety. Permission for the participant’s inclusion in this study was obtained through informed consent by his guardian.

**Materials**

For this case study, the materials that were used to assist in reducing nonverbal protesting include a Kindle Fire and the program Central Reach. This program keeps track of the data throughout the session and has a timer that is used to time the length of the nonverbal protests. When necessary, paper and pen are used to write out the prompt that C.S. is required to say before the command is lifted.

**Design**

A simple linear regression was used to determine the duration of nonverbal protesting on the days where ABA therapy was implemented. The independent variable was the amount of sessions with C.S. and the dependent variable was the duration of the nonverbal protesting. The average number of seconds of nonverbal protesting was also examined, the independent variable being the therapist who executed the therapy and the dependent variable being the duration of the nonverbal protesting.

**Results**

A simple linear regression was calculated to predict the duration of the nonverbal protesting based on the days of ABA therapy implemented. A non-significant regression equation was found (F(1,17)=1.030, p<.324)

This case study examines the behavior plan and its attempt to correct the nonverbal protesting. The ABA therapy focused on correcting the nonverbal protesting that affects symptoms of autism that C.S. displays. These include the absence of the ability to sort objects from small to large, asking questions using “who, what, where, when, why, how” words, and auditory processing. C.S. received therapy every Tuesday and Thursday for two hours from a therapist. The therapist arrived at the home and immediately requested C.S. to say hello or wave. If C.S. complied, the therapist then moved on to engaging C.S. in play. However, saying hello was one of the major instances that caused C.S. to nonverbally protest. When the nonverbal protesting occurred, the behavior plan was implemented. When C.S. did not comply and instead began to nonverbally protest, the demand was repeated again after 3-5 seconds. If there was still no response, the command was modeled. To model the correct response, the therapist said “hi” and waved. If C.S. still did not comply, then written prompting was used. Written prompting consisted of writing down what C.S. was supposed to say and waiting until he complied to lift the command. It was imperative that the command always be followed through so that C.S. understood that nonverbal protesting would not excuse him from accomplishing certain tasks.

Once the initial requirement of saying hi was completed, the therapist gave positive reinforcement such as a high five. The therapist then spent about 15 minutes engaging C.S. in conversation and play. The play was motivated by C.S., and consisted of toys inside the house as well as outdoor activities such as going for a walk or jumping on the trampoline. This continued throughout the session, and programs were completed periodically. An example of one program is to give C.S. a one step command. Periodically throughout the therapy session, the therapist gave a specific command such as, “Put your shoes away.” C.S. was expected to go and put his shoes where they belong. If C.S. exhibited nonverbal protesting, the behavior plan was implemented. Modeling was used, as the therapist showed the participant how to complete the action saying, “Like this.” If C.S. did not comply after the modeling, then hand over hand prompting was used. In this case, written prompting is not sufficient in achieving the goal of C.S. complying. Instead, the therapist would physically move C.S. to get his shoes and move him to the spot where his shoes go. Positive feedback would be given for reaching this spot and the command would be considered followed through. The same programs were used during each session, although they were randomly executed. The amount of nonverbal protesting varied from between sessions. When it occurred, the therapist started a timer on their device to track the total amount of time of nonverbal protesting per therapy session.
with an \( r^2 \) of .239. The simple linear regression showed that the nonverbal protesting of the participant decreased by 23.279 seconds for each day of ABA therapy. Figure 1 displays these results.

Figure 1. Duration of Nonverbal Protesting in the Client C.S. This figure illustrates the effectiveness of ABA therapy on nonverbal protesting behavior.

To examine the difference in nonverbal protesting between therapists, the average amount of total seconds nonverbal protesting was taken for each therapist. The results show that there was no significant difference between the therapists, except for RH as shown in Figure 2.

Figure 2. Affect of The Therapist on Nonverbal Protesting. This figure shows the difference in nonverbal protesting between therapists.

Discussion

Past research has shown that ABA therapy had the best treatment efficacy when focusing on Autism Spectrum Disorder. The results of the analysis showed there was no significant decrease in the durations of the nonverbal protests over the course of the month. However, when looking at Figure 1, the line of best fit still decreases over time. This implies that even though the data is not significant, the amount of nonverbal protesting is decreasing with each session of ABA therapy.

The external validity is high in this case study because there are multiple confounds that could cause these results. These confounds include the training of new therapists, the difference in approach to the ABA therapy, the visits from his senior, as well as any changes to C.S.’s routine on the day of therapy. As the primary therapist for C.S., the researcher, M.F., was trained at the end of August by his previous therapist of two years. C.S. displayed initial nonverbal protesting, but nothing significant and it decreased at the end of training for M.F. After a few weeks of therapy, another staff member was hired for M.F. to train. Again, the nonverbal protesting increased during the training sessions. Although the nonverbal protesting data shows no significant difference between therapists, M.F. has the lowest duration.

When the senior (RH) on his case would come, his nonverbal protesting would increase considerably as shown in Figure 2. R.H. is not present for many therapy sessions; therefore, her relationship with C.S. is not as strong as that of the established therapists. This causes the increase in nonverbal protesting due to the fact that she interrupts the normal routine that C.S. has adapted to. R.H. also introduces new programs when she comes to the therapy sessions, which interrupts the routine to which C.S. is accustomed. This switch of routine causes him to be selectively mute until he understands what is expected of him.

The variance of how the different therapists administer the sessions could also explain the discrepancies in the duration of the nonverbal protesting. It is impossible for multiple therapists to conduct therapy in the same manner. ABA therapy establishes a behavior plan and gives specific programs for each client. These programs could be approached in ways that are dissimilar to one another. C.S. benefits from the programs being implemented in a play setting, and is especially motivated by carwashes and trucks. The ABA therapy to treat the problem behaviors C.S. displays is directly impacted by the nonverbal protesting, as no progress can be made when this arises. In an instance where C.S. exhibits nonverbal protesting, it is up to the therapist to implement the behavior plan. However, different therapists may approach this differently.

As seen through observation by the primary researcher, a disruption in C.S.’s routine was linked to an increase in the duration of nonverbal protesting. A disturbance could be something as simple as Grandma picking him up from school instead of Mom. A common one that occurred was if there were guests at the home at the time of therapy. This caused C.S. to nonverbally protest and no therapy was completed. To understand more fully the nonverbal protesting behavior displayed by C.S. a longitudinal study may be effective, as the current case study was only over a short period of time.

This case study concentrated on the nonverbal protesting that C.S. displayed at home during therapy sessions. However, these results cannot be generalized to different settings such as school or community outings. Implications for future research include creating a behavior plan for different settings other than the home, including school and community settings. Gaining knowledge from these settings would help to further the treatment of the client. Future research should also focus on the possible causes of selective mutism and how this may impact the life of a child with other comorbid disorders such as anxiety.
Conclusion

This case study provided an explanation of Autism Spectrum Disorder and selective mutism to provide background for the client C.S. Knowledge about these two disorders allows for an understanding of the best treatment when it comes to targeting unwanted behaviors such as nonverbal protesting. ABA therapy was implemented to decrease the duration of nonverbal protesting presented by C.S. While ABA therapy is often controversial for the fact that it can seem rigid and prompt-dependent, it has strengths in focusing on behavior and aspects of the environment that affect it. This is important in the case of C.S. because of the confounding variable discussed earlier. These variables in the environment cause C.S. to nonverbally protest, and ABA therapy focuses on understanding why and decreasing the behavior. To understand the nonverbal protesting further, future research should focus not only on the home setting, but on school and community settings.

References


