

Summer 8-2019

## **A Historical Analysis of Non-Normative Embodiment Through the Lens of Frankenstein's Creature**

Ashley H. Hobson  
*University of Southern Mississippi*

Follow this and additional works at: [https://aquila.usm.edu/honors\\_theses](https://aquila.usm.edu/honors_theses)



Part of the [History of Science, Technology, and Medicine Commons](#)

---

### **Recommended Citation**

Hobson, Ashley H., "A Historical Analysis of Non-Normative Embodiment Through the Lens of Frankenstein's Creature" (2019). *Honors Theses*. 681.  
[https://aquila.usm.edu/honors\\_theses/681](https://aquila.usm.edu/honors_theses/681)

This Honors College Thesis is brought to you for free and open access by the Honors College at The Aquila Digital Community. It has been accepted for inclusion in Honors Theses by an authorized administrator of The Aquila Digital Community. For more information, please contact [Joshua.Cromwell@usm.edu](mailto:Joshua.Cromwell@usm.edu).

The University of Southern Mississippi

A Historical Analysis of Non-Normative Embodiment  
Through the Lens of *Frankenstein's* Creature

By

Ashley H. Hobson

A Thesis  
Submitted to the Honors College of  
The University of Southern Mississippi  
in Partial Fulfillment  
of Honors Requirements

August 2019



Approved by

---

Emily B. Stanback, Ph.D., Thesis Adviser  
School of Humanities

---

Matthew Casey, Ph.D., Interim Director  
School of Humanities

---

Ellen Weinauer, Ph.D., Dean  
Honors College

## Abstract

A trend to historicize the field of Disability Studies has emerged in recent years. However, little research has been done to place different societies and generations in conversation with one another. This thesis will utilize various adaptations of Mary Shelley's *Frankenstein* in order to explore shifting anxieties concerning non-normative embodiment through the vessel of the Creature. I examine the Creature's changing physical form next to scientific and medical literature of the period to explore connotations of disability and otherness within that society. I consider the manifestation of anxieties towards non-normative embodiment through Mary Shelley's 1831 *Frankenstein*, James Whale's 1931 film *Frankenstein*, and Victor LaValle's 2018 graphic novel *Destroyer*; the frequent reworking of *Frankenstein's* Creature allows for an examination of shifting and persistent anxieties concerning non-normative embodiment over time.

Keywords: Frankenstein, non-normative embodiment, the Creature, disability, gigantism, yellow fever, eugenics, artificial intelligence, race

## Dedication

To all those who have watered me as I've grown, to all those who've poured into me, I carry a piece of you wherever I go. Thank you.

## Acknowledgments

First and foremost, Dr. Emily Stanback must be acknowledged for her seemingly endless support and guidance for this project. Her patience and encouragement as I've worked through messy ideas and equally messy drafts have cultivated my love of writing while expanding it to the academic field. I had no idea what would come when I sat in her office 2 years ago and answered the simple question, "Do you like *Frankenstein*?" This project has taken me back in time, across the country to archives, and even into our future. I have been extremely blessed to have her as my advisor.

There are many institutions and organizations I must thank and will attempt to do them justice here. To both the University of Southern Mississippi and The Honors College, thank you for being institutions that focus on the cultivation of education and growth within students. Without your influence, this would have never come to be. To the Drapeau Center for Undergraduate Research, thank you for providing the funds that allowed me to travel to Philadelphia and spend a week in their archives. That week and the material gathered there became the cornerstone of this project. My deepest gratitude to the staff and members of the Philadelphia College of Physicians and the Mutter Museum. You went above and beyond to ensure not only my access to materials, but that my time in the archives was enjoyable and memorable. Thank you.

Lastly, I must acknowledge the family that has been by side throughout this process. To my parents, Michelle and Daniel, you are rock stars and not a single day goes by that I don't think how lucky I am to have you. My sister, Jessica, and my brother, Joshua, have kept my head above water and are always there with a laugh. The list goes on. My Student Printz family has

my heart, but Brayden Jones, Evelyn Lawson, Emily Rasch, and Bethany Lawson deserve endless thanks for their support and even their distraction when needed.

## Table of Contents

List of Figures.....	ix
Chapter 1: Introduction.....	1
Disability Studies.....	4
Historicizing Disability Studies.....	8
Disabling Frankenstein.....	14
Chapter 2: Mary Shelley’s Yellow Giant.....	20
Gigantism.....	23
Yellow fever.....	28
Chapter 3: 20 <sup>th</sup> -Century Characterizations of Mental Disability through Shelley’s Creature and the 1931 film <i>Frankenstein</i> .....	39
James Whale’s 1931 Creature.....	40
Mental Disability and Eugenics.....	43
Chapter 4: Exploring Racial Embodiment through Victor LaValle’s <i>Destroyer</i> .....	55
LaValle’s <i>Destroyer</i> .....	56
Black and Female Embodiment in LaValle’s <i>Destroyer</i> .....	63
Chapter 5: Conclusion.....	72
Works Cited:.....	73

## List of Figures and Illustrations

Figure 2.1	Charles Byrne centered the Knipe twins. Courtesy bmj.com.....	26
Figure 2.2	18th-century etching by John Kay. Charles Byrne depicted center..... next to George Cranstoun and three individuals of normal height. Courtesy npr.org.	26
Figure 2.3	Frontispiece for 1831 Frankenstein. Steel engraving. Courtesy.....	26
Figure 3.1	Boris Karloff headshot while portraying the Creature for the 193..... James Whale film Frankenstein. Courtesy google images.	40
Figure 3.2	Movie poster for 1931 film Frankenstein. Courtesy Amazon.com.....	40
Figure 3.3	Colorized rendering of Boris Karloff's headshot while portraying..... the Creature for the 1931 James Whale film Frankenstein. Courtesy Drury University.	40
Figure 4.1	Frontispiece for 1831 Frankenstein. Steel engraving. Courtesy.....	57
Figure 4.2	Mary Shelley's Creature reimagined for Victor LaValle's 2018..... graphic novel. Courtesy the Destroyer.	57
Figure 4.3	Boris Karloff headshot while portraying the Creature for the 1931..... James Whale film Frankenstein. Courtesy google images.	57
Figure 4.4	Cover art for Victor LaValle's 2018 Destroyer depicting Akai.....	57
Figure 4.5	Frontal and profile view of Akai. Courtesy of Newsarama.....	58

## Chapter 1:

### Introduction

Over the past 200 years, Mary Shelley's *Frankenstein* has been adapted for film, novels, short stories, the stage, spin-offs, and more. While it would be easy to assume each of these new renditions only updated Shelley's novel in language or scenery, this is not the case. As each new generation has created a new adaptation of Shelley's *Frankenstein*, they have also birthed a new Creature. His physical appearance and mental characterization have changed with each new adaptation. However, the purpose of the Creature to rouse fear and anxiety within audiences has remained constant. He is seen as "other," and is met with reactions of fear, horror, or disgust. Because the Creature's purpose remains consistent throughout various adaptations while his physical and mental characterization changes, there becomes a space to explore how the Creature maintains his role to horrify audiences through different means each time. No matter his physical or mental characterization at the time, in each adaptation of Mary Shelley's novel, the Creature is viewed as an outcast, and is prohibited from partaking in normal society. This then allows for an exploration of the features which cause the Creature to be viewed as non-normative, and the ways these features manifest within society.

In this thesis I am interested in the relationships between normative and abnormal embodiment. While the basic biology of the human body has remained uniform, the ideal, normal, and abnormal human form has significantly differed based on the culture and society that body is born into or a part of. For example, while women with tiny waists and long hair appear to embody the ideal form in 21<sup>st</sup>-century America, this is very different from the women of Mauritania, who consume up to 16,000 calories a day to possess the stretch marks that denote them as having high socioeconomic status. Every society has their own standards for what is

considered ideal, normal, and abnormal. Accordingly, the body of Frankenstein's Creature also differs significantly based on the culture and society that restructured it around their cultural norms. Because some bodily forms are considered superior, and therefore rare in their appearance, there are rarely negative social stigmas or associations with them. There is, however, a dark shadow cast on those who embody the differences viewed as inadequate or unacceptable. It is within this shadow that authors often portray those with embodied differences, mostly influenced by the cultural and historical moment. The content and the reasons for that portrayal may change, but the negative representation and social stigma against those with embodied differences have persisted.

Historically, perceptions of individuals with non-normative bodies have differed across geographical borders and historical periods. For example, the mentally disabled are revered as reincarnations of deities within certain communities in Ghana (Munyi para.10). However, 16<sup>th</sup> century Christians deemed non-normative bodies as markers of evil and viewed them as monstrous (Munyi para. 4). The association of non-normative bodies with evil has persisted in many cultures, as evidenced by films and literatures in which evil villains, who often fail to embody the ideal bodily form, are unable to defeat their often beautiful heroic counterparts. This is seen most popularly in the portrayal of ugly or aged evil villains who seek to destroy the beautiful princesses in Disney films, or through the muscular superheroes saving the world from a scarred villain in the Avengers films. However, there is perhaps no greater vessel to explore the evolution of the cultural and societal anxieties surrounding embodied differences<sup>1</sup> than the Creature from Mary Shelley's *Frankenstein* (1818 and 1831).

---

<sup>1</sup> Because of the projected aim of this research, the term "embodied difference" will be used in addition to "disability." My use of "embodied difference" will allow for a broader understanding and analysis of the emotions directed toward those deemed to have not attained embodied norms. "Embodied difference" can be used to describe

In this thesis, I argue that *Frankenstein* offers a unique opportunity to explore how attitudes towards embodied differences have shifted from generation to generation through the character of the Creature. By analyzing Mary Shelley's novel *Frankenstein* and *Frankenstein: The man who made a monster*, the 1931 film directed by James Whale, using the methodologies of the history of medicine and Disability Studies, I offer an in-depth investigation of evolving cultural attitudes towards those with embodied differences in the 19<sup>th</sup> and 20<sup>th</sup> centuries. The 2017 graphic novel *Destroyer* by Victor LaValle allows this same investigation of cultural attitudes in the 21<sup>st</sup>-century society. My research focuses specifically on the character of Victor Frankenstein's Creature who, in the original novel, is described as having "yellow skin that scarcely covers his muscles", "black hair", "pearly white teeth", "watery eyes" that are sunken in their sockets, and "straight black lips" (Shelley 57). However, the physical appearance and the mental characterization of the Creature morphs with each new rendition. In fact, the most well-known image of the Creature today originates from the 1931 film in which Boris Karloff portrays the Creature with a flat head, bolts in his neck, and thin skin with sunken features. Furthermore, Shelley's original Creature embodies a level of intelligence which enables him to teach himself language as well as study classical works such as Milton's *Paradise Lost* and Plutarch's *Parallel Lives* (Shelley 127).<sup>2</sup> However, in the 1931 rendering, the Creature loses his ability to speak and instead communicates through a series of grunts and gestures.

I argue that the continual reworking of the Creature's physical appearance offers a unique chance to explore the evolving social anxieties and emotions concerning those exhibiting embodied differences. In Chapter 2, I will claim that Shelley's 1818 Creature embodies the

---

human forms that differ from the set standard of society in both physical and mental ways while not limiting the inclusion of characteristics to those that are pathologized and therefore deemed "disabilities."

<sup>2</sup> These works are regarded as canonical literary classics and exhibit not only Shelley's education by her inclusion of them within her work, but also the Creature's mental capacity to read and understand them.

symptoms of yellow fever, which would have struck fear into the 19<sup>th</sup>-century audience.

However, as I discuss in Chapter 3, the Creature turns green and is unable to speak in the 1931 film, teasing the audience with signs of mental disability much like Shelley did with yellow fever in 1818. Furthermore, LaValle's 2017 graphic novel *Destroyer* allows for an exploration of not only technological presences on the human form, but also a critique of current tensions concerning the black body. The scientific foundations of each adaptation also allow for an exploration of anxiety and fears concerning scientific advancement and its effects within society.

### **Disability Studies**

This analysis will be constructed on the foundation of Disability Studies, which understands disability as a socially constructed concept. Disability Studies then attempts to explore the effects those social constructs have on individuals with a disability and on society at large. This understanding is mirrored in the fact that science, medicine, and technology are social constructs as well, and each informs the others in various ways. As the fields of science, medicine, and technology have advanced, so have the professional and public understanding of them. The knowledge that was shared between scientific and medical authorities of the 18<sup>th</sup> century has trickled down to inform modern public perceptions and understandings of disease and disability. In order to understand 21<sup>st</sup>-century anxieties and perceptions of non-normative embodiment, 19<sup>th</sup> and 20<sup>th</sup> century responses to must be understood. Accordingly, these 19<sup>th</sup> and 20<sup>th</sup> century responses can be explored next to corresponding publications of *Frankenstein* in order to fully understand the evolution of fear and anxiety towards non-normative embodiment. For example, important to my analysis due to the corresponding *Frankenstein* publications, late 19<sup>th</sup> and 20<sup>th</sup>-century professionals believed in the institutionalization, criminality, sterilization, and even termination of those that deviated from 18<sup>th</sup>-century concepts of a proper body.

Twenty-first-century Disability Studies scholars attempt to define a more fluid model of disability in order to understand the position of disabled people within society.

Within Disability Studies,<sup>3</sup> multiple models exist that attempt to organize and categorize understandings and framings of disability. One such model important to this study is the functional model, which has been defined and used by many scholars and governments in varying ways. Generally, the functional model of disability conceptualizes disability as an impairment caused by physical, medical or cognitive deficits. The disability itself limits a person's functioning or ability to perform functional activities (Griffen).<sup>4</sup> Similar to the functional model, the medical model<sup>5</sup> of Disability Studies attempts to place non-normative bodies within categories based on symptoms and diagnosis. However, it is important to note that the Disability Studies community largely rejects the medical model. Instead, Disability Studies attempts to create an alternative understanding of disability outside of symptoms and diagnosis. Simi Linton, 21<sup>st</sup>-century disability scholar, defines the medical model view of disability as seeing disability as "something material and concrete, a physical or psychological condition considered to have predominantly medical significance" (4). The functional and social models of Disability Studies offer an alternative to the stagnant, cold view of those with disability, as well as an alternative way of understanding disability itself. Ruth O'Brien states that disability is not an identity of an individual, but instead a "condition that shapes how people do things" (57). This

---

<sup>3</sup> The Oxford English Dictionary defines "disability" as "a physical or mental condition that limits a person's movements, senses, or activities." The second definition states, "a disadvantage or handicap, especially one imposed or recognized by law."

<sup>4</sup> The Americans with Disabilities Act of 1990 defined an individual with disability as "a person who has a physical or mental impairment that substantially limits one or more major life activities, a person who has a history or record of such an impairment, or a person who is perceived by others as having such an impairment."

<sup>5</sup> The medical model of disability is defined in *Stedman's Medical Dictionary* as "a medicolegal term signifying loss of function and earning power," which directly relates to the social model of disability in terms of understanding disability in relation to providing an income based on labor whether mental or physical (as cited in Linton pg. 12).

then removes individuals from the medical understanding of disability, where their disability defines them, and recognizes that their disability is worsened or bettered by the society within which that person exists. Disability studies scholars such as Susan Wendell argue for a social model of disability, which understands that there is a distinction between

the biological reality of disability and the social construction of disability...because complex interactions of social factors and our bodies affect health and functioning, and also in that social arrangements can make a biological condition more or less relevant to almost any situation. (Wendell 35)

It is through the social model lens provided by Disability Studies that the Creature's embodied differences will be explored.

This then is the foundation of Disability Studies—the idea that disability is socially constructed and informs the experience of those with disability within that society. Disability Studies attempts to explore the effects those social constructs have on individuals with a disability and society at large. The concept and manifestation of disabilities have been greatly changed and altered by scientific advancement, historical context, and social stigmas or the lack thereof. Literary characters that embody the differences we often find intriguing or repulsive are scattered throughout the ages, as many scholars have noted. Disability literature scholar Rosemarie Garland-Thomson writes, “From folktales and classical myths to modern and postmodern ‘grotesques,’ the disabled body is almost always a freakish spectacle presented by the mediating voice” (10). This is true not only of Romanticism—particularly because this is the era during which Mary Shelley wrote *Frankenstein*—but of all eras and all genres within literature. Furthermore, Michael Bradshaw and Essaka Joshua argue that “Romantic studies should be revisited in the light of contemporary disability awareness” (1). By revisiting

preconceived notions and interpretations of characters and their embodied difference, we may be able to adjust the trajectory of social inclusion, acceptance, and understanding.

While these statements raise important questions concerning the portrayal of disability in various mediums, a question remains. Why should we care that the disabled body is historically portrayed as freakish or grotesque? Specifically, why should we explore and attempt to answer these concerns within the literary field? Wouldn't these concerns be better addressed in an applied field such as medicine? Simi Linton answers this when she states,

Disability studies has arisen in the past twenty-years to focus an organized critique on the constricted, inadequate, and inaccurate conceptualizations of disability that have dominated academic inquiry. Above all, the critique includes a challenge to the notion that disability is primarily a medical category. Consequently, Disability Studies contests the current academic division of labor in which the study of the phenomenon rests in the specialized applied fields (rehabilitation, special education, health, and so on) and the rest of the academy is largely exempt from the meaningful inquiry into the subject of disability. (Linton 2).

For scholars, the responsibility for the field of Disability Studies is a call to critique the relationships between medicine and disability—to identify and cure what afflicts those with disability *outside* of their own bodies. In other words, the purpose of Disability Studies is to identify and resolve how society enhances or alleviates the struggles of the disabled body. For those outside academia, responsibility lies within a self-critique of how one views and responds to embodied differences. Responsibility to create a more accurate representation of non-

normative bodies and erase outdated and misinformed stigmas surrounding those bodies lies with those who interact with non-normative bodies in the private and public spheres.

### **Historicizing Disability Studies**

Within recent years, there has been a turn within the field to place disability in conversation with historical periods and explore how disability was defined, perceived, and interacted with in different societies, cultures, and time periods. Not only is disability a social construct, but our definition and perception of those with disabilities is defined and informed by past “social and historical particulars” (Wang 2). These “particulars” include but are not limited to remnants and artifacts of our past such as pictures, literature, plays, public records, medical journals, and even newspapers and magazines that portray those with disabilities in various ways. It is from these remnants of our past that we can trace the threads of public responses to disability as they run through history in order to understand how we arrived at our present. Keeping this in mind, we can explore these remnants in conversation with one another in order to form a comprehensive understanding concerning disability within a certain period. These remnants, whether they be books, newspapers, or films, offer an in-depth exploration of the changing perceptions of those with disability and of those without disability.

*Frankenstein*, originally published in 1818, offers itself to the historicization of disability due to its various adaptations, the shifting physical and mental characterization of the Creature within those adaptations, and the application of scientific theories and concepts throughout the novel and subsequent adaptations. Historicizing disability within *Frankenstein*, especially as a product of Romanticism, follows a recent shift within the field. As Fuson Wang explains, “The field of literary Disability Studies has been playing

catch up ever since the scholarship issued its daunting challenge: the wide-ranging hypothesis that various forms of impairment have informed nearly all human cultural production”(Wang 1).<sup>6</sup> In other words, the historicization of disability within cultures and societies is a recent trend, and very little literature on the topic exists, especially as relates to the field of Romanticism.

Central to historicizing disability is understanding when certain language and concepts were used to describe or categorize those with disabilities. For example, the concept of the “proper body” emerged in the Romantic period and has informed our notion of the human body ever since. While 21<sup>st</sup>-century individuals do not refer to it as the “proper body,” the earlier period also produced the language we use to categorize the human form today. The year 1840 has been cited as the year the word “normal” enters the English language (Davis 24). Scholars such as Wang and Davis argue that 1840 marks the beginning of an “amorphous, pre-1840 period to post-1840 enforcements of proper embodiment” (Wang 1). The society of the 1840s informed future generations’ application of the term “normal” and therefore what is deemed “other” or abnormal. Therefore, “the Romantic era (1780-1830) represents a transitional moment between Enlightenment yearning for universal humanism and the Victorian codification of social mores; it sits between two restrictive movements to classify the human against the inhuman and the normal against the abnormal” (Wang 2). *Frankenstein*, published first in 1818 and again in 1831, offers a glimpse of how this transition manifested itself in literature and is reflected within Romantic and preceding societies.

---

<sup>6</sup> While not strictly focused on the Romantics conversation of/with disability, Roy Porter offers important historicization of medicine while placing it in its proper perspective of world history within *History of Mankind*.

Just as the Creature changes form, so does the lens I use to contextualize and understand that bodily form. Disability Studies understands disability as socially constructed and insists that the experience of each disabled individual is informed by the society in which he or she exists. Therefore, as values, beliefs, and scientific understanding have shifted, so have the ideas and definitions of disability. This is seen through the various models of Disability Studies previously discussed. In order to understand why the Creature's physical form and mental characterization morphs over time, one must understand how views of disability have shifted from one generation to the next.

Before the Enlightenment (pre-17<sup>th</sup> century), the religious model of disability was dominant. For many, a disability was a sign of evil while beauty was a sign of God's grace and favor. Further explored in Chapter 3 in terms of madness, Euripides, a Greek dramatist from 484 B.C., is recorded as writing "Those whom the gods destroy, they first make mad" (McCulloch).<sup>7</sup> This demonstrates the stigmatization of "madness" as a curse or punishment, as well as the belief that madness stemmed from a higher power instead of psychological or physiological determinants. This is further seen in Biblical scripture where Jesus is seen healing those who are lame, blind, or crippled. To be born with a disability was a hindrance or curse while being healed was an act of God—not science or medicine—which illuminates the lack of medical or scientific knowledge in the pre-Enlightenment period. This would change as the Enlightenment, or Age of Reason, blossomed within Europe. Accompanying this Age of Reason was a "preoccupation with disease entities and their classification" (Wechowicz 71). As the Enlightenment took hold and strictly religious notions of disability fell to the wayside, a need to classify and categorize disease-causing pathogens and their manifestation in the human body took root within the

---

<sup>7</sup> There has been speculation within the academic community that Euripides was wrongly attributed with this quote, and versions of it have been attributed to Sophocles, Seneca, John Dryden, and even Henry Wadsworth Longfellow.

scientific community.<sup>8</sup> While this would eventually help lead to scientific advancements and the more organized sharing of information, it is important to explore what this meant for those of interest to the medical community—those who exhibited deformities or disabilities.

In the 18<sup>th</sup> century, as the scientific community became increasingly interested in those embodying abnormalities, individuals with physical deformities often hid themselves away, choosing rather to accept their deformity in silence than to subject the public to their appearances (Deutsch and Nussbaum 2). David Turner writes that the 18<sup>th</sup> century was a “period in which disability was commonly regarded as a ‘miserable’ or ‘pitiable’ state” (146). A society that had now largely rejected religious reasoning but also lacked scientific knowledge had little guidance for either those with disabilities and abnormalities or those interacting with them. Sources such as medical texts, “newspapers and periodicals reveal that the degree of ‘unhappiness’ associated with disability depended on timing, context and the symbolic significance of certain impairments” (Turner 147). In other words, the reality behind the common assumption that disabled people are miserable varies. These same sources also reveal public perceptions and reactions to those with abnormalities. Publications such as Richard Steele’s *Spectator* 17 from 1711 exemplify the social tone regarding those with physical deformities in the 18<sup>th</sup> century. The publication encouraged those with physical defects to band together away from the public sphere in order to “adapt to their misfortune” (Deutsch and Nussbaum 2). In this way, although society was largely unable to understand the how or why concerning physical deformities within a medical context, those denoted as “other” or “abnormal” were still categorized based on physical descriptions.

---

<sup>8</sup> Within science, there is a taxonomy known as Linnaean classification that allows all living organisms to be classified. Organisms are classified according to Kingdom, Phylum, Class, Order, Family, Genus, and Species, with Kingdom being the broadest category and Species being the most concise.

The era of Romanticism (circa 1785-1830) produced literature, specifically *Frankenstein*, that explores bodily forms as authors experimented with new philosophical concepts, scientific theories, and religious motifs. No singular perception of disability dominates the time; instead the era offers a diversity of ideas about abnormal embodiment. Little work currently exists that focuses on placing the Romantics in conversation with Disability Studies, but there has been a recent shift to rectify this. The British Romantic period birthed a cultural concept of the “proper body” and accompanying language to define and categorize this proper body (Youngquist xv). As the period ushered in the concept of the proper body, so entered language to define, describe, and categorize that which was not “proper.” However, it is surprising that the society that craved scientific explanation and categorization labeled improper bodies as monstrous or monstrosities (Weckowicz 71). As this is the literary movement that produced *Frankenstein*, it is especially important to understand the diversity of the “field of Romantic medicine and its relation to a correspondingly broad range of cultural attitudes towards those thought to be under the purview of medical authority—those who, by virtue of their non-normative bodies and minds, we might now call ‘disabled’” (Stanback 2). In many ways, the modern understanding of a “normal” body and “abnormal” body is informed by the notions formed in the Romantic period.

As the 19<sup>th</sup> century progressed, a new era of scientific advancement, understanding, and experimentation began. As the field of science advanced, so did the ability of scientists, doctors and the common man to understand the workings of the human body. This exploration also took the form of global navigation as barriers to new worlds and foreign lands were overcome or removed. Nineteenth-century definitions of disease and disability cannot be explored without considering the consequences of British imperialism and the sharing of information such as scientific methods and theories.

While outdated notions concerning the treatment of certain diseases were shed, negative stigmas of disability persisted well into the 19<sup>th</sup> and 20<sup>th</sup> centuries. This is seen mainly within the scientific field of eugenics and its acceptance and eventual rejection within society. Most vehemently adopted in Nazi Germany, proponents of eugenics believed those who differed from the idealized person in mental or physical standards should be institutionalized, sterilized, or even terminated. No longer were deformities even seen as sources of comedic relief or public entertainment. Instead, abnormalities were viewed as criminal and became reason for imprisonment. Although scientific understanding had advanced further than ever before, the social condition of those with disabilities had only continued to deteriorate, as further explored in Chapter 3. Simi Linton defines 20<sup>th</sup>-century responses to disability as “the critical division of our society in the competent citizen versus the ward of the state” (3). Linton, who identifies herself as a disabled person and offers valuable contextualization for 21<sup>st</sup>-century Disability Studies, asserts

[We] are a group only recently entering everyday civic life. A host of factors have typically screened us from public view. We have been hidden—whether in the institutions that have confined us, the attics and basements that sheltered our family’s shame, the ‘special’ schools and classrooms designed to solve the problems we are thought to represent, or riding in segregated transportation. (3)

The passage above summarizes the history of Disability Studies in terms of society’s response to those with embodied differences. They have been screened or hidden from public view, put away so that society may bring them out for freak shows or monster marathons but rarely as members of proper society. Because Linton wrote this in 1994, it is tempting to argue that social persecution of those with embodied difference has waned. Yet it is still provable that social

acceptance and understanding of those with embodied differences falls short and errs on the side of unfairness.

In terms of the 21<sup>st</sup>-century society, disability is categorized not as a curse or a disease, but rather as a shifting condition that influences how individuals perform certain tasks and participate in society. Ruth O'Brien states,

Disability should not be viewed as an identity, but rather as a condition that shapes how people do things. This condition, moreover, is ever changing. Few people escape facing it sometime in their lifetime. This is inherent in our organic nature—all people are dying. Hence the term 'disabled' should not be used to characterize the unusual mind or body; it describes what habitually happens to the mind or body. It captures the human condition. (35)

The view of disability that O'Brien provides above is pertinent to understanding the transformations of the Creature throughout the adaptations of *Frankenstein* that I discuss in this thesis, especially when considering the black cyborg Creature of Victor LaValle's *Destroyer* in Chapter 5.

### **Disabling Frankenstein**

When Mary Shelley published *Frankenstein* in 1818, there was no way for the aspiring author to know she had just created a novel that would go on to entertain individuals for generations to come. Beginning with the novel's first publication in 1818, Shelley would go on to edit and re-publish the work again in 1831. Shelley's original novels would then be adapted into films and plays such as the recently discovered 1910 Edison Film Productions short piece and the hugely successful 1931 film adaptation starring Boris Karloff. However, the "monster" obsession would not end there, and would include over thirty film adaptations alone that range

from comedies such as *Young Frankenstein* to loosely based sequels such as *Bride of Frankenstein* and the more recent *Frankenstein Diaries* on Netflix. Because of the ever-changing characters, plot lines, and themes, each new adaptation of Shelley's creation allows for a unique exploration into the anxieties surrounding the science, medicine, and even pop culture of the generation that produced it. It is then possible to also trace how the scientific advancements, social stigmas, and medical tones of that generation morph over time.

Because of the recent shift in the field to place disability within the context of history, multiple societies' anxieties and opinions of the embodied difference can be studied either separately or together. In this thesis, I aim to combine the history of medicine and Disability Studies. Medical texts will be used as primary sources. The characterizations of symptoms and diseases found within these medical texts will be used to compare each generation's interpretation of the Creature. This then will be used to analyze anxieties or fears from each society concerning disease or disability—anxieties and fears which are embodied by the Creature. Medical texts that correspond with the era of each interpretation of the Creature will be used to ensure the authenticity of the identified anxiety. This is an attempt to remove our 21<sup>st</sup>-century understandings and knowledge in order to more fully understand past societies' anxieties and misconceptions. In the case of the yellow fever material I discuss in Chapter 2, these medical texts will be effective because they contain information such as time, date, symptom description, patient notes, and diagnosis.

Nineteenth-century disability cannot be explored only in strictly national terms ("English" disability versus "American" disability) due to the sharing of knowledge, cultural tropes, and pathogens across geographical borders. The 1818 Creature's characterization of yellow fever is not strictly British in nature just as the black body of LaValle's Creature does not

reflect solely American stigmas or mistreatments of the black body, especially in terms of scientific experimentation. While perceptions of disability will differ in manifestation, a transcontinental mindset will lend itself to forming a more complete picture of disability. This is especially true when considering that Shelley's novel was published as a European work while the proceeding adaptations I discuss stem from American culture.

Just as Shelley's novel became a transatlantic phenomenon, so too must this study engage in a transatlantic approach to disease and disability. I adopt a transatlantic approach because disability and disease are not limited nor confined within the cultures and societies that inform them, even if the culture or society are the first to inform them. Additionally, in terms of Mary Shelley's *Frankenstein*, it is not possible to ignore the atmosphere of British imperialism<sup>9</sup> and Great Britain's colonization of foreign lands corresponding to Shelley's publication of her novel. British exploration aimed not only to extend Great Britain's land, wealth, and control; but also to spread British ideals, culture, and beliefs. As Great Britain's hold on lands and peoples increased, so did the diffusion of cultures, ideas, and non-British people *into* the Motherland (these often were put on display in freak shows) and British culture *out of* Britain and into the conquered lands. Traces of this can even be seen in Shelley's novel through Captain Walton and his first description of Victor and the Creature: "He [Victor] was not, as the other traveller seemed to be, a savage inhabitant of some undiscovered island, but an European" (Shelley 24). The idea that one society is informed by not only its predecessor but also foreign cultures messes the process of historicizing disability, but it is important to recognize that most often the leading authorities on what was "other" such as scientists, doctors, and scholars were in

---

<sup>9</sup> Imperialism is defined by the Oxford English Dictionary as "A policy of extending a country's power and influence through colonization, use of military force, or other means." British Imperialism would be Britain's extending of their country's power through the listed means.

conversation with one another across geographical borders as well as exposed to various cultures.

Because *Frankenstein* has maintained its popularity for more than 200 years, there are various scholarly approaches concerning not only the overall story but also individual characters. Outside of the field of Disability Studies, a text titled “The Frankenstein of the Revolution” by Julia Douthwaite and Daniel Richter analyzes Shelley’s work as representative of the French Revolution and the “new man,” which they argue is embodied by Victor Frankenstein. Others, such as Francine Prose, choose to analyze the text in the context of humans “playing God.” Prose, however, does not assume a firm position on the interpretation of *Frankenstein*, choosing instead to speculate on the many ways the text can be analyzed. In what takes the form of classroom prompts in literary classes, she writes that *Frankenstein* inspires discussions on the topics of “what is a human being, what are the implications of playing God, what are the ethical implications and limits of scientific research, and what are the effects of isolation and alienation,” among others (para. 13).

However, existing literature and scholarship fail to place *Frankenstein* and worthy adaptations in conversation with one another in the context of historicized disability. In addition to offering a “sketch for how future work on Romantic-era Disability Studies might proceed,” Fuson Wang’s work interprets Shelley’s lack of defining physical characteristics concerning the Creature by proposing that Shelley revises “Enlightenment tolerance” that “makes it impossible to force the novel neatly into a continuous history of ableist representation” (Wang 2, 9). Specifically, Wang focuses on the Enlightenment<sup>10</sup> theories of blindness in terms of the Creature,

---

<sup>10</sup> Enlightenment era typically associated blindness with wisdom. For more see Jack Orchard’s “The Enlightenment and visual impairment.”

Frankenstein, and De Lacey<sup>11</sup>. Mitchell and Snyder list *Frankenstein* in their “literary pattern of disability exploitation” in *Narrative Prosthesis* (Wang 7). Mitchell and Snyder state, “Shelley’s story of Frankenstein ends in the monster’s anticipated obliteration on his own funeral pyre in the wake of his misinterpretation as monstrous ... Disability inaugurates narrative, but narrative inevitably punishes its own prurient interests by overseeing the extermination of the object of its fascination” (56-57). In other words, disability creates a narrative for the novel, but is only repaid for its contribution to the story by its removal from the narrative.

I argue that *Frankenstein* offers a unique chance to explore the social anxieties and emotions concerning those exhibiting embodied differences, projected onto a literary character who was then adaptable to each new generation’s set of standards concerning embodied norms. Specifically, the Creature offers a unique opportunity to explore how attitudes towards embodied differences shift from generation to generation. Through this research, I hope to validate my theory: that society projects its fear or acceptance of a disability on its popular media. In turn, the way these disabilities or abnormalities manifest in media also influences the response of that society towards the portrayed disability. Put otherwise, popular media simultaneously shapes and reflects a society’s fear or acceptance of a disability. This fear or acceptance can be traced through the literary, cinematic, and dramatic versions of *Frankenstein*. While there have been a wide variety of arguments concerning both Disability Studies and the interpretation of Frankenstein and his Creature, this specific area of Disability Studies has not been explored to its full potential. Scholars have made arguments that recognize only certain diseases, the psychological effect literary disability has on each generation’s perception of disability, and the

---

<sup>11</sup> De Lacey is the blind old cottager, first seen in Shelley’s novel on page 164, that the Creature attempts to befriend.

religious implications concerning Victor's act of creation. However, there is ample space to explore Disability Studies and *Frankenstein* together by viewing the Creature as a literary interpretation and manifestation of each generation's fear of disease. These various adaptations can be explored next to medical literature and alongside contemporaneous social attitudes towards disability in order to identify the embodied norms and abnormalities of the generation that produced the specific adaptation through the vessel of the Creature.

This thesis will use Shelley's 1831 novel *Frankenstein: The Modern Prometheus* as a starting point of comparison for later adaptations. The 1831 novel offers critical evidence concerning the scientific underpinnings of the novel and also begins the trend of adaptations reflecting historically specific scientific foundations.<sup>12</sup> For example, references to galvanism in the 1831 novel are absent in the 1818 version. Galvanism will be further discussed in Chapter 2 in relation to scientific authority of the novel as well as gigantism and yellow fever. Chapter 3 will explore the Creature's changing skin tone and loss of ability to speak in relation to eugenics and the stigmatization of mental disability, while Chapter 4 will analyze more recent adaptations of the Creature through LaValle's *Destroyer*. While Shelley's 1831 novel offers a unique lens to explore many different topics, especially those concerning the ethics of science and experimentation, the collection of *Frankenstein* adaptations and portrayals as a whole offers a map to trace how scientific advancement and shifting social attitudes towards embodied difference was reflected by each generation through the character of the Creature.

---

<sup>12</sup> "historically specific scientific foundations" refers to the shifting nature of various fields within the scientific community. Due to a large variety of factors, theories that are accepted as factual and accurate may be disputed and put aside in future generations.

## Chapter 2

### Mary Shelley's Yellow Giant

The science, medicine, and society of the 19<sup>th</sup> century is the starting point for my analysis of the social anxiety surrounding the embodied differences of the Creature. Just as the Romantic period informed ideas of the “proper” body, so did the 19<sup>th</sup> century inform new theories and concepts of disease and disability through science and medicine. The discoveries of 19<sup>th</sup>-century science and medicine would build a foundation that allowed for more accurate concepts and applications of treatments of diseases, especially in relation to the human body.

One such example of the influence of science within Shelley's novel is the use of galvanism as a means to reanimate the Creature. Mirrored in Shelley's novel, 19<sup>th</sup>-century scientists had become fascinated with understanding the essence of life and exploring the possibilities of bodily reanimation. Within the scientific community, galvanism became a credible route to establishing the source of life. Commonly referred to as “animal electricity,” the field of galvanism began in 1781 when Luigi Galvani touched the exposed nerve of a frog's leg with a scalpel through which electricity was running (Bostock 1). As galvanism continued to be studied by the scientific community, medical uses of electricity expanded. Galvani's initial experiment sparked treatments for various mental afflictions, most popularly as “shock treatment” for “melancholic and other deranged patients” (Beaudrau and Finger n.p.). Galvanism not only offered itself as treatment for 19<sup>th</sup>-century patients, but also lent theories, concepts, and techniques to the animation of Shelley's Creature. Although the 1818 novel fails to mention galvanism, Shelley's 1831 work contains a passage in which Victor discusses the merits of

galvanism with a “man of great research in natural philosophy”<sup>13</sup> after a tree has been struck by lightning. Victor states,

Before this I was not unacquainted with the more obvious laws of electricity. On this occasion a man of great research in natural philosophy was with us, and, excited by this catastrophe, he entered on the explanation of a theory which he had formed on the subject of electricity and galvanism, which was at once new and astonishing to me. (Shelley 41)

Victor continues to discuss the disdain this news brought in relation to his “accustomed studies,” and immediately Victor believes galvanism is a more “credible science” than what he has been studying. He at once “set down natural history and all its progeny as a deformed and abortive creation; and entertained the greatest disdain for the would-be science” (41). Furthermore, in addition to alluding to the future use of galvanism by Victor, this passage also provides scientific credibility to Shelley’s novel. While we are able to conclude based on reasonable evidence that Shelley was influenced by the science of the 19<sup>th</sup> century, in the 1818 “Preface” to *Frankenstein*, Percy Bysshe Shelley<sup>14</sup> informs readers that the novel is grounded in real life possibilities. The “Preface” to the 1818 novel states,

The event on which this fiction is founded, has been supposed by Dr. Darwin<sup>15</sup> and some of the physiological writers of Germany, as not of impossible occurrence...I have not considered myself as merely weaving a series of supernatural terrors...I have thus endeavored to preserve the truth of the

---

<sup>13</sup> Natural philosophy encompasses a wide range of subjects that do not include metaphysics and mathematics during the Renaissance. For more see Stanford Encyclopedia of Philosophy “Natural Philosophy in the Renaissance.”

<sup>14</sup> Percy Bysshe Shelley was Mary Shelley’s husband as well as a major Romantic English poet.

<sup>15</sup> Charles Darwin, known as the Father of Evolution, was a respected English naturalist, biologist, and geologist.

elementary principles of human nature, while I have not scrupled to innovate upon their combinations. (Shelley 13)

Shelley informs us that her work is grounded in scientific foundations supported by leading figures in science of the 19<sup>th</sup> century, although that work may be embellished for the sake of literary purposes.

Furthermore, Victor Frankenstein states within the 1831 novel, “With an anxiety that almost amounted to agony, I collected the instruments of life around me, that I might infuse a spark of being into the life-less thing that lay at my feet” (Shelley 57). This “spark” of life suggests an electrical rather than biological beginning for the Creature. This passage also reveals Victor’s anxiety and uncertainty concerning galvanism. Shelley essentially recreates Galvani’s animal electricity experiment through Victor as Galvani and the Creature as the animal conductor. The fact that Victor is able to bring the Creature to life utilizing galvanistic techniques illustrates its credibility as a scientific theory that at the very least merited discussions amongst the scientific community and those in close relation to it.

The way the Creature is brought to life suggests the possibility that a “monster” like the Creature could be revived or animated. Primary archival research, descriptions of the Creature from the text, and medical journals recording treatments and diagnosis will be used to explore disability of the 19<sup>th</sup> century and how it was projected onto the form of the Creature. The *idea* that an amalgamation of corpses could be reanimated into some semblance of a “living” creature would cause Shelley’s readers to experience some fear and anxiety.<sup>16</sup> However, it is the appearance of that corpse—the Creature—that would truly haunt them. The presence of the

---

<sup>16</sup> Grave robbing, also known as body snatching, became popular in the 19<sup>th</sup> century as a way for medical schools, anatomists, or doctors to procure cadavers for study. The bodies of the deceased would be removed from their graves and exchanged for a price. This often occurred without consent or knowledge of the deceased’s family. For more see Allison C. Meier “Grave Robbing, Black Cemeteries, and the American Medical School.”

symptoms of yellow fever, as well as the characteristics of gigantism, produce the template for all adaptations of the Creature that follow.

### **Gigantism**

The first description of the Creature is through the eyes of Captain Walton, who, as an explorer and navigator in the 19<sup>th</sup> century, would also possess scientific authority. Walton states,

We perceived a low carriage, fixed on a sledge and drawn by dogs, pass on towards the north, at the distance of half a mile: a being which had the shape of a man, but apparently of gigantic stature, sat in the sledge, and guided the dogs. We watched the rapid progress of the traveler with our telescopes, until he was lost among the distant inequalities of the ice. (Shelley 24)

While this passage begins the “shifting eye”<sup>17</sup> concept concerning the Creature discussed by Fuson Wang, it is not impossible to form a picture of the Creature from the descriptive threads that Shelley weaves into the novel. It is important to note the distinction of the Creature having the “shape of a man, but apparently of gigantic stature.” Even from this first cursory glance through the lens of a telescope, the Creature is deemed to be human, but also other. He appears to be a man but is categorized as abnormal through his stature. As Emily B. Stanback has argued, Walton offers the most objective view of the Creature due to his profession as an explorer and his initial ignorance concerning the Creature and Victor. As Stanback points out, “Walton does not register fear or disgust; rather, he and his men are left rapt, in awe—what Walton describes as an experience of ‘unqualified wonder’” (“Frankenstein’s Creature in Medico-Scientific

---

<sup>17</sup> Fuson Wang argues that Shelley never allows readers to have a complete picture of the physical characteristics and traits of the Creature. Her descriptions repeatedly change and a concrete depiction of the Creature is never fully formed. For more see Fuson Wang’s “The Historicist Turn of Romantic-Era Disability Studies, or Frankenstein in the Dark.”

Contexts,” n.p.). Later in the novel, we learn through Victor that the Creature is “of a gigantic stature; that is to say, about eight feet in height, and proportionally large” (Shelley 54).

Shelley’s inclusion of a “giant” within her work reflects a history of the characterization of individuals of abnormally large stature to be viewed as entertainment or curiosities. Although today we know the cause of gigantism, scientists were unaware of the causes of the condition in Shelley’s day. However, the symptoms and manifestations of the disease were studied and recorded as early as the 1500s. 21<sup>st</sup>-century medicine understands that gigantism, an excessive growth of both height and of specific body parts, is caused by an overactive pituitary gland (“Definition of Gigantism”). The pituitary gland, a part of the endocrine system, releases excessive amounts of somatotropin before the bones of the individual are able to fuse together during childhood. It would have been impossible for scientists and doctors of Shelley’s day to know the causes of or treat gigantism because the endocrine system was not discovered until 1901—eighty years after Shelley published her novel. Furthermore, it has only been within the last 50 years that science and technology have allowed for those suffering from gigantism to be understood and treated.

Individuals perceived as “giants” appear in medical files as early as the late 1500s when Johannes Weir first attempted a medical description in a publication released in 1567. While gigantism was first recorded in the 1500s, a lengthening of the hands, feet, nose, tongue, and ears in those suffering from gigantism—known as acromegaly—was first described by Pierre Marie in 1886 (Mammis).<sup>18</sup> Unfortunately, respected physicians later in the 19<sup>th</sup> century speculated that

---

<sup>18</sup> An 1877 excerpt from a medical journal by Brigidi described the case of the Italian actor Ghirlenzoni as follows: “he could not speak clearly, on account of the excessive size of his tongue...the rest of the face had more the appearance of an ape than a man. It was lengthened, with very marked prognathism, flattened and indented laterally, as if the cheeks had been elevated by a blow from the hatchet on each side” (Mammis). This unfortunate side effect was caused by the individual’s tongue growing abnormally large—a symptom of acromegaly.

those with gigantism also suffered from some type of mental incapacity due to their struggle or inability to articulate recognized language. This will be further explored in Chapter 3 in relation to the characterization of the Creature in the 1931 film.

During Shelley's lifetime, doctors and scientists viewed those with gigantism or acromegaly as abnormalities that needed to be studied instead of treated. The general public saw them as curiosities and freaks to be viewed for entertainment and pleasure, resulting in many individuals with gigantism or acromegaly becoming attractions within circuses or freak shows.<sup>19</sup> One example of this is the "Irish Giant" Charles Byrne. Born in Scotland in 1761, Byrne would eventually travel Europe while charging admittance for onlookers to awe over his abnormally large body. While some reports document Byrne as being the same height as the Creature, it is now known that he was actually 7 ft. 7 in. After Byrne's death in 1783, Byrne's body was meant to be buried at sea, but instead was acquired by Scottish surgeon and anatomist John Hunter (Quinn).<sup>20</sup>

---

<sup>19</sup> Popular in the Victorian Period, Freak Shows were exhibitions that charged admittance to view their display of those of non-normative embodiment such as giants, dwarfs, strong men, and bearded ladies. Examples include P.T. Barnum and Bailey Circus. For more see Rosemary Garland Thomson *Freakery: Cultural Spectacles of the Extraordinary Body*.

<sup>20</sup> Since his death, the body of Byrne has been on display in the Hunterian Museum at the Royal College of Surgeons, ignoring calls to respect Byrne's wishes and arguing that his body serves an important educational and research value. The Hunterian is under renovations until 2021, and it is unclear if Byrne's skeleton will be on display when it reopens. While Byrne is a popular example of a skeleton acquired by scientists after death, another example of this can be found in the Mutter Museum's giant, which I personally traveled to Philadelphia to view and study how the bodies of giants were presented to the public in the 19<sup>th</sup> century. The giant was dedicated to the institution under the condition that no inquiry ever be made into the identity of the giant. This will be further explored in Chapter 3.

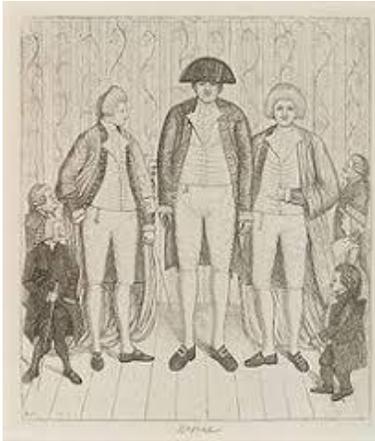


Figure 2. 1



Figure 2. 2



Figure 2. 3

Shown in Figure 2.1 and 2.2, Charles Byrne is certainly the largest individual depicted within the portrayals. He is also arguably the most famous giant of Mary Shelley's time. However, in addition to his excessive height it is important to note the way Byrne is dressed. He is not depicted as a "savage other" or cheap commodity. Instead, he is dressed in suits and fine clothing, distinguishing him as a member of a refined society, even if he is abnormally large (Stanback "Frankenstein's Creature in Medico-Scientific Context," n.p.). The portrayal of Byrne as an English gentleman suggests 18<sup>th</sup> century society's lack of fear or anxiety towards those of gigantic stature. The presence of their bodies seemed to spark curiosity, not fear. The frontispiece from Shelley's 1831 novel, Figure 2.3, portrays the Creature, presumably after his animation, on the floor of Victor's laboratory. Although the Creature is on the floor instead of standing, we can still see the presence of acromegaly in his hands and feet. Furthermore, even though the Creature is not dressed as Byrne, his body is muscular and void of scarring or lacerations.

Although the stature of the Creature denotes him as "other" even from distances of a half mile, he is always met with fear, excluding Captain Walton's reaction of intrigue and curiosity. Recalling portrayals of giants such as Charles Byrne as gentlemen, there must be additional physical characteristics that are only visible close-up that explain the reactions of terror, horror,

and disgust the Creature is met with in the novel. For example, blind De Lacey welcomes the Creature into his cottage until Felix, Safie, and Agatha return and serve as mediums to interpret the physical appearance of the Creature. Shelley writes,

‘Great God!’ exclaimed the old man, ‘who are you?’ ‘At that instant the cottage door was opened, and Felix, Safie, and Agatha entered. Who can describe their horror and consternation on beholding me? Agatha fainted; and Safie, unable to attend to her friend, rushed out of the cottage. Felix darted forward, and with supernatural force tore me from his father, to whose knees I clung: in a transport of fury, he dashed me to the ground, and struck me violently with a stick. I could have torn him limb from limb, as the lion rends the antelope. But my heart sunk within me as the bitter sickness, and I refrained. I saw him on the point of repeating his blow, when overcome by pain and anguish, I quitted the cottage, and in the general tumult escaped unperceived to my hovel. (135)

The Creature did not speak after De Lacey’s children entered the cottage, nor did he attack them. Their responses of fear, disgust, and hatred would be warranted if he did. What could have caused such an extreme reaction in those who had only just seen the Creature? The Creature’s stature—even an abnormally large stature—would not incite this level of repugnance and fear.

Perhaps the reactions of the cottagers could be reasoned away if they were isolated incidents. However, the Creature is constantly met with reactions of fear or repulsion. The man in the woods shoots the Creature even after the Creature has saved his companion from drowning. Victor himself is repulsed at the appearance of the Creature, stating,

but now that I had finished, the beauty of the dream vanished, and breathless horror and disgust filled my heart. Unable to endure the aspect of the being I had

created, I rushed out of the room, and continued a long time traversing my bed-chamber, unable to compose my mind to sleep. (Shelley 57)

Recall that Charles Byrnie was portrayed as a refined and eloquent gentleman. The Creature's 8-foot height would not have been enough to cause these intense reactions of disgust within a society who marveled over the likes of Charles Byrnie. Therefore, there must be additional physical characteristics of the Creature besides his abnormally large stature that provoke this level of reactions from onlookers.

When the Creature kidnaps Victor's brother, William, the child "struggled violently" and calls the Creature a "hideous monster," an "ogre,"<sup>21</sup> and an "ugly wretch," claiming the Creature wished to eat him or tear him to pieces (142). While struggling violently could be assumed the natural instinct for a child being kidnapped, his distinction of the Creature as an ogre and the accompanying fear that the Creature meant to eat him instead of simply kill him denotes yet another instance of the Creature's physical appearance inciting extreme reactions. The abnormal stature of the Creature might evoke extreme reactions of fear in the context of fairy tales if he were classified as an ogre as William exclaims. However, Williams reaction is still more extreme than warranted if the only embodied difference of the Creature was his abnormal stature. I would suggest that it is the appearance of the symptoms of yellow fever on the body of the Creature that causes such responses.

### **Yellow fever**

To understand these reactions, we must turn to Victor's description of the Creature, which should be noted also caused Victor to flee his laboratory. In the first detailed physical description of the Creature, Victor recounts,

---

<sup>21</sup> An ogre is a man-eating giant, popular in fairy tales and folklore.

I saw the dull yellow eye of the creature open; it breathed hard, and a convulsive motion agitated its limbs... His limbs were in proportion, and I had selected his features as beautiful. Beautiful! —Great God! His yellow skin scarcely covered the work of muscles and arteries beneath; his hair was of a lustrous black, and flowing; his teeth of a pearly whiteness; but these luxuriances only formed a more horrid contrast with his watery eyes, that seemed almost of the same color as the dun white sockets in which they were set, his shriveled complexion and straight black lips. (Shelley 57)

Again, scholars such as Fuson Wang would suggest that the above description fails to provide a concrete depiction of the Creature, instead forcing the reader to sort through a fog of contrasting descriptions without ever clarifying his entire form. The Creature's "dull yellow eye" turns to "watery" and then "almost the same color as the dun white sockets in which they were set." However, I believe Shelley's "wandering eye" when describing the Creature only lends itself to increasing our anxiety accompanying his presence—especially in terms of Shelley's 19<sup>th</sup>-century readers. Although Shelley does not state outright that the Creature has yellow fever, Shelley is able to conjure discomfort and anxiety from her readers familiarity of the symptoms. The Creature's dull yellow eyes, yellow skin, and shriveled complexion allude to symptoms of the very real disease of yellow fever.

A disease that remains incurable today has a dark history of epidemics and outbreaks that left doctors confounded and populations diminished. Some sources record the first outbreak in the United States during the 1690s, less than 100 years after the founding of Jamestown,<sup>22</sup> while others state there was a quarantine in Boston in the late 1640s (The College of Physicians of

---

<sup>22</sup> First permanent English settlement in America.

Philadelphia). Furthermore, yellow fever was not confined by geographical boundaries, nor was it contained within certain ecological zones since the disease plagued civilizations in Europe, Africa, and the Americas well before the 1600s. A definitive emergence date for yellow fever is not available, then, due to the transatlantic nature of the disease, as well as the deterioration or loss of medical records over time, the fall of civilizations and corresponding erasure of records, and the lack of scientific or medical knowledge that prevented individuals from identifying the disease when it was present.

It is difficult to frame diseases during the colonial period due to the breakdown of previously untraversed barriers, but this only adds to the anxiety and fear of yellow fever during the time. Pathogens that plagued European cities could not travel across the Atlantic without a host. Populations were safe from outside pathogens as long as those carrying them—invaders, if you will—stayed within their geographic boundaries. However, once the age of exploration began, so also began an unthought of and unforeseen genocide of all bodies who were “other” in nationality or geographic origin. Explorers, mainly white European males, unknowingly carried the deadliest and most powerful weapon for claiming the “New World” within their bodies. Pathogens that were safely tucked away within European hosts who had built immunity to their devastating attacks spread through native populations like wildfire. Likewise, yellow fever was then transported back to Europe with imperial explorers. While Europe became fascinated with the bodies of foreign individuals newly discovered in this age of exploration—a fascination that would eventually manifest in the form of freak shows and side shows—the real “body” to be feared was the microscopic stowaway of the pathogens and microbes that hid in the bodies of immune European settlers. These pathogens would bring death and destruction to any who lacked antibodies and immunity. The sporadic and unpredictable nature of outbreaks, coupled

with the uncertainty of causation, added to the anxiety and fear surrounding yellow fever while simultaneously breeding a deep suspicion of the “other”—those who either exhibited symptoms of yellow fever or differed from that society’s embodied norm. This is further explained within *Romanticism and Colonial Disease*, which states,

Disease representations during the colonial period are triangulated, as expressions not only of the interaction between different groups of people (classes, societies, genders) but also of the interaction of human beings with a dynamic and changing world of microbes and parasites. (Bewell 4)

Different societies were grappling with new diseases in the sense that individuals were being exposed to pathogens that had previously been contained within certain climates and biospheres. Bewell goes on to argue that disease profoundly structured the experience of individuals in colonial times “both as a metaphor and as reality. For different people at different times, it was an age of epidemiological crisis” (Bewell 2).

Disease had the power to incite “total social collapse,” as it destroyed the bodies of women, children, and the strongest warriors. Charles Rosenberg remarks,

The negotiations surrounding the definition of and response to disease are complex and multilayered. They include cognitive and disciplinary elements, institutional and public policy responses, and the adjustments of particular individuals and their families. Involved at all levels is the doctor-patient relationship...disease can be seen as a dependent variable in such a negotiated situation; yet, once agreed upon, it becomes an actor in that social setting, legitimating and guiding social decision making. (Rosenberg and Golden xxi)

Rosenberg argues that the foundation of disease response is the doctor patient relationship, stemming from patient's trust of their physicians to treat their afflictions. Therefore, it is the doctor-patient relationship that also informs responses of the general public to a disease. If a doctor could not treat an affliction, the anxiety of that society would fester and grow until a proper treatment could be formed.

Following Rosenberg's line of reasoning, I will explore documents from the Mutter Museum and Philadelphia College of Physician Library Archives that give evidence to the anxiety surrounding yellow fever, as well as the need to discover a way to contain the disease. These documents will also touch on each of the elements of disease listed by Rosenberg, including explorations of the doctor-patient relationship, public policy responses, and the ever increasing need to find suitable treatment. Records from the city of New Orleans Public Library will also be used.

It was discovered in the 20<sup>th</sup> century that yellow fever is transmitted by the *aedes aegypti* mosquito and is most prevalent in areas that are suitable for the breeding of these mosquitoes and also lack access to modern medicine or fail to implement modern public health practices. However, the cause and treatment of yellow fever was unknown to pre-20<sup>th</sup>-century societies, which includes laymen, public officials, religious leaders, scientists, scholars, and members of the medical community. The uncertainty surrounding yellow fever is proven by the varied routes of treatment and beliefs for prevention as well as the noticeable absence of a cure tied to the disease. For example, the ninth edition of *Encyclopedia Britannica*, released in 1885, prescribed a treatment which consisted of "vigorous measure to 'purge the infection: doses of ipecacuanha to in-duce vomiting, castor oil to loosen the bowels, and enemas of cold water with turpentine to expel gas" ("Yellow Fever"). Note that this prescription of treatment aimed to purge the disease

from the body.<sup>23</sup> Whether by route of the esophagus through emesis or the gastrointestinal tract through diarrhea and flatulence, professionals aimed to expel the disease from the body instead of fight it internally. Physicians could not cure the disease, and those who became sick were subjected to ineffective treatments that attempted to flush or purge the infection from the body.

Contributing to the fear and anxiety associated with yellow fever is the fact that there was no consensus on the best form of treatment. The way a physician would treat an outbreak in England differed from the way physicians would administer a treatment in New Orleans. In fact, the way physicians treated an outbreak on the same city street would differ from physician to physician. These are the medical responses to yellow fever that Mary Shelley and her contemporaries would have known, and the simple fact is that nothing was working. The fear of yellow fever was deeply rooted in the sense that those society expects to heal them—physicians, scientists, priests—were unable to do so. Much like anyone who gazed into the “dull yellow eyes” of Frankenstein’s monstrous creation and fled, those who witnessed yellow fever attack their family, friends, or communities feared the disease. The yellow eyes and jaundiced skin would be a tell-tale sight that registered fear and anxiety within those who had seen it before—and a sense of “otherness” for those who had never witnessed the manifestation of yellow fever. Although yellow fever caused the appearance of ghastly physical symptoms such as yellow skin or yellow eyes, the fear and anxiety accompanying yellow fever also stemmed from the inability of leading scientists, doctors, and even public officials to pinpoint a cause, transmission mechanism, or treatment for yellow fever.

---

<sup>23</sup> Note that vomit inducing drugs were used in order to treat one of yellow fever’s symptoms, nausea. Other symptoms include jaundice, which cause the whites of the eyes to turn yellow, and liver damage, which can result in black bile (“Yellow Fever”).

To truly understand the fear that yellow fever would have caused in societies at Shelley's time, we must consider both the transcontinental nature of the disease as well as the responses of specific areas and communities. Shelley's hideous progeny presents with the physical symptoms of the disease that swept across not only Europe but the world, much of the time on the backs of European explorers like the character of Robert Walton. The first outbreak of yellow fever recorded was in central and coastal South America after the Spanish conquest in the 16<sup>th</sup> century. From there the disease travelled to not only the tropical and subtropical regions of the Americas, but as far as Philadelphia and Boston (Kotar and Gessler 12). By the end of the 19<sup>th</sup> century, yellow fever had traversed the globe. Due to the transatlantic nature of yellow fever, we can analyze it in the context of Romanticism and colonial disease. The feelings of fear and anxiety experienced in a society in New Orleans in the 19<sup>th</sup> century would mirror the same responses to a yellow fever outbreak in Europe in the 19<sup>th</sup> century. The geographical location and treatments will differ, but responses to the disease remained the same.

Yellow fever plagued communities within European and American society. In the summer of 1793, the city of Philadelphia lost almost 10% of its population as refugees from an outbreak on the island of Santo Domingo flooded the city. The city had known sporadic outbreaks before, but 5,000 people died between August 1 and November 9, 1793 (Historical Society of Pennsylvania). The uncertainty in treatment and lack of knowledge of the cause of yellow fever is further shown through the report of Dr. Benjamin Rush and other leading medical professionals of Philadelphia in 1797 as they listed recommendations to the city in an effort to escape the grip of yellow fever. I transcribed this document in 2018 at the archives of the Philadelphia College of Physicians. In the document, dated December 1797, Rush recommended that city officials prevent imports from parts of the world such as the West Indies where the

disease “prevails”; remove all debris from streets, gutters, and other areas of the city since these led to “putrefaction in warm weather” and cause the most “frequent cause of the disease in all countries;” appoint physicians to inspect all areas that are susceptible or “capable by putrefaction of producing the disease;” frequent washing of “all impure parts of the city in warm and dry weather;” and prevent ships from docking near the city from June through October.

Dr. Rush’s recommendations to the city of Philadelphia emphasize a lack of knowledge concerning the transmission method of the disease as well as the lack of a cure as evidenced by the wide-ranging implementations. Furthermore, it is pertinent to note these recommendations were suggested in 1797, four years after the city’s outbreak. Dr. Rush and his contemporaries left no stone unturned, even suggesting that the ports near the city be shut down during certain months. Because Philadelphia is a port city, this would have resulted in a major economic hit and reveals the lengths city officials and medical professionals were willing to traverse to prevent another outbreak.

Over 60 years later, little progress had been made in terms of curing or understanding yellow fever. Further south in New Orleans, Louisiana, another major port city, residents were consistently experiencing their own yellow fever outbreaks during the summer months. Documents from the New Orleans Public Library report that over 13,000 people died from yellow fever between the years of 1853-1857. However, the geographical area was familiar with the disease as “the first record of yellow fever on the lower Mississippi appeared at Biloxi, 90 miles from New Orleans, in 1702” (Kotar and Gessler 13). An unpublished document found in the archives of the Philadelphia College of Physicians titled “The Inaugural Essay on Yellow Fever Presented to the Faculty of the Philadelphia College of Medicine for the Degree of Doctor

in Medicine for Stephen Cheeks of New Orleans” is the “thesis” of a medical student completed on June 1, 1857.<sup>24</sup>

In the document, Cheeks outlines and explains the various preferred treatments of yellow fever and results from his time shadowing three separate doctors in New Orleans in the year 1857. Cheeks states,

It has therefore been my unhappy lot to have been thrown amidst this all powerful of human diseases and witness it from its earliest symptoms to the last moments of life...I shall not rely on my own individual experience but with the aid of some of the most eminent men of the South of whom I shall make but too frequent quotations.

It is important to note the language Cheeks uses to begin his thesis, a document that would be submitted for evaluation to his superiors. Instead of being grateful for the opportunity to work alongside established medical professional in treating the disease, Cheeks is instead unhappy, almost sorrowful, that he was witness to the suffering of those with yellow fever. As an aspiring physician, this “unhappy lot” could also be attributed to Cheeks’ inability to cure his patients. Cheeks goes on to describe the circumstances surrounding the yellow fever outbreak in New Orleans stretching from 1853 to 1857. Recall that over 13,000 people died from yellow fever in New Orleans from 1853-1857. The year following Cheeks’ return to Philadelphia, 1858, nearly 5,000 people died of yellow fever in New Orleans. Therefore, Cheeks’ thesis material stems

---

<sup>24</sup> It is important to note the correlation between Cheeks and Rush. Although Rush died in 1813, he was a leading doctor and public figure in Philadelphia-especially in terms of yellow fever treatment and outbreak control. Cheeks was being educated at the College of Physicians in Philadelphia, and would have been educated or at least exposed to Rush’s public health measures as well as treatment for yellow fever. Furthermore, Cheeks was practicing under established physicians within New Orleans. These physicians would have been familiar with and educated on various treatments for yellow fever since the disease had been present in the area for over a century.

from an overwhelming outbreak of yellow fever. These statistics also illustrate the sporadic and unpredictable nature of outbreaks previously discussed.

Cheeks takes care to describe weather and various public health concerns such as the cleanliness of the streets and canals leading up to the outbreaks. Concerning the treatment of the disease, Cheeks states,

So much has been said in relation to the treatment of this disease that I hardly know what to say or recommend. Quinia [used to induce vomiting] has been the favorite medicine ever since the disease was known and so highly has it been recommended that many of the physicians look at it as the only medicine. I believe it is used too much by the southern practitioners. At the same time, I think it is a valuable medicine.

The lack of understanding of the medical community surrounding yellow fever is highlighted by Cheeks' own uncertainty in knowing what to recommend as treatment after shadowing several leading physicians of the area. This is further exemplified by the large number of deaths from yellow fever reported in the city each year. Cheeks shadowed several physicians while in New Orleans, each of which he would go on to describe as using different procedures and protocols to treat the symptoms of yellow fever. The fact that Cheeks still doubts the proper or best form of treatment at the conclusion of his shadowing experience further illustrates the overall lack of consensus for treatment of the disease within the medical community— in Philadelphia, New Orleans, and England.<sup>25</sup>

---

<sup>25</sup> Cheeks continues to describe how one physician believes quinia should be administered at the onset of symptoms, while another asserts the drug should be given at the earliest signs of the disease in an attempt to prevent subsequent stages. However, both physicians had released contradicting recommendations in pamphlets to the medical community. The popularity of the vomiting inducing drug, as well as the inconsistency in its use, dosage, and effectiveness within the medical community prove the lack of understanding of knowledge of this disease.

Recalling that over 13,000 people died from yellow fever during Cheeks' study, it is important to note that these deaths were not distributed evenly over the span of five years. They are as follows: 1853:7849 deaths; 1854: 2425 deaths; 1855: 2670 deaths; 1856:74 deaths; 1857: 200 deaths; 1858: 4845 deaths. The unpredictable nature of yellow fever coupled with the lack of understanding in the medical community created an environment where yellow fever truly became "monstrous." The fear and anxiety surrounding yellow fever fueled by the large number of deaths and inability of physicians to treat the disease offer an explanation for the extreme reactions of the Creature—especially if he was perceived as contagious or carrying the yellow fever pathogen. This yellow giant swept across geographic barriers as small as a river or as large as an ocean, similar to the Creature in portions of Shelley's novel.<sup>26</sup> Yellow fever infected every age group, socioeconomic level, ethnicity, street corner and capital building without reproach until after 1900 when it was discovered that yellow fever is transmitted by the *aedes aegypti* mosquito, allowing for public health measures such as limiting the breeding grounds of mosquitoes that prevented an exorbitant death toll.

The fear of the unknown, compounded with the fear of death within the communities that were ravaged by yellow fever, is what enabled Shelley's Creature to strike fear at only the mention or sight of symptoms of this powerful disease. The novel ends with the Creature floating across the waves on an ice-raft after declaring his impending self-inflicted death. This ending of the novel not only highlights the isolation that drove the Creature to suicide, but also mirrors the isolation of those who had yellow fever. Just as there was and remains no proper place for those of non-normative embodiment, the Creature never found community, acceptance, or a cure.

---

<sup>26</sup> Recall the Creature bounding across the ice in the first description by Captain Walton. Furthermore, the Creature follows Victor across geographical borders and barriers throughout the novel.

### Chapter 3

#### 20<sup>th</sup>-Century Characterizations of Mental Disability through Shelley's Creature and the 1931 film *Frankenstein*

Dr. Max Theiler created the first effective yellow fever vaccine in the 1930s and followed this with a much more effective version known as 17D in 1938. His discovery would earn him the Nobel Prize in Medicine in 1951—the only Nobel Prize ever awarded for a vaccine against a virus (Norrby n.p.). In other words, by 1931, yellow fever was no longer a global source of fear or anxiety. Especially within the Western world, the Creature could no longer bear the physical symptoms of yellow fever to garner fearful reactions. Therefore, the Creature was reimagined one-hundred years after the publication of Mary Shelley's novel in such a way that he reflected the anxieties and fears of a 20<sup>th</sup>-century audience.

With a little more than a century between Shelley's original 1818 publication and James Whale's 1931 film, one must wonder why the physical appearance of the Creature evolved in such a way. Even though the yellow fever vaccine would not be invented until the 1930s, science and medicine would have advanced enough—especially within developed countries—that yellow fever would not have been common among the population. Therefore, a more dramatized version of the disease was needed to garner the same fearful reaction. While Shelley's novel gestures to the presence of yellow fever on the Creature's body, filmmakers adjusted the Creature's embodied differences for 20<sup>th</sup>-century viewers. Yellow fever had lost its frightening appeal, and therefore no longer served as a source of anxiety for audiences. I argue that the differences in the Creature's appearance between the 1831 and 1931 depictions offer a space to explore shifting attitudes towards disease, disability, and science.

## James Whale's 1931 Creature



Figure 3.1



Figure 3. 1



Figure 3. 2

The 1931 film *Frankenstein* is loosely based on Shelley's novel. The influence of galvanism remains, but the rest of the film assumes creative license. Character names, geographical settings, and dialogue all change. The only constant between Shelley's Creature and Whale's is his abnormal height. In the 1931 film, Boris Karloff portrays the Creature with a flat head, bolts in his neck, and thin skin with sunken features, as seen in Figure 3.1. The original poster for the 1931 film, shown in Figure 3.2, portrays the Creature as somewhere between yellow and green. In other images, the 1931 Creature turns more definitively green with several more lesions and scars, especially on his face (see Figure 3.3). Shelley's original readers did not need a "monster" or "villain" who was green with a flat top head and bolts sticking out of his neck to feel fearful; references to symptoms of yellow fever would lend themselves to inciting fear in Shelley's original audience. However, even though the yellow fever vaccine would not be invented until the 1930s, science and medicine had advanced enough—especially within the countries producing and screening the film—that yellow fever would not have been common among the population. Therefore, a more dramatized monster or version of embodied difference was needed to garner the same fearful reaction. Thus, the Creature turned green.

Although the Creature loses his yellow skin between the novel and the film, he maintains his abnormal stature. In the 1831 novel and 1931 film the Creature is portrayed as a giant. The 1831 novel by Shelley states, “It was with these feelings that I began the creation of a human being. As the minuteness of the parts formed a great hindrance to my speed, I resolved, contrary to my first intention, to make the being of a gigantic stature; that is to say, about eight feet in height, and proportionably large” (Shelley 54). While the stature of the Creature compared to Victor Frankenstein is difficult to surmise based on the 1831 frontispiece (see Figure 2.3), we know from the text above that the Creature was eight feet tall.

While the height of the Creature is the only constant between the film and Shelley’s original novel, the “spirit” of the text remains: the vessel of the Creature serves to display changing standards of non-normative embodiment while the scientific foundations of the story are tweaked to account for the advancements of science between adaptations. The actual story of the 1931 film is prefaced by a warning to the audience. Much as Percy Bysshe Shelley’s 1818 “Preface” claims the scientific foundations of the tale,<sup>27</sup> a man appears on stage and issues the following warning in Whale’s film:

It would be a little unkind to present this picture without a little word of friendly warning. We’re about to unfold the story of Frankenstein,<sup>28</sup> a man of science, who sought to create a man after his own image, without reckoning upon God. It is one of the strangest tales ever told. It deals with the two great mysteries of creation, life and death. I think it will thrill you, it may shock you, it might even *horrify* you. So if any of you feel you don’t care to subject your nerve to such a strain, now’s your chance to—well, we’ve warned you. (Whale)

---

<sup>27</sup> Recall Darwin’s approval of the scientific foundations of the novel

<sup>28</sup> Victor Frankenstein, the Creature’s creator in Shelley’s novel, is now Henry Frankenstein in the 1931 film

A sly grin then appears on the messenger's face before the screen cuts to black and the sounds of *Dona eis, Domine: et lux perpetua luceat eis*<sup>29</sup> fill the air. In the same way that Percy Shelley added to the novel's suspense by reminding readers of its scientific foundations, the passage above also adds to the suspenseful nature of the film. The film then opens with Frankenstein and his henchman—who was also nonexistent in the novel—stealing bodies from graves and gallows to form the Creature.

The first glance of the Creature comes after Frankenstein manages to animate the corpse when the Creature's acromegaly-reminiscent hand twitches and Frankenstein's famous words of "It's alive!" fill the air. The first full body image of the Creature is when he enters backwards through a doorway—a tactic used by filmmakers to not only heighten the suspense of the Creature's first appearance but also to demonstrate his abnormal stature as he fills the frame. When the Creature does finally reveal his face, it is a far cry from Shelley's original description of the Creature as having yellow skin that "scarcely covered the work of muscles and arteries beneath," "lustrous black hair that flowed," and "pearly white teeth" that contrasted with his eyes (Shelley 57). Now, the Creature has short black hair, a flat-top head, bolts protruding from his neck, and eyes that are hidden by his drooping lids (see Figure 3.1). While these characteristics differ from Shelley's original description, they serve the same purpose—to denote the Creature as non-normative to audiences.

Although the Creature had lost his yellow skin in the 1931 film, his presence still causes reactions of horror. While arguably not the same level of repulsion expressed in the novel by the cottagers or even Frankenstein when he flees the laboratory after the Creature's animation, the reimagined 1931 Creature is met with reactions of more fear than disgust. Elizabeth screams in

---

<sup>29</sup> Prayer asking western God to hasten the souls of the faithful departed in Purgatory to their place in Heaven

horror when the Creature crawls through her window on her wedding day, fainting soon after. Remarkably, Frankenstein makes no comment on the physical appearance of his creation, unlike within the novel, but instead responds to the Creature with intrigue or even admiration. While it is possible to attribute Victor's lack of comment in the film to a difference in medium, it is assumed that Victor's strong repugnance of the Creature in Shelley's novel would translate to the screen. Furthermore, Maria, a young village girl, chooses to ask the Creature to play with her—unlike young William Frankenstein in the novel, who calls the Creature an “ogre” and exclaims he fears being eaten. Recalling that the Creature's abnormally large stature denoted him as “other” within the novel, while the presence of yellow fever produced reactions of horror, we must dig deeper into both the physical and mental characteristics of the Creature to determine the source of these extreme reactions within the film.

### **Mental Disability and Eugenics**

Perhaps the most obvious difference in the characterization of the Creature is in the area of speech: even though he was portrayed as eloquent and intelligent in the novel, in the 1931 film he loses the ability to speak. In Shelley's novel, the Creature reads works such as *Paradise Lost* and teaches himself to speak from observing the cottagers. However, in the 1931 film the Creature is reduced to a series of grunts and gestures for communication. He also fears fire and light, while the Creature of Shelley's 1831 novel states “I found a fire which had been let by some wandering beggars, and was overcome with delight at the warmth I experienced from it” (Shelley 104). The 1931 Creature also appears to be unable to control his non-normative body, as illustrated in the Creature's clumsy fighting within the film. Instead, Shelley's Creature bounds across the ice, slips from the grasp of angry villagers, and even jumps out the window of a ship to land on his ice-raft. While it is possible to argue these instances are only effects of acromegaly

or gigantism, 20<sup>th</sup>-century societies—both within America and Europe—still traditionally portrayed giants as respectable instead of savage or “other” as their fellow members of freak shows.<sup>30</sup> When these aspects are considered next to an earlier scene concerning the brain of the Creature, it becomes apparent the Creature is embodying characterizations of mental disability or mental illness.

In the film, when Frankenstein is assembling parts for the Creature, Fritz—Frankenstein’s hunchback henchman—is sent to Frankenstein’s old medical college to collect a brain. There are two specimens of intact brains on display, one labeled “normal” and the other labeled “abnormal.” Earlier, a professor had been lecturing and stated,

In conclusion, ladies and gentleman, here we have one of the most perfect specimens of the human brain to ever come to my attention at the university. And here, the abnormal brain of the typical criminal. Observe, ladies and gentlemen, the scarcity of convolutions on the frontal lobe as compared to that of the normal brain, and the distinct degeneration of the middle frontal lobe. All of these degenerate characteristics check amazingly with the history of the dead man before us, whose life was one of brutality, of violence, and murder. (Whale)

Finding no brain suitable or well preserved enough from the grave, Fritz attempts to steal the “normal” brain from the university. However, after dropping the jar and destroying the brain, he is forced to take the brain labeled “abnormal.” This distinction of the “abnormal” brain as well as its description of belonging to a “typical criminal” becomes important when exploring the Creature’s mental differences and characterizations within the film next to the contemporaneous

---

<sup>30</sup> Portrayals of Captain William George Auger, known as the Cardiff Giant, was a giant who traveled with the Barnum and Bailey Circus. He had been employed as a police officer for Queen Victoria, and is always portrayed in suits and a top hat—consider them updated versions of the portrayals of Charles Byrne from Chapter 2. For more see The Human Marvels “George Auger-The Mighty Cardiff Giant.”

stigmatization of the mentally disabled. The various treatments of those with mental disability as well as their seclusion from the public reflects negative attitudes towards those with disability in the 20<sup>th</sup>-century society—the society that inspired James Whale’s rendering of the Creature. These negative portrayals are evident in the Creature’s inability to speak. In 1931, as in 1818, the Creature is not feared because he is a giant; this physical embodiment would cause him to be viewed with interest and intrigue. Instead, the fact that he appears mentally disabled or mentally ill is what made him “monstrous” for 20<sup>th</sup>-century audiences.

In order to understand the social anxiety and stigmas surrounding those suffering from mental disabilities, a brief history of mental disability and mental illness must be explored. The long and complex beliefs, both religious and scientific, surrounding mental disability are riddled with misunderstandings and misinterpretations. Even in the 21<sup>st</sup> century, science continues to study the field and report new findings at astronomical rates, and suggested treatments remain largely theoretical just as they did in the past—although the methods and research behind those theories are arguably more advanced. Much like there was no set treatment for yellow fever in Mary Shelley’s day, there remains little consensus on the most appropriate and successful treatment of those who have mental illnesses or possess mental disabilities.

Historically, various forms of mental illness have been categorized or construed as madness. The *Oxford English Dictionary* provides several definitions for “madness” one of which states: “the state of having a serious mental illness, extremely foolish behavior, a state of wild or archaic behavior” (1398-1990). In *Madness: A Brief History*, Roy Porter describes the historical context and “causation” that societies believed were at the root of madness. Porter states that as early as 5000 BC, doctors were drilling holes in the skulls of those plagued with madness in order to allow devils or spirits an escape from the body of the afflicted, similar to the

lobotomies of the 20<sup>th</sup> century (10). This belief of mental illness or disability being caused by demonic possession coincides with Christian views of the time, as there are several recordings and references to madness in both the Old and New Testament. In both cases, the soul of a man is the cause of his madness. In other words, a soul possessed by the Holy Spirit would be mentally sound while a soul possessed by Satan or evil spirits would be mad. This is exemplified by Nebachanezzar eating grass like a cow or Jesus casting out the evil spirits, who then possessed the bodies of pigs and forced them to run off a cliff. While yellow fever and even gigantism were viewed as diseases and disabilities that did not discriminate in the bodies they took over, the presence of mental illness or disability within a person was blamed on the individual's lack of religious faith or punishment for a religious misstep. The religious influence on society's understanding and acceptance of mental disabilities continues even today.

According to Porter, medicalized madness excluded the supernatural (37). This is especially the case from the late 18<sup>th</sup> century on. Therefore, the anxieties of the medical community towards mental disability differed from the social anxieties towards it. However, just because Hippocratic medicine excluded the supernatural does not mean they correctly identified the cause of mental illnesses or disability. Early medicine determined the cause of disease to be based on the balance of humours within the body, and mental health was no different. A shift in the humours (blood, phlegm, melancholy, and cholera) was believed to cause a shift in mental sanity (Porter 37). In 20<sup>th</sup>-century America, the treatment of the mentally ill was not much more consistent nor fully understood. For example, one physician—Henry Cotton<sup>31</sup>—believed that

---

<sup>31</sup> Henry Cotton was an American psychiatrist who was also the medical director of New Jersey State Hospital from 1907-1930. While there, he performed over 645 treatments in order to cure his mentally ill patients. Most popularly, he believed that pulling a patient's teeth would cure their mental illness or disability. For more see Laura Martisiute's "The Horrifying "Cures" Of Dr. Henry Cotton — America's Biggest Quack."

untreated infections caused mental illness and would extract patient's teeth, ovaries, tonsils, and spleens in an effort to "cure" their mental illness by removing the infected body part much like physicians would remove specific humours (Larson para. 34). More extreme forms of treatment included lobotomization, in which the connections between the prefrontal cortex and the rest of the brain were severed by drilling holes in the skull. It is now known that lobotomization, developed in 1935, produced little improvement in patients with many who underwent the procedure experiencing cognitive decline (Larson para. 34). In spite of the lack of documentation of improvement in patients, almost 40,000 lobotomies were performed in the U.S. in the 20<sup>th</sup> century (Larson para. 35).

Another issue with classifying the cause of mental disability is due to the frustration of categorizing the various ways mental disabilities present themselves. For example, Porter writes,

Case histories from the Hippocratic writings onwards record mental abnormalities. In one, a woman is noted as being rambling in her speech and mouthing obscenities, exhibiting fears and depression and undergoing 'grief'; another woman, suffering anguish, 'without speaking a word . . . would fumble, pluck, scratch, pick hairs, weep and then laugh, but . . . not speak'. A case which reads like delusional melancholia, said to arise from black bile collecting in the liver and rising to the head, involved a condition which 'usually attacks abroad, if a person is travelling a lonely road somewhere, and fear seizes him'. (Porter 43)

Therefore, both those speaking too much and those speaking not enough—amongst other characteristics—could be labelled as mad. The passage above illustrates the frustrations involved in diagnosing mental illnesses as well as the inaccurate identification of their causes.

In terms of 1930s America, the social position of the mentally disabled and mentally ill was a bleak one. Unfortunately, the practice of confining those with mental disabilities or limiting the public areas they were allowed to inhabit was not new. In early 20<sup>th</sup>-century America and Europe, this confining took place in mental institutions or insane asylums. However, there are records as early as Plato in ancient Greece who wrote, “If a man is mad he shall not be at large in the city, but his relations shall keep him at home in any way which they can; or if not, let them pay a penalty” (Plato para. 29). As the insane or mentally deranged were the responsibility of family and friends, mental institutions became a pathway to shed the domestic responsibility or burden of caring for the mentally disabled, arguably without the guilt of locking them in a tower or dungeon. Porter states, “In urbanized Europe, and in North America, the rise of the asylum is better seen as not an act of state but as a side effect of commercial and professional society” (95). Porter goes on to state that the economic resources flowing through this commercialized and professional society encouraged people to buy certain services which had previously been provided by members of the family or at home. “Private madhouses” sold their services by arguing seclusion was therapeutic although it has already been stated that certain aspects of madness were known to attack abroad, especially if a person was traveling a lonely road somewhere (Porter 95). In other words, some argued that madness was brought on by seclusion, while others purported seclusion cured madness.

The industrialization of the American economy and the shift of domestic care for the mentally disabled also led to segregated care, based on socio-economic class. Mentally disabled patients from poorer families were sentenced to public insane asylums, while the wealthy could afford to lock away their disabled in more comfortable private country estates, far away from the probing eye of the public. The government’s responsibility of the mentally ill also paralleled an

increase in the criminalization of these individuals as they were housed in local jails due to the absence of proper treatment facilities (Larson para. 10). Treatments within these institutions ranged from electroconvulsive therapy (reminiscent of that previously discussed in conjunction with galvanism), which induces seizures through a series of electric shocks, “moral treatment” which exposed “patients” to “normal” behaviors such as physical labor, and forced sterilization which prevented said person from producing offspring (Larson para. 24). While there was not a cure for mental disability, the prevention of mental disability through forced sterilization was seen as a promising alternative. If mental disability was a disease like yellow fever, then sterilization was the much sought-after prevention.

The sterilization of those with mental illnesses or disabilities stemmed from the science of eugenics, which gained traction and popularity in the 20<sup>th</sup> century. The science of eugenics desired to improve the human race by controlling genes through the selective breeding of desirable traits (Kevles ix). Essentially, eugenics focused on creating a superior and ideal human form. Just one hundred years after Shelley’s use of galvanism within her novel to animate the Creature, filmmakers updated the scientific foundation of the tale to reflect this as well as include electrobiology and chemical galvanism as Frankenstein’s course of study. Just as Frankenstein selected certain corpses for what they could contribute to the Creature, 20<sup>th</sup>-century scientists became concerned with selecting and eliminating certain genes and DNA for what they could contribute to the human body.

When considering the abnormally large stature the Creature is maintained throughout the various adaptations, it is possible to argue that within the context of eugenics the physical trait of height must be considered positive or desirable. However, in practice, eugenics did not want extremes in all categories, but was more concerned with the elimination of “undesirable”

attributes. It has already been established through real-life giants such as Charles Byrne or Captain Auger that abnormal height did not incite fear or horror in onlookers, but instead awe and wonder. In keeping with the context of the 20<sup>th</sup> century, a stigma that those of abnormal stature also possessed an abnormal brain emerged. The side effects of acromegaly—which cause the lengthening of hands, feet, noses, ears, and tongues—caused sufferers to be labeled as mentally disabled due to their inability to communicate to “normal” society’s standards. Furthermore, there was a belief that these abnormal brains largely resided within criminals, brutes, or murderers. This is mirrored in the 1931 film, when it turns out that the brain labeled as “abnormal” belonged to a criminal. The coupling of these stigmatizations often resulted in the criminalization of the mentally disabled and giants who actually often possessed normal or above average levels of intelligence.

The word “eugenics” was first used by an English scientist by the name of Francis Galton in 1883, fifty years after Shelley’s second publication of *Frankenstein* (Kevles 2). The 1931 film gestures to this science through the selecting of the Creature’s body parts. The term “eugenics” originated from the Greek root that means “good in birth” or “noble in heredity.” According to Daniel Kevles, Galton chose the term in an effort to designate the science of “breeding” the human race. In the same way that ranchers breed a more desirable strain of cattle to be better suited to their environment, Galton believed the human race could make or breed “more suitable races or strains of blood a better chance of prevailing speedily over the less suitable” (Kevles 4).

The science of eugenics reached the height of its popularity in the early 20<sup>th</sup> century. For example, information scientist Joseph Tennis states that the subject of eugenics first appeared in the 7<sup>th</sup> edition of the Dewey Decimal Classification, published in 1911 (Tennis 1350). The appearance of eugenics as a category in the Dewey Decimal Classification (DDC) proves its

significance and popularity in the 20<sup>th</sup> century by denoting its position as a scholarly science being actively researched at the time. A 1950 change in the DDC would cause a disruption and reorganization within libraries, when eugenics was redefined from a biological science to a social science or history (Paul 643). Tennis states, “although it was once possible to say through the lens of the classification scheme that there are books published on eugenics as a science (specifically life science), it is no longer possible to do so” (Paul 643). What caused eugenics to be written about as a science, and then be switched to the stacks of social science?

Perhaps the greatest reason for eugenics falling by the wayside as a “real” science was the Nazis’ implementation of the theory in World War II through their desire to create a master race. Kevles argued in the 1980s that eugenics had justly “become a word of ugly connotations.” He went on to state that the aims of eugenics had become entangled with misconceptions with the even newer science of genetics. This sinister combination of misunderstanding and lack of ethical experimentation evident in the Holocaust produced “cruelly oppressive and, in the era of the Nazi, barbarous social results” (Kevles i). World War II lasted from 1939-1945. In a truly foreboding fashion, the seeds of the concepts of eugenics and exterminating those who failed to be categorized as normal is seen within Mary Shelley’s novel as well when Frankenstein chooses to not give the Creature a mate, musing that he could end the entire human race stating, “the wickedness of my promise burst upon me; I shuddered to think that future ages might curse me as their pest” (Shelley 166). However, James Whale’s film was released in 1931, eight years before the start of WWII. This exposes 20<sup>th</sup>-century society’s acceptance of eugenics and lack of anxiety or concern about its implementation until it reaches extreme forms—not the sterilization of the mentally ill or disabled, but the extermination of a race of normative bodies.

One of the Galtonian premises most evident in the 1931 film *Frankenstein* comes in the form of human genetic engineering. Consider this a molecular version of Frankenstein picking each physical trait his creature would possess. Instead of picking pieces of desired corpses and robbing graves, eugenicists would choose a living male and female with the desired trait in hopes that their offspring would possess said trait. This would later be more fully explored on the cellular level through genetics. Frankenstein wanted the Creature to be “of abnormal height and stature” so he stole long legs from cadavers as well as coordinately proportional body parts. Frankenstein crafted his “monster” on his butcher’s table to surpass the capabilities of the common man in the same way eugenicists (and geneticists) would eventually do in their labs. The science and technology were simply not available to Shelley (or to Frankenstein) in 1818 or 1831. Kevles writes, “Galton, innocent of the future, confidently equated science with progress. All around him the technology of the industrial revolution confirmed man’s master over inanimate nature” (4). In the same way, Victor Frankenstein equated science with progress as he blindly moved forward in selectively creating a “monster” that surpassed the human race. Galton, and eventually Hitler, believed he could create a “highly gifted race” of men based off of physical and mental traits being bred through selective marriages over consecutive generations. Galton also valued intelligence superiority over physical superiority and believed that those who did not meet the mental standard emerged as criminal, deformed, or mentally ill and should be disposed of (Kevles 4). This then strengthens the presence and influence of eugenics, as well as the symbolism of the Nazi agenda, in the 1931 film, when Frankenstein finds out from Dr. Waldman that the brain used in Creature was not only from a criminal, but also labelled as

“abnormal.”<sup>32</sup> Frankenstein is then convinced that the Creature must be destroyed, just as Galton would have been. Furthermore, the general success of Whale’s film proves that his audience—as well as himself—were not appalled by the underlying scientific currents of the film.

Furthermore, it is possible to explore the anxieties concerning those who embodied a mental disability in the 20<sup>th</sup> century in conjunction to the beliefs perpetuated by genetics and eugenics. There is a perception evident in the *Frankenstein* films that seems to echo a trend of portraying those with mental disabilities as embodying too much physical space. This is one explanation of the coupling of abnormally large stature with characteristics attributed to mental disability. However, it is pertinent to remember that Galton believed those with mental disabilities should be labelled as criminal and “disposed” of. While this perception of mental disability is atrocious, it would also lead to the mistreatment of those who embodied physical deviations from the norm but maintained “normal” mental functions. While varied, the ways in which these individuals were “disposed of” reveals 20<sup>th</sup>-century society’s anxieties and uncertainties towards those bodies that differed from the accepted standard—either mentally or physically.

Just as it is possible to explore the anxieties of the unknown concerning diseases through the Creature, it is also possible to explore anxieties of the unknown concerning scientific advancement—or when scientific experimentation goes too far. Just as Victor was unable to know what his creation would yield until after its completion, eugenicists were unable to predict the outcomes or long-term consequences of eugenic experimentation. This uncertainty concerning the outcome of Frankenstein’s creation is evident when in Shelley’s novel he loses

---

<sup>32</sup> These feelings of “otherness” towards those with mental disabilities are even gestured to in the later film *Young Frankenstein* when the brain used for the Creature is also labeled as “abnormal” and the Creature exhibits exaggerated stereotypical characteristics of those with mental disability.

control of Creature and states that it is “a thing such as even Dante could not have conceived” (Shelley 79).

While the anxieties explored differ in the 1831 novel and the 1931 film, the concept remains the same. Frankenstein’s Creature offers a unique lens to trace the anxieties surrounding non-normative bodies as well as scientific advancement. As science advances and society changes, the Creature will continue to shed or take on physical traits as well as be portrayed in different lights in each new adaptation. This will continue to be true concerning the various adaptations of *Frankenstein* yet to be explored.

## Chapter 4

### Exploring Racial Embodiment through Victor LaValle's *Destroyer*

In the 87 years between James Whale's 1931 film and Victor LaValle's 2018 graphic novel, *Destroyer*, many adaptations of *Frankenstein* were produced with varying levels of success and varying levels of divergence from Mary Shelley's original novel. As the 20th century drew to a close, anxieties concerning mental disability persisted in different forms. However, in addition to mental disability, a tension concerning black bodies grew within America. The 1950s and 60s ushered in the Civil Rights Movement, and increasingly, individuals were compelled to address racial segregation and stereotypes. It is important to note that anxieties toward a specific non-normative embodiment are not always cleanly resolved, like they were in the case of yellow fever and the production of a vaccine. Instead, it is likely that they are replaced with more pressing anxieties and fears that accurately mirror the cultural and historical moment that produced the Creature. Anxieties, fears, and stigmas towards those with mental disabilities were not resolved or extinguished between 1931 and the next adaptation of the Creature. However, within recent adaptations, there has been a trend for the Creature to embody anxieties concerning race, ethnicity, and gender. Specifically, Victor LaValle's *Destroyer* reimagines the Creature as an adolescent black male, Akai, and Frankenstein as a black female scientist, Dr. Baker. LaValle's graphic novel highlights anxieties not only concerning black bodies as a form of non-normative embodiment, but also of gender roles and technological aids for the non-normative human body, and the proper place for black bodies within normative society.

## LaValle's *Destroyer*

LaValle's adaptation begins where Shelley's novel ends—with the Creature somewhere in the Arctic. The body of the Creature appears to have aged since Shelley's description in 1831. As seen in Figure 4.2, the Creature's skin is no longer yellow or green, but instead possesses a greyish tint. However, the Creature's body still resembles the frontispiece from the 1831 edition of *Frankenstein* (Figure 4.1). The Creature's hair is no longer black, but his body is still muscular and lacks the scarring that was portrayed on the 1931 Creature (see Figure 4.3). His hands and feet still appear to possess the characteristic lengthening of acromegaly, and the Creature appears to be of abnormally large height still. The Creature is quickly incited to rage in the opening pages of the novel as a passing ship impales a whale, a possible reference to today's concerns of species endangerment and global warming, or an ode to Shelley's original novel by paralleling these images with the whaling ship that provided Victor passage. LaValle's novel includes several references to Shelley's original novel, but also adapts it for 21<sup>st</sup>-century audiences. LaValle crafts his own Creature, Akai, who appears somewhere between a cyborg and a 12-year-old black adolescent. Akai's mother, Dr. Baker—the reimagined Victor Frankenstein—is a black female scientist working at a predominantly white science corporation. Dr. Baker is not only forced to quit her job after becoming pregnant with Akai but must also later use her technological research to reanimate Akai after he is shot by police.



Figure 4. 1



Figure 4. 2



Figure 4. 3



Figure 4. 4

While Shelley's original Creature might appear adequate for a critique of science and technology in the 21<sup>st</sup> century, LaValle's truly original Creature, Akai, is reanimated using technology Shelley and succeeding adaptors of the novel would never have been able to consider. Referring to Figures 4.4 and 4.5, Akai appears to be a compilation of science horror and science fiction. His body is scarred, the lines resembling autopsy cuts, and his exposed muscles appear to be metal or steel instead of human tissue. His eyes are yellow once more (Figure 4.5), but 21<sup>st</sup>-century readers would not assume or even consider yellow fever as the cause as Shelley's (and possibly Whale's) audience would have. In the context of the 21<sup>st</sup> century, the Creature's yellow eyes would instead be an indicator of some type of technological aid such as augmented vision. Akai is not rebirthed from decomposing body parts or stolen from a grave. Instead, he is sustained by technology. Within the novel, LaValle states, "As the sciences make greater and greater leaps, the things that once seemed like myths and fairy tales become reality. Power over life and death will soon become commonplace. Artificial intelligence, artificial life—we are on the threshold of truly unnatural science" (16).

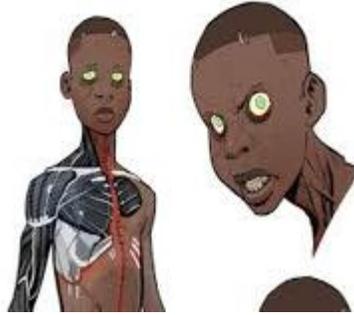


Figure 4. 5

The passage above exposes 21<sup>st</sup>-century anxieties concerning “natural” versus “unnatural science,” reminiscent of the 19<sup>th</sup>-century concerns previously discussed. Today, doctors are able to implement varying types of technological aids to sustain or increase the quality of human life. Within the next 10 years, it is predicted that aids such as augmented vision, exoskeletons, and even 3-D printed organs will be commonplace (Bohon n.p.). Already, facets of these advancements are infiltrating society, specifically through the disability community.<sup>33</sup> The barrier between the “natural” and “unnatural” is fading, but the distinction between normative and non-normative embodiment remains. There is a growing concern in relation to “unnatural” human forms and the need to categorize and distinguish the human from the non-human. Just as 18<sup>th</sup>-, 19<sup>th</sup>-, and 20<sup>th</sup>-century societies struggled to define the distinctions between normative and non-normative in the midst of scientific advancement, we now sit “between two restrictive movements to classify the human against the inhuman and the normal against the abnormal” (Wang 2). Those who are aided by technology that mimics the human form in physical presentation or function cause anxieties within normative populations. These anxieties stem from the inability to clearly distinguish man from machine, what is human from what is non-human. This need to establish a classification of human versus nonhuman then becomes important when

---

<sup>33</sup> The appearance of technology on bodily forms are seen most evidently within society through the disability community in the form of powered wheelchairs, prostheses, and even exoskeletons.

considering those whose human forms are most often aided by technology—the disabled population.

Artificial intelligence (AI) is a term used to describe the simulated intelligence in machines that are created and programmed to mimic the human thought process and actions (Frankenfield para. 1). The field can be traced back to as early as 1950s Britain when Alan Turing asked if machines could be created to think (Carrico para. 1). “Initially, AI was described as ‘the science and engineering of making intelligent machines’” (McCarthy para. 1). However, as the field changed, so did the definition and today AI is considered to be “a machine that has the ability to solve problems that are usually dealt with by us humans with our natural intelligence” (Andersen n.p.). Essentially, the goal of AI machines is to be able to perform and act based on the same rationalization that a human would. However, concern arises when it is understood that human rationalization is a product of past experiences and environmental factors. The consequences and outcomes of those experiences shape the human mind to understand future situations. Due to varied pasts, each human brain rationalizes different scenarios in different ways. Even if the most advanced forms of AI are able to replicate or mirror this function, there is a concern that AI will never truly be natural or organic, and a doubt that a functioning human brain can be produced through inorganic and non-biological means persists. “Artificial intelligence is based around the idea that human intelligence can be defined in such exact terms that a machine can mimic it” (Frankenfield para. 4). The fact that there are several different definitions of AI only further proves the evolutionary nature of the field as well as the need to define and understand exactly what AI is capable of.

The presence of AI in the body of Akai reflects growing concerns and anxieties about the increasing prevalence of advanced forms of AI in everyday life. Forms of AI can be found in the

cell phones we use (Siri) and the cars we drive (self-driving or self-parking cars). An article published in the *European View* by Goncalo Carrico, the Political Adviser for Innovation, Technology and Digital Policy at the European People's Party headquarters, argues that the progress of science and technology, specifically that of AI machines, should "always be driven with the human-centered perspective in mind, that is, one that seeks to augment human intelligence and capacity, and not to supersede it" (para. 1). The concern grows when one wonders what will happen if the "human-centered perspective" is not always kept in mind. Carrico goes on to suggest various policies to ensure that Europe becomes the global leader of AI development, which showcases the economic potential of AI machines.

What was once considered the topic of science fiction could soon become the topic of government proposals and contracts as science continues to develop at an astronomical pace. AI has the potential to transform daily human life as well as significantly influence medical treatment and war. Already Russia, China, and Europe are devoting funds to the development of artificial intelligence in military equipment (Allen and Chan 23). Vladimir Putin, the president of Russia, has even been quoted as stating "whoever becomes the leader in [AI] will become the ruler of the world" (Allen and Chan 52). It has also been reported that Russia aims to have 30% of their military be robotic by 2025, thus removing the human factor from warfare (Carrico para. 7). The European Commissioner for Research, Science and Innovation, Carlos Moedas, has also stated, "artificial intelligence is not a threat, how we choose to use it is" (Carrico para. 2). The potential future of AI is evident in the attention it has received from various government officials of varying levels from several countries and nations. The anxieties and uncertainty of how this technology will affect society is also evident in how these same government officials are attempting to regulate and control it.

LaValle is able to explore the use of AI and several other technologies such as nanobots in his novel through Akai. This specifically occurs in a conversation between Akai and his mother, Dr. Baker. Akai's mother, the reimagined "Doctor" Frankenstein is able to use technology to reanimate and maintain Akai's "human" body. However, LaValle also acknowledges the uncertainties prevalent in even the scientific community concerning how the use of these technologies will evolve. When Akai questions his mother about whether he will ever get older, she states that the continuously regenerating nanobots keeping him alive would not allow him to age. Dr. Baker states that Akai will not age because he died and "cellular decay commenced" (LaValle 111). Akai was frozen in the physical state of his body at the time of his death. The inability to age naturally is also reflected in the presence of Shelley's Creature within LaValle's novel—200 years after his "birth." This then exposes an anxiety about how individuals who are aided by technology differ from normative bodies in natural physiological processes such as aging. In the same way Dr. Baker and Frankenstein are uncertain how their Creatures will age, we are uncertain how technology sustaining certain bodily functions will allow those bodies to age in comparison to the age of the technology. Metals and electric connections do not age in the way that cells do. Bodies do not rust or decay in the same way that inorganic fibers do.

Dr. Baker continues to state, "The tech, those nanobots, they're essentially rebuilding you on a constant basis. If decay is like a flood, they are the sandbags" (LaValle 111). When Akai voices concerns about the organic decay of his body outpacing the machines that are keeping him alive, his mother states, "Actually, I think it's more likely the bots will replace your flesh. They'll rebuild you literally" (LaValle 111). Akai then questions if he will be human at all if he is made entirely of nanomaterial—a question Dr. Baker is unable to answer with any certainty.

This uncertainty reflects our current societies lack of knowledge or understanding concerning the topic. Dr. Baker states,

All of this has me thinking about what you are now. Of course you are [my son], but you're also something entirely...new. Even the monster [Shelley's Creature], in the end, is only human. You [Akai] are actually a new life-form...Artificial life will be humanity's next great 'concern.' Not just you, but other life-forms. Totally nonorganic pure machine. What will we do with you? It's not just about how humans treat artificial life, but how you all will treat us. What kind of ethics should we expect? What kind do we deserve? (LaValle 112)

The passage above directly reflects the current anxieties and fear of 21<sup>st</sup>-century society regarding science, technology, and non-normative embodiment. Although LaValle offers no complete answers, it is important that he articulates these concerns. Furthermore, it is important to consider how those who exist in the “in-between”—not fully human but not fully machine—are treated. These individuals most often are a part of the disability community, as electronic limbs, wheelchairs, and exoskeletons aid in their everyday functioning.<sup>34</sup>

The relationship between the human body and technology fosters many anxieties in the 21<sup>st</sup> century. While these anxieties may be less evident towards those who are inconspicuously aided by technology, such as through hearing aids or pacemakers, these anxieties become more evident towards those who already exhibit a physical abnormality such as a missing or deformed limb(s). Within Disability Studies there is an area of research concerning how those with physical disabilities who are aided by technology are perceived and viewed. If those with physical traits that deviate from the “norm” or “standard” human body are perceived as other,

---

<sup>34</sup> Internal technological aids such as pacemakers will not be discussed due to the fact that they are not visible to the public eye and therefore rarely designate the wearer as non-normative.

then how are those who are aided by technology such as prosthetics viewed? Do they become even more “other” or “non-human?” Bertolt Meyer and Frank Asbrock explore the anxieties towards those aided by technology in “Disabled or Cyborg? How Bionics Affect Stereotypes Toward People with Physical Disabilities.” Meyer and Asbrock argue that those who use bionic technologies such as exoskeletons, retina implants, and limb prostheses are perceived as more competent not only compared to disabled persons who do not use bionic technologies, but also to their able-bodied counterparts. Meyer and Asbrock purport that, in Rosemarie Garland-Thomson’s words, “society tends to view physical disability as an inferior state and as a personal misfortune” (para. 1). However, they argue, labeling an individual with physical disabilities as a cyborg can change how society views that person. Instead of being seen as incompetent (as in the coupling of giants and mental disabilities), being seen as a cyborg implies that person is mentally competent (even mentally superior) and physically capable. However, it also removes an element of humanity. Much like Akai becomes more machine than man, those who use biotech to eliminate the disadvantages of their physical limitations are seen as less human and more machine. Society is unsure how to classify or categorize these bodies or define where man becomes machine—where it is no longer a human body being aided by technology, but a machine that only resembles the human form.

### **Black and Female Embodiment in LaValle’s *Destroyer***

LaValle is also able to explore 21<sup>st</sup>-century anxieties concerning female bodies in the workplace through the character of Dr. Baker, Akai’s mother and scientist. While science and technology concerning the human body is the main focus of LaValle’s novel, LaValle also explores today’s society’s increasing attention to gender roles and stereotypes—essentially, the place that female and male bodies have within certain communities. By portraying “Dr.

Frankenstein” as a woman, LaValle opens the door to explore what it means to be a female in the scientific community as well as in corporate America. The fact that in *Destroyer* Dr. Baker was forced to leave her professional sphere in order to raise her child highlights common occurrences in the 21<sup>st</sup> century, where mothers are pressured to choose between professional and personal aspirations. According to an article published by *The New York Times*, the same number of women are present in the workforce in 2018 as in 1995, an odd phenomena considering women have been out-earning men in college degrees since the 1990s. Researchers from Princeton, the National University of Singapore and Ebonya Washington of Yale attribute this to the fact that “women underestimate the costs of motherhood” (Miller para. 5).

Furthermore, there is a trend of increasing demands on mothers since the 1990s. Reports show that today’s mother feels pressure from society to conform to society’s structured views on motherhood and the female body by actions such as breastfeeding and constant supervision (Miller para. 3). When women choose to adapt or entirely do away with actions historically attributed to a mother’s body and instead remain in the professional sphere, they create an anxiety concerning the placement of their bodies within society. For example, female bodies are increasingly expected to naturally nourish their offspring in the form of breastfeeding, but despite the decades-old message of “breast is best,” breastfeeding continues to be viewed as a private and even sexualized act with no place in a professional or public setting. 21<sup>st</sup>-century society has anxieties towards the female body when it serves its historical purpose of raising and nourishing children but does so outside of its historical place (the home).

The anxiety surrounding working mothers and the female body in the professional sphere is further highlighted in LaValle’s novel by the fact that Dr. Baker appears to have been isolated from her peers (whether by choice or force) when she was the only black female scientist. This

isolation is escalated to termination of employment when she becomes pregnant. The Director of Dr. Baker's corporation, a mother herself, states, "I couldn't believe she threw away all her opportunities just to become a mother" (LaValle 68). This further exposes the anxiety and stipulation that the female body must serve to be either a good mother or nurture a successful career—but never both.

While LaValle's *Creature* depicts several anxieties concerning disease and disability, the prominent anxiety concerns non-normative embodiment of the black body—both male and female. LaValle uses a concise summary of powerful and specific incidents of racial oppression to highlight the anxiety surrounding black bodies both historically and today. Akai, who we know was only 12 years old and carrying a baseball bat home from a game, was reported to authorities as being an 18-20 year old male carrying a rifle down the street. He was shot when police confronted him. LaValle goes on to reference the assassination of Mississippi civil rights leader Medgar Evers in front of his own home by white supremacist Byron De La Beckwith on June 12, 1963 (History.com editors n.p). Dr. Baker recounts,

Medgar Evers was gunned down in 1963. Right in his own driveway. He'd been trying to drag himself inside but he bled to death out there. Myrlie Evers, his wife, is the one who found him. The neighbors came out and the police were called. Medgar's assassin was picked up quickly. A white man named Byron de la Beckwith. His fingerprints were on the gun. He was tried twice in 1964. Both juries, all white, were deadlocked. He went free. In an interview, Myrlie remembered wishing she had a machine gun that night. If she had it, she said she would've mowed down the police and her white neighbors. The depth of her hatred was indescribable. (LaValle 66)

When the Evers case was retried in 1994 in order to ease pressure from civil rights leaders, a racially-mixed jury sentenced 73-year-old Beckwith to life in prison (History.com editors n.p.).

Many cases of racial injustice do not see the same resolution as the Evers' case, even decades later. The Black Lives Matter movement began in July of 2013 when Alicia Garza, Patrisse Cullors, and Opal Tometi organized in response to the acquittal of George Zimmerman, a neighborhood watch captain of his Florida neighborhood who shot and killed 17-year-old Trayvon Martin (Black Lives Matter). The actions of Zimmerman expose the irrational anxieties that individuals experience when a black body is present in a predominantly white environment. These anxieties are frequently so powerful they result in the black body's alienation or removal from the space. While these anxieties surrounding race previously manifested in the prominent segregation of the South, they took a new form after of laws such as the Civil Rights Act of 1964<sup>35</sup> and the Voting Rights Act of 1965.<sup>36</sup> These laws ended previously lawful responses to racism such as segregation and voter suppression. However, these laws failed to end the social repercussions that were results of anxieties towards black bodies. Race-based segregation has arguably grown and morphed into a much more powerful and stringent separation of white and black bodies that takes form in economic and educational barriers.

Just as Shelley's *Creature* of 1831 personified society's fears of yellow fever, LaValle's *Creature* embodies the form which society fears most today—a black teenage male. This tension is further explored in the characters' interactions with each other within LaValle's novel. The first instance of race and gender critique comes when the two agents from Dr. Baker's former employer are sent to capture her in order to obtain her research. The agents, two white males by

---

<sup>35</sup> Civil Rights Act of 1964 outlaws discrimination based on race, color, religion, sex, or national origin

<sup>36</sup> Voting Rights Act of 1965 ensured the right to vote extended to African Americans

the names of George Byron and Percy Shelley<sup>37</sup>, enter a bar to search for the female scientist. When they confront her, she asks, “You went to every table asking for me, but you never stopped at mine. Why is that?” The agent responds with “Well, for one, you seem to have scrubbed all images of yourself anywhere. It’s almost like you’re trying to hide from the world” (LaValle 22). However, the agents’ assumption that a black female could not be the esteemed scientist they are searching for exposes the historical and current “norm” of the scientific community—a community that has been populated by predominantly white males. The agents did not question Dr. Baker because they assumed that they were searching for a white male body.

The next reference to subtle racism is made through the agents Shelley and Byron again. When the agents enter Dr. Baker’s home, they state, “What was the boy’s name again? I can’t pronounce it. I never understand why they do that kind of thing,” referring to white society’s frustration concerning their inability to pronounce, enunciate, or understand vernaculars that have not historically been their own (LaValle 45). LaValle best summarizes the current anxieties and treatment of the female black body when Dr. Baker states

Do you know that in all my years as a scientist, both at the lab and when I worked in universities, I’ve usually been treated in two ways. Either I’ve been invisible or I’ve been an angry black woman. I can’t describe how frustrating this has been but I’m going to try. I honestly don’t know if I’m going to kill you tonight. But no matter what I can’t abide the idea that you’ll think I’m some mad black woman who lost control. I’m sorry, but that just won’t do” (LaValle 59).

The passage above iterates modern frustrations concerning the way not only women in general are treated within professional communities, but specifically the frustrations of

---

<sup>37</sup> There are several references to Shelley’s original novel within LaValle’s graphic novel such as the names of the agents and the inclusion of the original Creature.

black women in these settings. Dr. Baker states that no matter where the professional sphere was—a science lab or a university classroom—she has been treated as if her work was not on par with that of her male coworkers. Furthermore, she continues on to state that her frustrations and emotions were accredited to her gender or race. This then removed the blame for misdeeds from her coworkers and instead placed them on Dr. Baker.

Although LaValle's *Creature* is the furthest cry from Shelley's original in physical appearance, the use of *Frankenstein* to expose racial injustice is not a new trope. As Elizabeth Young observes, "The *Frankenstein* story has a long history of being used as a political metaphor" (1). The use of the Creature as a racialized political metaphor can be traced back to references of Shelley's 1818 novel as evidenced by the following quote from George Canning in 1824. Canning was a British foreign secretary fighting for the emancipation of West Indies slaves. He states,

In dealing with a negro we must remember that we are dealing with a being possessing the form and strength of a man, but the intellect only of a child. To turn him loose in the manhood of his physical passions...would be to raise up a creature resembling the splendid fiction of a recent romance; the hero of which constructs a human form with all the physical capabilities of a man, and with the thews and sinews of a giant, but being unable to impart the work of his hands a perception of right and wrong, he finds too late that he has only created a more than mortal power of doing mischief, and himself recoils from the monster in which he has made. (Young 20).

Canning directly references Frankenstein's description of the Creature in order to describe the body of a slave. The passage from *Frankenstein* was used again by Thomas Dew, a pro-slavery apologist, in referring to the Nat Turner revolt in the United States that took place in 1831—the same year that Shelley published her second version of *Frankenstein* (Young 20). The referencing of *Frankenstein* in political context on different continents proves both the popularity of *Frankenstein* within society as well as the transcontinental nature of the novel and its applications. Shelley wrote the novel in 1818 and again in 1831 in Europe, yet the 1931 film was produced in America. George Canning was a British foreign secretary and the quote above was used in his speech concerning the emancipation of West Indies slaves in 1824.<sup>38</sup> However, Thomas Dew was a member of the Virginia State legislature and used the quote from Canning in order to characterize American slaves in 1831. Young states,

As Dew's words suggest, the Frankenstein monster was a figure equally at home on the symbolically related sites, the West Indies and Virginia, in which slavery was practiced as well as in the complementary political assemblies, the British parliament and the Virginia state legislature, in which the slaves' fate was debated. (20).

This only further illustrates the transcontinental nature of disease, disability, and concepts concerning the normative and non-normative bodies.

In the same way, Akai allows for this political metaphor to be reimagined for 21<sup>st</sup> century use. Instead of the Creature being used for political metaphors that convince listeners of the need to categorize and define black bodies as "other," Akai allows readers to understand the fear of the black body in order to free it from these anxieties. Therefore, as has already been alluded to

---

<sup>38</sup> British Parliament passed the Abolition of the Slave Trade Act in 1807. For more see The National Archives "Emancipation."

with the analysis of yellow fever, gigantism, and mental disability—and now the fear of the black body in the context of Europe and America spanning several generations—metaphors and social anxieties that are explored through the Creature are not limited by geographical boundaries, social cultures, or even time.

The use of the metaphors surrounding a “Black Frankenstein” become even more important when it is understood that those metaphors are being used by white normative bodies to describe bodies deviate from their own in almost every way. That is, the metaphor of Frankenstein’s Creature is used to describe the non-able bodied and non-rational body as previously discussed, but now also the non-white body. According to Elizabeth Young, author of *Black Frankenstein*, by changing the skin tone of the Creature, it is possible to argue that Shelley’s tale exemplifies white anxiety towards black bodies. Specifically, it exposes fears of a black body (the Creature) revolting against their master (Victor). LaValle also uses a “black Creature” to explore anxieties towards black bodies. However, LaValle’s graphic novel is informed by his own experience as a black body within 21<sup>st</sup>-century America. Therefore, LaValle is exploring non-normative embodiment of the black body in the same way Linton is able to do with the disabled body—through personal experience within that body.

Historically, black bodies have been the “specimens” of experimentation.<sup>39</sup> Akai is a reflection of this even though his creator in the scientific and biological sense is his mother—a black female scientist. Furthermore, LaValle’s novel exposes the fact that any human form that deviates from the heteronormative white body is seen as predatory or meaning harm.

Specifically, within the context of the 21<sup>st</sup> century, the black body and the cyborg body are seen

---

<sup>39</sup> For more see Lily Rothman’s “The Disturbing History of African-Americans and Medical Research Goes Beyond Henrietta Lacks.”

as forms of non-normative embodiment causing anxiety and fear for those who look upon them.

Just as there was no home for the Creature, there is no right neighborhood for the black body.

## Chapter 5 Conclusion

The past 200 years of *Frankenstein* have birthed new editions, adaptations, films, plays, comic books, and more. The constant revisions and adaptations of the Creature have allowed for an exploration of not only what it means to be afraid, but also what it means to inhabit the edges of the normative society. Cast out from villages, confined in dungeons, or shot by police, the Creature has continued to be a vessel of exploration concerning the non-normative human form and the implications of this form within societies. Looking to past treatments of those with yellow fever, gigantism, or mental disability will allow for a critical analysis of 21<sup>st</sup>-century treatments of forms other than the white normative body. Within the past 5 years, something is happening once again to the Creature. He no longer takes the form of white males exhibiting forms of otherness, but instead reflects 21<sup>st</sup>-century concerns of the non-normative body in more complex ways. LaValle reimagined him as a black teenage boy, but in *Frankenstein in Baghdad*, Ahmed Saadawi has reimagined the Creature as a composition of human body parts torn apart by explosions in the U.S. occupation in Iraq. Understanding that the Creature has historically been a reflection of that society's anxieties and fears concerning the non-normative then becomes pertinent to understanding the importance of these works in relation to the future treatment of those who differ from society's standards of what is "normal." This understanding will then inform our responsibility to create a more accurate representation of non-normative bodies and erase outdated and misinformed stigmas surrounding those bodies.

## Works Cited

- Allen G., and Taniel Chan. (2017). "Artificial intelligence and national security." *Belfer Center for Science and International Affairs*. Cambridge, MA, July 2017. <https://www.belfercenter.org/sites/default/files/files/publication/AI%20NatSec%20-%20final.pdf>
- Anderson, S.L. "John McCarthy: Father of AI." *Research Gate*, vol. 17, no 5, pp 84-85. October 2002. Doi: 10.1109/MIS.2002.1039837
- Beaudreau, S. and S. Finger. "Medical electricity and madness in the 18<sup>th</sup> century: the legacies of Benjamin Franklin and Jan Ingenhousz." *PubMed*, vol. 39, 2006. doi: 10.1353/pbm.2006.0036
- Bewell, Alan. *Romanticism and Colonial Disease*. The John Hopkins University Press. 1999.
- Black Lives Matter. 2018. <https://blacklivesmatter.com/>
- Bohon, Elise. "10 Human Body Modifications You Can Expect in the next Decade." *Big Think*. March 2017. <https://bigthink.com/10-human-body-modifications-you-can-expect-in-the-next-decade>
- Bostock, John. *An Account of the History and Present State of Galvanism*. 1818.
- Bradshaw, Michael and Essaka Joshua. *Disabling Romanticism*. Palgrave Macmillan. 2016. doi: 10.1057/978-1-137-46064-6
- Carrico, Goncalo. "The EU and artificial intelligence: A human-centered perspective." *Sage Journals*. March 2018. doi: <https://doi.org/10.1177/1781685818764821>
- Cheeks, Stephen. "The Inaugural Essay on Yellow Fever Presented to the Faculty of the Philadelphia College of Medicine for the Degree of Doctor in Medicine for Stephen Cheek of New Orleans." 1857. MS. The College of Physicians Archive.

Davis, Lennard. *Enforcing Normalcy: Disability, Deafness, and the Body*. Verso. 1995.

“Definition of Gigantism.” MedicineNet, [www.medicinenet.com/script/main/art.asp?articlekey=11374](http://www.medicinenet.com/script/main/art.asp?articlekey=11374).

Deutsch, Helen and Felicity Nussbaum. *Engendering the Modern Body*. The University of Michigan Press. 2000.

Douthwaite, Julia and Daniel Richter. “The Frankenstein of the Revolution” *European Romantic Review*, vol. 20. 2009. Doi: <https://doi.org/10.1080/10509580902986369>

Frankenfield, Jake. “Artificial Intelligence.” *Investopedia*. April 2019. <https://www.investopedia.com/terms/a/artificial-intelligence-ai.asp>

Garland-Thompson, Rosemarie. *Extraordinary Bodies: Figuring Physical Disability in American Culture and Literature*. Columbia University Press. 1997.

Griffen, Adriane. “Compare and Contrast Different Models of Disability.” *Disability in Public Health*. <https://disabilityinpublichealth.org/1-1/>

Historical Society of Pennsylvania. “Diagnosing and Treating Yellow Fever in Philadelphia, 1793.” *Historical Society of Pennsylvania*. <https://hsp.org/education/unit-plans/diagnosing-and-treating-yellow-fever-in-philadelphia-1793>

History.com Editors. “Medgar Evers Assassinated.” *History.com*. A&E Television Networks. March 2010. <https://www.history.com/this-day-in-history/medgar-evers-assassinated>

“Imperialism | Definition of Imperialism in English by Oxford Dictionaries.” English Oxford Dictionaries.

Kevles, Daniel. *In the Name of Eugenics*. Alfred Knopf, Inc. 1985.

Kotar, S.L. and J.E. Gessler. *Yellow Fever: A Worldwide History*. McFarland and Company. 2017.

Larson, Zeb. "America's Long-Suffering Mental Health System." *Origins*, vol. 11, 2018.  
<http://origins.osu.edu/article/americas-long-suffering-mental-health-system>

LaValle, Victor D., et al. *Destroyer*. BOOM! Studios, 2018.

Linton, Simi. *Claiming Disability: Knowledge and Identity*. NYU Press. 1998

Louisiana Division New Orleans Public Library. "Yellow Fever Deaths in New Orleans, 1817-1905." <http://nutrias.org/facts/feverdeaths.htm>

Norrby, Erling. "Yellow Fever and Max Theiler: the only Nobel Prize for a virus vaccine." *Journal of Experimental Medicine*, vol. 204. 2007. doi: 10.1084/jem.20072290

"Madness | Definition of Madness in English by Oxford Dictionaries." English Oxford Dictionaries, [en.oxforddictionaries.com/definition/madness](http://en.oxforddictionaries.com/definition/madness).

Mammis, A, et al. "Early depictions of acromegaly and gigantism and their historical evolution as clinical entities." *Neurosurgical focus.*, U.S. National Library of Medicine, Oct. 2010, [www.ncbi.nlm.nih.gov/pubmed/20887119](http://www.ncbi.nlm.nih.gov/pubmed/20887119).

Martisiute, Laura. "The Horrifying 'Cures' of Dr. Henry Cotton-America's Biggest Quack." *ATI*. November 2017. <https://allthatsinteresting.com/henry-cotton>

McCarthy, John. "Artificial Intelligence." *Stanford*. 2007. <http://jmc.stanford.edu/artificial-intelligence/index.html>

McCulloch, Richard. "Whom the Gods Would Destroy." *Racial Compact*.  
<http://www.racialcompact.com/whomgodsdestroy.html>

Meier, Allison C. "Grave Robbing, Black Cemeteries, and the American Medical School." *JSTOR Daily*. 24 August 2018. <https://daily.jstor.org/grave-robbing-black-cemeteries-and-the-american-medical-school/>

- Meyer, Bertolt and Frank Asbrock. "Disabled or Cyborg? How Bionics Affect Stereotypes Toward People with Physical Disabilities." *Frontiers in psychology*, vol 9, no 2251, 20 Nov 2018, doi: 10.3389/fpsyg.2018.02251
- Miller, Claire. "The Costs of Motherhood are Rising, and Catching Women off Guard." *The New York Times*. 2018. doi: <https://www.nytimes.com/2018/08/17/upshot/motherhood-rising-costs-surprise.html>
- Mitchell, David and Sharon Snyder. *Narrative Prosthesis: Disability and the Dependencies of Discourse*. The University of Michigan Press. 2000. pg. 56-57.
- Munyi, Chomba. "Past and Present Perceptions Towards Disability: A Historical Perspective." *Disability Studies Quarterly*, vol. 32, no. 2, 2012. <http://dsq-sds.org/article/view/3197/3068>
- O'Brian, Ruth. *Bodies in Revolt: Gender Disability and a Workplace Ethic of Care*. Routledge. 2005
- Paul, Diane. "Reflections on the Historiography of American Eugenics: Trends, Fractures, Tension." *Journal of the History of Biology*, April 2016. doi: 10.1007/s10739-016-9442-y
- Plato. *Laws*. 360 B.C.E. <http://classics.mit.edu/Plato/laws.11.xi.html>
- Porter, Roy. *Madness: A Brief History*. Oxford University Press. 2008
- Prose, Francine. "How Frankenstein's Monster Became Human." *The New Republic*. June 2016. <https://newrepublic.com/article/134271/frankensteins-monster-became-human>
- Quinn, James. "The 'Irish Giant' Who Found Fame Exhibiting Himself in London." *The Irish Times*, *The Irish Times*, 28 Feb. 2018, [www.irishtimes.com/life-and-style/abroad/the-irish-giant-who-found-fame-exhibiting-himself-in-london-1.3407445](http://www.irishtimes.com/life-and-style/abroad/the-irish-giant-who-found-fame-exhibiting-himself-in-london-1.3407445).

- Rosenberg, Charles and Janet Golden. *Framing Disease, Studies in Cultural History*. Rutgers University Press. 1992.
- Rothman, Lily. “The Disturbing History of African-Americans and Medical Research Goes Beyond Henrietta Lacks.” *Time*. April 2017. <http://time.com/4746297/henrietta-lacks-movie-history-research-oprah/>
- Rush, Benjamin. Letter to City of Philadelphia Officials Concerning Public Health Measures to Contain Yellow Fever Outbreaks. June 1793. MS. The College of Physicians Archive.
- Shelley, Mary Wollstonecraft. *Frankenstein*. Oxford University Press. 2008.
- Stanback, Emily. *The Wordsworth-Coleridge Circle and the Aesthetics of Disability*. Palgrave Macmillan. 2016. Doi: 10.1057/978-1-137-51140-9
- Stanback, Emily and Ashley Hobson. “Frankenstein’s Creature in Medico-Scientific Context.” Mississippi Academy of Sciences, 21 February 2019, Thad Cochran Center, Hattiesburg, MS.
- Stanford Encyclopedia of Philosophy. “Natural Philosophy in the Renaissance.” <https://plato.stanford.edu/entries/natphil-ren/>
- Steinbeck, John. *Of Mice and Men*. 1937.
- Tennis, Joseph. “The Strange Case of Eugenics: A Subject’s Ontogeny in a Long-Lived Classification Scheme and the Question of Collocative Integrity.” *Journal of the American Society for Information Science and Technology*, vol. 63, no. 7, 2012. pp. 1350–1359. doi: 10.1002/asi
- The College of Physicians of Philadelphia. “The History of Vaccines: Yellow Fever.” <https://www.historyofvaccines.org/timeline/yellow-fever>

- The Human Marvel. "George Auger—The Mighty Cardiff Giant." *TheHumanMarvels.com*.  
<https://www.thehumanmarvels.com/george-auger-the-cardiff-giant/>
- The National Archives. "Emancipation." The National Archives. <http://www.nationalarchives.gov.uk/pathways/blackhistory/rights/emancipation.htm>
- Thomson, Rosemary Garland, (ed). *Freakery: Cultural Spectacles of the Extraordinary Body*. New York and London: New York University Press, 1996.
- Orchard, Jack. "The Enlightenment and Visual Impairment." *OUPblog*. July 2016.  
<https://blog.oup.com/2016/07/blindness-and-the-enlightenment/>
- Turner, David. "Disability History and the History of Emotions: Reflections on Eighteenth-Century Britain." *Asclepio*, vol. 68, no. 2, pp. 146. doi:<http://dx.doi.org/10.3989/asclepio.2016.18>
- Wang, Fuson. "The Historicist Turn of Romantic-Era Disability Studies, or *Frankenstein* in the Dark." *Literature Compass*, vol. 14, no. 7. 5 July 2017. pp. 1-10. doi: e12400, 10.1111/lic3.12400
- Weckowicz, Thaddeus E, and Helen P Liebel-Weckowicz, editors. "The Eighteenth Century: The Age of Enlightenment and Reason." *ScienceDirect*, vol. 66. 1990. pp. 71–107. doi:[https://doi.org/10.1016/S0166-4115\(08\)61444-2](https://doi.org/10.1016/S0166-4115(08)61444-2).
- Wendell, Susan. *The Rejected Body*. Routledge. 1996.
- Whale, James, director. *Frankenstein*. Universal 8, 1931.
- "Yellow Fever." Gale Encyclopedia of Medicine, 3rd ed. Encyclopedia.com. 30 Jan. 2018.  
<<http://www.encyclopedia.com>>.
- Young, Elizabeth. *Black Frankenstein: The Making of an American Metaphor*. NYU Press. 2008.

Youngquist, Paul. *Monstrosities: Bodies and British Romanticism*. Minneapolis and London:  
University of Minnesota Press, 2003. doi: <https://doi.org/10.7202/012467ar>