

GOTHIC HORROR AND SCIENTIFIC EDUCATION
IN MARY SHELLEY'S *FRANKENSTEIN*

THESIS

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For William Wilson

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In 1995 I casually reread Mary Shelley's *Frankenstein*, one of my favorite novels. After finishing the novel, I felt that I did not have a thorough understanding of Victor Frankenstein's drive to create the Monster. By questioning his motives, I later realized that my understanding of Shelley's novel was incomplete. This study renders one of my favorite novels understandable, and I must thank my thesis committee for their encouragement and guidance. I would like to thank Dr. Nancy Grayson, my thesis chair, for her dedication and editing prowess. I would like to thank Dr. Rebecca Bell-Metereau for asking the right questions when I was too busy writing answers. I would like to thank Dr. Christopher Frost for his enthusiasm and support. I would also like to acknowledge Dr. Mark Hansen and Dr. Tim Hulsey for their help in the formation of my thesis topic and approach.

PREFACE

Mary Shelley's *Frankenstein* has been studied and categorized as one of the most prominent works of Gothic horror in the English Romantic period, and the popularity that the novel and its film adaptations have enjoyed testifies to the enduring quality of the work. Although film adaptations have enabled Shelley's message of scientific restraint to reach more diverse audiences since the novel's publication in 1818, the novel endures because Mary Shelley masterfully combines social criticism and Gothic horror.

In this study of the Gothic horror tradition as it is applied to scientific education in Mary Shelley's *Frankenstein*, I will first examine *Frankenstein* as a Gothic horror novel. By analyzing the evolution of the Gothic from 1764 to 1820, I propose that Shelley's novel represents the later, more philosophical form of the genre.

In the second part of this study I examine the 1831 edition of Mary Shelley's text as it describes the Paracelsian education of Victor Frankenstein in an era of Aristotelian natural science. Victor eschews modern scientific progress and emulates the works of alchemists

like Paracelsus, Cornelius Agrippa, and Albertus Magnus. I will explore how this embrace of quasi-science allows Victor to rise above the limits of modern science and restore life to a dead body, but also serves as the source of his ruin.

Finally, I will examine the contrast between Sir Robert Walton and Victor Frankenstein. As men of science, both are driven to obsession in their pursuit of scientific discovery, and the lesson in Victor's tale tempers Walton's own scientific journey with its caveat against an unrestrained pursuit of science. Mary Shelley's intentional use of the frame story to show the interplay between Frankenstein's alchemical science and Walton's natural science enables us to see the contrast between the scientific ages and their implications in modern society.

CHAPTER 1

THE HORROR OF SHELLEY'S "GHOST STORY"

What began as a game in which Mary Shelley, her husband Percy, her stepsister Claire Clairmont, Lord Byron, and Dr. John Polidori proposed to write ghost stories on a rainy summer evening in the Swiss Alps grew into the fateful summer in which Mary Shelley conceived and wrote one of the scariest novels in English literature. The popularity of *Frankenstein* since its publication in 1818 and again in 1831 demonstrates an enduring interest in the moral implications of science as well as other themes. I argue that *Frankenstein* continues to enrapture its readers because Mary Shelley conscientiously uses images of abject horror and fear to anthropomorphize the seemingly cold, amoral science that is the basis of scientific progress as seen in Victor Frankenstein's scientific education and Sir Robert Walton's expedition to the North Pole. Such horror and fear derive their strength from the pitiful horror of Frankenstein's creation, the Monster.

Mary Shelley's *Frankenstein* has enjoyed a resurgence in literary studies in recent years. As the bicentennial of

Shelley's birth approaches on August 30, the text has been reopened in the age of postmodern criticism. Critics have approached the text from several literary perspectives,¹ and previous research has focused predominantly on the relationship between Victor Frankenstein and his creation, the Monster. Although the complex relationship between Frankenstein and his Monster is enough or too much for a single essay to deal with completely, only a few studies have provided an in-depth analysis of Frankenstein before his godlike act of creation. Yet the pity and horror of this single act of creation depend upon the nature of the creator; therefore, this study examines Victor Frankenstein as a scientific creator whose education and studies control the rest of his tragic life.

Only by studying the scientific influences that lead Victor to his experiments can we see the true nature of Shelley's social criticism. It is not enough to say that "man should not play God" anymore. We must now see Shelley's criticism of unrestrained scientific progress in terms of the variables that lead to the crux of the problem. Therefore, this study explores Victor Frankenstein's scientific interests and education as the main cause of his unrestrained experiments.

While much research has been conducted on Frankenstein's growing up in an idealized environment and

his subsequent obsession with his scientific experiments, few studies have examined what I see as the turning point in Victor's life. Victor himself admits that the discovery of natural philosophy was the turning point:

Natural philosophy is the genius that has regulated my fate; I desire, therefore, in this narration, to state those facts which led to my predilection for that science. When I was thirteen years of age, we all went on a party of pleasure to the baths near Thonon; the inclemency of the weather obliged us to remain a day confined to the inn. In this house I chanced to find a volume of the works of Cornelius Agrippa. I opened it with apathy; the theory which he attempts to demonstrate, and the wonderful facts which he relates, soon changed this feeling into enthusiasm. A new light seemed to dawn upon my mind. . . .²

Victor's love of Cornelius Agrippa, and later, Paracelsus and Albertus Magnus demonstrates that his education was a scientific anachronism; as a result, we are not surprised that Alphonse Frankenstein is disgusted with the alchemist's work. The antiquated work of misguided alchemists continues to guide Victor to his studies in Ingolstadt and the experiments there that lead to his death and ruin.

The fear and horror that is experienced by both the characters and the reader grow from Shelley's assimilation of the Gothic tradition. Mary Shelley describes the impetus for writing the novel as a game in which she, her husband, and Lord Byron tried to emulate the traditional Gothic tales that had enraptured them during their stay in Switzerland in the summer of 1816. Shelley describes the impact of those stories in her introduction to *Frankenstein*: "Some volumes of ghost stories, translated from the German into French, fell into our hands...I have not seen these stories since then; but their incidents are as fresh in my mind as if I had read them yesterday" (21).³ In her introduction to the 1831 edition of *Frankenstein*, Shelley describes the conception of the novel as being rooted firmly in the tradition of Gothic horror:

I busied myself to *think of a story*,--a story to rival those which had excited us to this task. One which would speak to the mysterious fears of our nature, and awaken thrilling horror--one to make the reader dread to look round, to curdle the blood, and quicken the beatings of the heart.

(21-22)

To understand the appropriateness of Gothic horror in *Frankenstein*, we must understand the history of Gothic fiction in Shelley's time. Gothic fiction emerged after

society's realization that books had a didactic element that could not be ignored. Early Gothic books were mainly guides of conduct that served to maintain the mores of the predominant culture, and we now see Gothic fiction as a reaction to the growing concern in late eighteenth-century society that books could corrupt those who read them. The tales of supernatural horror that would later be categorized as Gothic fiction capitalized on that concern by catering to the escapist desires of their readers. The success of Gothic horror enabled more philosophical and psychological thinkers to incorporate their social criticism into a very popular genre. Lee E. Heller writes:

Philosophical Gothic made explicit the concerns about character, conduct, and education that underlay the emergence of popular Gothic fiction; in place of the machinery of sentimental and horror Gothic, it explored the horrific elements of human personality, and the forces--including education and reading--that go into their creation. (329)

Gothic fiction enabled Mary Shelley to render her dream-vision tangible in literary form; using these elements of Gothic horror, she transferred the horror and fear of that experience to the reader. Shelley's account of her conception of *Frankenstein*, especially the laboratory scene

in which the Monster opens his eyes, is reproduced in words and images almost identically by the doctor as he experiences it. In Shelley's Introduction, she writes:

I saw--with shut eyes, but acute mental vision,--I saw the pale student of unhallowed arts kneeling beside the thing he had put together. I saw the hideous phantasm of a man stretched out, and then, on the working of some powerful engine, show signs of life, and stir with an uneasy, half vital motion. . . . He sleeps; but is awakened; he opens his eyes; behold the horrid thing stands at his bedside, opening his curtains, and looking on him with yellow, watery, but speculative eyes. (22-23)

Victor later describes his first encounter with the living Monster:

With an anxiety that almost amounted to agony, I collected the instruments of life around me, that I may infuse a spark of being into the lifeless thing that lay at my feet. . . . I saw the dull yellow eye of the creature open; it breathed hard, and a convulsive motion agitated its limbs. (57-58)

The similarity between these scenes shows the potency of Shelley's vision that allows intrinsically horrific elements of the experience to frighten the reader. Victor's account

of that fateful moment reminds us of Shelley's frightening account of her nightmare, and the Gothic nature of *Frankenstein* is the mode by which Shelley evokes that fear.

The critical elements of the Gothic tradition emerge as we see the power that Victor's early fascination with alchemy has over his destiny. Lee Heller correctly observes that "*Frankenstein's* focus is on human nature and on the possibility of controlling experience in order to shape character and cultural values" (329). Victor's idealistic upbringing offers him an education that few can match, yet he studies the vulgar alchemy of Agrippa, Paracelsus, and Albertus Magnus, who are not respected in the Aristotelian scientific community. Although Victor's success in his experiments depends upon innovation and scientific creativity, his neglect of his "proper" scientific studies isolates him from his peers in the scientific community. We discover with Victor that it is this very distorted perception that propels the horrific chain of events that eventually leads to his ruin.

The complexity and variety of the reader's reactions to the Monster raise the question of the appeal of Shelley's novel. The pity and horror that the reader feels for Victor's creation demonstrate the fear and confusion that we as readers feel for the Monster and the social problem that he represents. What then are we to make of *Frankenstein's*

Monster? We must try to understand the nature of the beast as well as his allegorical significance if we are to reconcile the mixed feelings that invariably accompany reading Shelley's thought-provoking novel. Only through analyzing the fears that the characters in the novel feel, and that we as sympathetic readers experience vicariously, can we understand *Frankenstein's* significance in its culture as well as our own.

Since Frankenstein's experiments and downfall are as much a result of his education as his morals, I will demonstrate the great degree to which his study of Paracelsus shapes his experiments with nature, experiments that ultimately lead to his ruin and death. Although I maintain that Victor is able to create the Monster because of his studies of the legendary alchemists, I limit this study to an examination of the influence of Paracelsus's work on Victor's scientific education. Though Cornelius Agrippa and Albertus Magnus are also significant contributors to Victor's studies, the analogies between Victor Frankenstein and Paracelsus are much more explicit. Since there has been little research on the alchemists' influence on Victor Frankenstein, the difficulties with which readers approach the nature of the Monster in this Gothic horror novel are not surprising. I present this study as a means of understanding education in the Gothic

tradition and the role that it plays in directing Mary Shelley's moral criticism in *Frankenstein*.

In studying the influence of Paracelsian science on Victor Frankenstein, I must limit my research in two ways. First, I must admit that the biography of Paracelsus is so clouded with legend and myth that the spectacular tales of Paracelsus's miracles must be checked by current scientific evidence.⁴ As a man of science in a time of quasi-scientific philosophies and exaggerated reports, Paracelsus remains a man whose biographical particulars contain as much myth as fact. I have opted not to include mystical accounts of Paracelsus's craft, but I shall demonstrate instead analogy that accounts of Paracelsus's success, however fabricated, provide a precedent for criticism of Victor Frankenstein's success in creating the Monster. Since Frankenstein does not provide us with his secret for raising the dead, we need only say that he is emulating his predecessor who was just as secretive.

Second, I must assume for the purpose of this study that Gothic literature has some common elements that are present in the majority of works that are now considered Gothic. The nebulous concept of Gothic literature has created much controversy since critic Robert D. Hume's classification of the genre's subtypes in 1969.⁵ Although Gothic horror was regarded as vulgar and indecent in its

time, the use of supernatural events and the horror they invoke enabled authors as well as philosophers and psychologists to criticize, instruct, and educate Romantic society in the early nineteenth century.

As Mary Shelley tried to capture the vision that terrified her, she adopted the Gothic form for its sensational nature and its popular appreciation. The "ghost stories" that had thrilled her that rainy night in Switzerland enabled her to write one of the greatest Gothic horror stories in English literature. The nightmare that is *Frankenstein* emerges out of the Gothic tradition, both in the sense that it titillates and it criticizes the faults of unheeded scientific progress.

CHAPTER 2

FRANKENSTEIN AS A GOTHIC HORROR NOVEL

The "ghost stories" that entertained Mary Shelley in a Swiss cottage during the summer of 1816 inspired the young author to write a novel that captured the fears of a nightmare during a time of great ideological shift in science, politics, and culture. These "ghost stories" formed the origins of the Gothic novel, a style of literature that Mary emulated in *Frankenstein*. The Gothic tradition in tales of supernatural terror and sensational horror endures despite its unsavory reputation in literary circles. Although critics of *Frankenstein* generally categorize Shelley's work as a Gothic novel, Mary's story of murder and ruin cannot be disregarded like so many of its Gothic predecessors. Clearly there is something more to Shelley's novel than its writer's family and patronage. Shelley's novel remains popular while most readers today are probably unfamiliar with Anne Radcliffe's *The Mysteries of Udolpho* or Horace Walpole's *The Castle of Otranto*. The popularity of Mary Shelley's *Frankenstein* can be judged by the number of film, theater, and television adaptations that

have been made in the twentieth century. The story of Victor Frankenstein and the Monster continues to frighten and delight audiences over a century after its publication in 1818. What distinguishes *Frankenstein* from other Gothic novels?

The initial reviews of Shelley's novel would seem to indicate that little or nothing distinguishes *Frankenstein* from its Gothic predecessors.⁶ The novel's initial reception seems to indicate that literary society placed *Frankenstein* in that most unfavorable category of novels, the Gothic. Recent literary studies rediscovered the Gothic novel by critically examining the social implications of sensational escapism and social commentary within the genre. Unfortunately, these studies have not generated a clear definition of the Gothic novel. As a result, the analyses of *Frankenstein* as a Gothic novel have led to little more than a common assertion that the novel is Gothic. Although this assertion seems obvious, critical studies must continue to try to understand the Gothic novel and its role in social criticism.⁷ By demarcating the various types of Gothic literature, we can categorize Shelley's novel in a way that enables critics to understand the popular success and endurance of *Frankenstein* as a Gothic novel.

Robert D. Hume summarizes the general conventions of the Gothic genre and their preconceptions in the literature of the time:

It is usually assumed that all Gothic novels are much the same, and that the form is defined by the presence of some stock devices. These "Gothic trappings" include haunted castles, supernatural occurrences (sometimes with natural explanations), secret panels and stairways, time-yellowed manuscripts, and poorly lighted midnight scenes.

(282)

Such a description renders the Gothic novel stereotypical, yet it has been the predominant conception of the Gothic novel until only recently. What Mary Shelley has done with the Gothic tradition is to elaborate upon the more banal elements of Gothic fiction by introducing scientific elements into the traditionally unscientific genre. Shelley's influence on the Gothic genre is demonstrated not only by her novel's popularity but also by her importance in modern Gothic studies. If the literary Gothic period covers 1764 to 1820, Shelley's publication of *Frankenstein* in 1818 marks the beginning of the end of the Gothic tradition. The fate of the Gothic novel in England was cast with the emergence of the more philosophical works of later

Romantics, those of Byron, Mary's husband Percy, and John Keats.

According to Lee E. Heller, the origins of the Gothic novel seem to begin with the sensationalism of the popular literature of the late eighteenth century. Popular literature consistently reinforced social mores and addressed domestic concerns. The original Gothic works, now commonly called "Pure Gothic," sensationalized what would otherwise have been domestic plots. These Gothic novels reinforced proper family behavior by showing the frightening consequences of improper behavior in an escapist setting. Impropriety was punished by the appearance of foreboding ghosts, and the otherwise happy home became a haunted house that terrified those who endured the impropriety of the offending family member. Horace Walpole's *The Castle of Otranto* and Ann Radcliffe's *The Mysteries of Udolpho* demonstrated the Gothic novel's inherently didactic form, and this early form was perhaps the most respected in its time. As Lee E. Heller points out,

Gothic literature achieved a measure of respectability only in the 'sentimental Gothic' form popularized by Ann Radcliffe, whose plots were little more than scary versions of the didactic novel's lessons about women's proper marital choices. (327)

Despite the subject matter of Radcliffe's works, Gothic literature endured unfavorable criticism from the beginning. The growing concern over the demoralizing nature of Gothic literature apparently outweighed the benefits of such a popular form of didactic, socializing literature. English literary society in the mid-eighteenth century was quite concerned with the effects of literature upon its reader.⁸

Unfortunately, this concern was not as benevolent or objective as modern reader-response criticism. The obtuse common sentiment of the period was concerned solely with the negative effects that escapist literature like the Gothic novel could have on the less-educated reader. The implications were clear; the escapism inherent in Gothic literature was too sophisticated for the less-enlightened readers of the time. Gothic literature would lead its readers to error and moral ruin. As a result, Gothic literature had no real redeeming value given the social and moral havoc that it could wreak upon English society.

Such implications, however, demonstrated a newfound respect for the effect of the novel on its readers. Gothic literature had struck a chord with literary critics with its defining use of the supernatural, terror, and escapist settings to enrapture its readers without overtly criticizing them. These works involved and depended upon the reader's reaction to the text. Good Gothic fiction

(though such a term would seem like an oxymoron to its critics) instilled a pleasurable sense of escapist fear in its reader, and such emotional reaction had rarely been experienced to that degree in earlier works of the period. The Gothic novel depended upon its readers' psychological investment, the assumption by its readers that transitory fear would make worldly concerns seem pale by comparison, even if only temporarily. According to Robert Hume,

In the sentimental literature of the age one is invited to admire fine feelings; in Gothic writing the reader is held in suspense with the characters, and increasingly there is an effort to shock, alarm, and otherwise arouse him. Inducing a powerful emotional response in the reader (rather than a moral or intellectual one) was the prime object of these novelists. (284)

It became increasingly obvious to literary critics that the popular appeal of Gothic fiction was its ability to provide that emotional response, even at the cost of moral or social peril. The popular opinion of Gothic literature and the opinions of its critics seemed antithetical, and such opposition was focused on the ideals of narrative. Gothic writers avoided realism in their narratives because the supernatural invoked fears of the unknown or the other-worldly that were the traditions of the genre. Although

realism was the essence of good narrative to the critics of Gothic literature, it was counterproductive in such escapist fiction. Many critics still hold realism is a necessary quality of good literature, and the unfavorable criticism that Gothic novels receive in recent studies, as well as the scarcity of research on the Gothic genre, demonstrate this belief.

Gothic literature eventually evolved in response to the increasing social criticism that the genre was experiencing, but it did not disappear as its critics would have liked. The novelists of the time had found a medium that appealed to the public, and this discovery breathed new life into popular literature. Criticism, however, was so great that Gothic literature could not endure in its original form. Later Gothic fiction tried to adopt more socially conscious modes and deeper philosophical implications within its escapist mode. The intermediate forms of the evolving Gothic genre involved what Robert Hume calls "historical-Gothic" and Gothic "translations." One used historical settings within the Gothic genre in the hopes that it would give credibility to the unfavorably criticized genre while the other involved translations of popular English Gothic works to distance their authors from the original work. Both failed, and Gothic literature was still criticized for demoralizing its readers.⁹

In trying to give Gothic literature credibility as well as continued mass appeal, Gothic writers gradually developed a new mode for Gothic works. This new mode contained philosophical inquiries within the Gothic framework, and such thought-provoking literature finally earned a moderate degree of respectability. Even though Gothic has never really gained respectability in the annals of literary history, it is this new mode of Gothic fiction under which *Frankenstein* is generally categorized. Heller's description of this Philosophical Gothic shows the evolution in its grandest form:

Philosophical Gothic made explicit the concerns about character, conduct, and education that underlay the emergence of popular Gothic fiction; in place of the machinery of sentimental and horror Gothic, it explored the horrific elements of human personality, and the forces--including education and reading--that go into their creation. (329)

Philosophical Gothic combined the best of the didactic elements of Gothic literature's earlier forms with the horrific elements of the genre's more popular forms. The genre addressed the concerns of both critics and its popular readership and in doing so elevated Gothic literature to its highest point.

A definition of Gothic horror is in order at this point, for horror is that which enables the best of the genre to involve the reader. Only a working understanding of Gothic horror can clarify the distinctions of Gothic literature in a way that resolves the greatest misunderstandings inherent in Gothic criticism. In this endeavor Robert D. Hume is correct in believing that a distinction must be made between Gothic horror and Gothic terror. As I have stated earlier, the creation of terror in the earliest Gothic works is a quintessential element of the genre, but the distinction between terror and horror enables the later, more philosophical Gothic writers to realize the potential of the genre. Using comments made by Anne Radcliffe in making his distinction between Gothic horror and Gothic terror, Hume aptly defines the two modes so integral to the Gothic genre:

As Mrs. Radcliffe puts it, "Terror and horror are so far opposite, that the first expands the soul, and awakens the faculties to a high degree of life; the other contracts, freezes, and nearly annihilates them . . . neither Shakespeare nor Milton by their fictions, nor Mr. [Edmund] Burke by his reasoning, anywhere looked to positive horror as a source of the sublime, though they all agree that terror is a high one."¹⁰ In short,

terror opens the mind to the apprehension of the sublime, while (according to Mrs. Radcliffe) the repugnance involved in horror closes it. (285)

While terror raises the consciousness to an emotionally charged level of concern, horror shocks the psyche to the point of psychological revulsion. This distinction is integral to an understanding of what Gothic literature does and how it does it. Gothic terror, which frightens the reader into thinking about a social problem in a new way, acts in a very easily understood, almost formulaic manner. As a result, the ghost-sightings and other hauntings so traditional in the early Gothic novels become quite predictable in the modern age. Gothic horror, however, assumes that its readers are not so easily frightened anymore. Gothic horror needs no common understanding of social problems to frighten the reader, for the horror of Gothic literature encourages and expects a more sophisticated readership. The problems in Gothic horror become more psychologically complex and morally ambiguous in the philosophical criticisms of the genre. The later Gothic writers like Mary Shelley changed their mode of literary invention to adapt to the philosophical growth of the Romantic period. As a result, they do not rely on surprise or the supernatural to the extent that earlier writers did; rather, they present events that are more horrible because

they are more believable. As Judith Halberstam points out in her book *Skin Shows: Gothic Horror and the Technology of Monsters*, Gothic horror novels like Mary Shelley's *Frankenstein* demand "a rethinking of the entire Gothic genre in terms of *who* rather than *what* is the object of terror" (28). The ghosts of the best Gothic horror novels are inside the characters, and the domains they haunt are the psyches of the characters. The experience of the sublime for readers of Gothic horror is much greater than the superficial chills and thrills offered by early Gothic terror fiction. Hume claims:

Terror-Gothic works on the supposition that a reader who is repelled will close his mind (if not the book) to the sublime feelings which may be roused by the mixture of pleasure and pain induced by fear. Horror-Gothic assumes that if events have psychological consistency, even within repulsive situations, the reader will find himself involved beyond recall. (285)

Hume is correct in saying that the difference between Gothic terror and Gothic horror is based on the degree of involvement between the reader and the text, but the importance of social context cannot be devalued by the expectation of "psychological consistency." There must be an element of plausibility amidst the massive suspension of

disbelief in a Gothic novel for that work to be effective, but Gothic fiction must also rely on the probable ramifications of supernatural or bizarre circumstances. Otherwise, there would be no need for the escapism that distant settings and psychologically complex characters (as fundamental devices of Gothic fiction) provide. Gothic fiction depends on the social and moral ideologies of its readership, so that it can subvert them. The sublime horror that is intended after reading Gothic horror novels transcends the experience, expectations, and comprehension of reason. The reader is left in the fugue of the sublime for that moment while reason tries to arrive at a solution. The escapism of Gothic horror depends on an understanding of the differences between the reader and the protagonist rather than on the reader's obvious identification with the hero. The skeptical eye cannot explain the horrifying events of the philosophical Gothic horror novel; as a result, the reader must look to the elements of the novel that make such a frightening narrative so plausible.

In trying to define the characteristics of the Gothic genre,¹¹ Hume discusses Radcliffe, Walpole and Shelley in terms of the following characteristics:

- (1) A setting in space or time or both sufficiently removed from the reader of 1800 that there would be no intrusion of everyday standards

of factual probability and morality. . . . (2)

There is a moral norm present in the story. The villain-hero is thus measured against a standard which the reader recognizes as close to his own everyday outlook. . . . (3) The action is derived from a complex villain-hero. . . . The world and atmosphere of the Gothic novel are like its "terrific" protagonists--fearsome and profoundly ambiguous. (4) The confusion of evil and good which the Gothic novel reflects in its villain-heroes produces a non-Christian or anticlerical feeling. . . . These writers simply cannot find in religion acceptable answers to the fundamentally psychological questions of good and evil which they were posing. (287)

It is in this context that one must examine *Frankenstein* as a work of Gothic horror. The misconception that it is "above" Gothic literature is largely due to the fame and prestige of Percy Shelley rather than to an examination of Mary Shelley's novel on its terms.¹²

Frankenstein is set for the most part in Geneva, Switzerland. The picturesque beauty of the mountainous landscapes provides an idealized, almost pastoral setting in which Victor enjoys rural life. The importance of Geneva in terms of the Gothic setting relies upon Shelley's depiction

of it as idealized, and Shelley's portrayal of Switzerland comes from her visit there in the summer of 1816. In the introduction to *Frankenstein*, she describes the climate during that summer:

In the summer of 1816, we visited Switzerland, and became the neighbors of Lord Byron. At first we spent our pleasant hours on the lake, or wandering on its shores; . . . But it proved a wet, ungenial summer, and incessant rain often confined us for days to the house. (Introduction, 20-21)

Shelley remarks that Byron was often a source of creativity, as well as amazement, for her during that summer. Her depiction of Switzerland shows the creative potential that she, as a thinker and creator, developed during her stay. Her experience is analogous to Victor Frankenstein's upbringing in Geneva. The paradisaical childhood in which every one of Victor's wants is fulfilled is the ideal of parenting. Victor, by virtue of his parenting, has the potential to do anything that he wants. His parents are wealthy, caring, and genuinely interested in rearing Victor according to the mores of proper society. Victor acts as a symbol of potential, power and capability that every nineteenth-century reader would emulate if he or she had Victor's opportunities in their youth.

When Victor reaches seventeen, his parents send him to the university of Ingolstadt, "that [he] should be made acquainted with other customs than those of [his] native country" (46-47). Although Victor admits to a certain reclusiveness in his youth, he is eager to pursue the sciences that fascinate him. What Victor does not realize though is that his departure for Ingolstadt is an allegory for Adam's exit from Eden. In his narrative to Robert Walton, Victor expresses his gratitude for his upbringing, but he expresses no longing to return to Paradise. Ingolstadt represents Victor's exposure to worldliness. In addition, the reclusiveness of his nature as well as the stubbornness with which he pursues his scientific studies are unsuitable traits for assimilating into modern society. Victor's studies preoccupy and estrange him from his family in Geneva; his alienation from the ideal family shows the growing distance between Victor and the values that his family represents. After he creates that which will ruin him, the Monster, he tries to leave Ingolstadt and the worldliness that it represents to return to Geneva, but the perversion of his studies and the monster as their culmination will follow him back to Geneva, his former paradise.

Victor converts his surroundings in the novel simply by being there. After his education, peril follows him and

those around him until his death. When he meets Robert Walton, the Arctic appears much more perilous until Victor dies. The allegory is clear. Victor's environment is, in fact, part of him: the Gothic settings are disguised reflections of the villain-hero, Victor.

The setting, however, is important only in terms of Victor and his science. The time and place are meaningless because they are not early nineteenth-century England. The story could be set anywhere. The setting furthers the plot without involving incredible locales. Though the Switzerland of Victor's childhood is portrayed as an idealized setting, his return from Ingolstadt shows that Geneva is no longer (and surely never was) the ideal place that he thought it was.

Though the setting does not frighten or horrify, it establishes the atmosphere and shows by contrast the horror that lies in what Victor and the Monster have done. Victor's reclusiveness obfuscates the social norms of the story, but the limited society with which he comes in contact illustrates social norms that are not quite different from early nineteenth-century English society. The best example of social norms in *Frankenstein* is Clerval, Victor's friend, who represents the social standard by which the average reader judges Victor's scientific endeavors. The tension between Victor and Clerval represents the

estrangement that we as readers feel about Victor's obsession with socially unsanctioned scientific practices. That Victor does not write to his family shows a slight awareness (at least at the subconscious level) that he is violating social norms. Regardless of his rationalizations, Victor's deviance from the norms of society as well as from the norms of science leads to the death of his friends and family.

The Monster also represents a deviance from social norms, but his deviance is much more pitiful. The Monster is a social deviant because he is an unnatural creation, who is rejected by society despite his trying to adapt to it and be normal. His grotesque figure despite Victor's careful selection of body parts for form and beauty shows original sin as clearly as Hester Prynne's scarlet letter does. The Monster's pitiful nature is portrayed clearly in both his classical *apologia* to Victor and his encounter with the DeLaceys. The Monster appeals to Victor as his creator:

I am thy creature, and I will be even mild and docile to my natural lord and king, if thou wilt also perform thy part, the which thou owest me.
Oh, Frankenstein, be not equitable to every other, and trample upon me alone, to whom thy justice, and even thy clemency is most due. Remember, that I am thy creature; I ought to be thy Adam; but I

am rather the fallen angel, whom thou drivest from joy for no misdeed. Every where I see bliss, from which I alone am irrevocably excluded. (90)

Similarly, the Monster describes his encounter with the DeLacey family:

I had admired the perfect forms of my cottagers-- their grace, beauty, and delicate complexions: but how was I terrified, when I viewed myself in a transparent pool! At first I started back, unable to believe that it was indeed I who was reflected in the mirror; and when I became fully convinced that I was in reality the monster that I am, I was filled with the bitterest sensations of despondence and mortification. Alas! I did not yet entirely know the fatal effects of this miserable deformity. (101)

When the Monster becomes aware of his own deformity and his subordinate nature as a product of Victor's scientific experiments, he becomes the victim of the novel rather than the villain.

Mary Shelley's social criticism in *Frankenstein* shows the perils of deviating from the social norms. Though the norms are questioned in and of themselves, a character's gravest error appears to be not following them. As we look for fault in Victor and the Monster, we try to rationalize

their behavior by comparing their origins and upbringing. Though we are arguably repulsed by the two villain-heroes to an equal extent, we also feel a great deal of pity for them. Because our judgment of them as truly repulsive creatures would render us as insensitive as the society in which they live, we distance ourselves from their pitiful existences with our rationalized pity. In doing so, we are experiencing the intended purpose of the Gothic horror story.

The complexity of the villain-heroes in *Frankenstein* provides the most frequently discussed criticisms of the novel. The complex interplay between Victor and the Monster represent the closest adaptation of the Gothic tradition in Shelley's novel. Critics have proposed that Victor and the Monster are bound to each other until their death. The image of the *Döppelgänger* persists in interpretations of *Frankenstein* because it seems to be a readily accessible way of describing the two. Other critics have discussed Victor as an allegory of the author's life, the Monster being either Percy Shelley or the novel itself.¹³ In any case, the multiple interpretations of Victor's character prove the complexity of the villain-heroes in *Frankenstein*.

Shelley's novel also conforms to Gothic conventions of ambiguity of good and evil. The moral sense of the work remains unclear, and this is proved as soon as we ask any

number of people *who* is at fault in *Frankenstein*. This convention is demonstrated in all of the major characters of the novel. If we see Victor as a man who comes to his demise as a victim of his self-education, where is the evil in the villain-hero? Either Victor is morally responsible for striving to equal God by creating life in the name of science, or he is not because he is simply a victim of fate. This ambiguity represents the typical device of Gothic horror fiction, and the questions it raises have made *Frankenstein* a source of study for over 150 years. The religious position on Victor's unhallowed acts is not examined in any detail within the novel. Since there are no religious figures to guide Victor (or the reader) in the novel, the reader must wrestle with the moral dilemma alone. The importance of Victor's education can be seen as we try to answer the question of who has wronged whom in the narrative. We find no evidence of Victor's being innately evil, yet we blame him as well as the Monster for the deaths of his friends and family. We can ascribe fault to his nature or the alchemical education that he pursues, but the answer to who has wronged whom is not readily available.

Similar problems arise when we try to label the Monster as innately good or evil. Provided by Victor under the duress of the sublime, his name alone connotes intrinsic evil. The Monster is not so easily labeled as Victor

assumes. Victor creates him to live in society, yet he does not teach him the social mores that he needs to adapt to social conventions. In any effort to avoid blaming the victim, we see the creature under the smoke and mirrors with which moral categorization has labeled him the Monster. The murders that he commits appear atrocious, but we must confess that he appears to be a victim too. There is arguably no intentional referent, religious or otherwise, for the moral problems that are created within the narrative. No one in the novel can tell us whether to blame Mary Shelley or the creature, and it does not suffice to blame both. The monster's nature is as much a product of society as it is innate, thereby initiating an age-old nature/nurture argument. The Monster argues that he is a product of society after imploring Victor to create a mate for him:

[I]nstead of threatening, I am content to reason with you. I am malicious because I am miserable. Am I not shunned and hated by all mankind? You, my creator, would tear me to pieces, and triumph; remember that, and tell me why I should pity man more than he pities me? . . . Let him live with me in the interchange of kindness; and, instead of injury, I would bestow every benefit upon him with tears of gratitude at his acceptance. But that

cannot be; the human senses are insurmountable
barriers to our union. (125)

As a product of society, the Monster defends his actions as the result of society's revilification of him. He argues that society will not recognize his grotesque form as possibly good, so he will leave the pain that society inflicts upon him forever.

The reader's reactions to the moral ambiguities of the text are best represented by Robert Walton after Victor's narrative and the encounter with the Monster. His initial reaction upon meeting the Monster is to judge him as horribly evil:

"Your repentance," I said, "is now superfluous. If you had listened to the voice of conscience, and heeded the stings of remorse, before you had urged your diabolical vengeance to this extremity, Frankenstein would yet have lived." (182)

Walton's moral judgment of the creature is biased, for he has lost a kindred spirit who spoke against the Monster until his last breath. After hearing the long narrative about the sinful Monster and seeing his grotesque form, Walton cannot comprehend the Monster's suffering. Even after Walton doubts himself and feels compassion for the Monster for a moment, he rekindles his disgust by looking at the Monster's tragic face. Walton's narrative ends with the

Monster's departure, and we do not know his final judgment. The scientist Walton's silence leaves the moral judgment to us, and we cannot say that we are any closer to the truth. This resolution or lack thereof demonstrates the moral ambiguity of good and evil in the Gothic novel, which we are still discussing today.

If we are to understand Mary Shelley's *Frankenstein*, we must accept the intentional ambiguities of the genre. Robert Hume differentiates the Gothic from Romantic by showing how they treat the complexities of life:

Romantic writing reconciles the discordant elements it faces, resolving their apparent contradictions imaginatively in the creation of a higher order. Gothic writing, the product of serious fancy, has no such answers and can only leave the "opposites" contradictory and paradoxical. In its highest forms romantic writing claims the existence of higher answers where Gothic can only find unresolvable moral and emotional ambiguity. (290)

If critics consider *Frankenstein* a Gothic novel, they may embrace the art of unresolvable moral and emotional ambiguity in the genre. The mimetic qualities of the philosophical Gothic horror novel prove the worth of the genre rather than working against it. Though the original

forms of Gothic literature were criticized for being escapist, the later novels of the genre are less escapist and more critical of the society in which they were written. The later Gothic genre raises questions, and its success relies upon how long people continue to try to answer them.

CHAPTER 3

THE HORROR OF PARACELSIAN SCIENCE IN *FRANKENSTEIN*

When Victor Frankenstein asserts that "Natural philosophy is the genius that has regulated my fate," he introduces the role of fate in his scientific education as one of the most problematical elements of Shelley's novel (44). In trying to distinguish good from evil in Victor and the Monster, we are faced with the problem of Victor's study and application of alchemical sciences. We continually ask ourselves who is responsible for the murder and destruction in the novel. Upon close inspection, readers generally view the Monster as a pitiful creature and blame Victor for creating the murderous villain. In an effort to avoid blaming the victim, we usually see the Monster as a Rousseau-inspired natural human; subsequently, we see Victor as the bad "parent." This interpretation has allowed for a variety of criticisms about the primal nature of humanity and the responsibilities of parenting.¹⁴ Yet one assumes that the Monster is human in these interpretations despite Victor's intentionally vague description of the Monster's origin. I maintain that the moral character of the Monster

depends upon Victor's scientific nature, but Victor's character is flawed by his scientific education as much as by his nature. If the end justifies the means, Victor's creation of the monster demonstrates a horrible practice of scientific knowledge with fantastic capabilities. Victor's statement about his being controlled by "natural philosophy" may be true, but his vague narrative of his scientific experiments conflicts with the otherwise-detailed narrative in the rest of the novel. Victor claims to be vague about the secrets of generating life because he "will not lead you on . . . to your destruction and infallible misery" (54), but his view of dangerous knowledge implies that the knowledge itself is dangerous rather than the application of it.

Since Victor Frankenstein is the primary narrator in the novel, his treatment of the dangers inherent in scientific knowledge provide the only clear answer to the questions of blame and evil in the story. As I have argued in Chapter 2, the ambiguity of good and evil in the Gothic horror novel presents both a social commentary and a philosophical problem for *Frankenstein's* readers, and Victor's scientific education is the most problematical display of that ambiguity.

We must first look at the role of nature in our assessment of Victor. Victor asserts throughout his

narrative that his inclination towards natural philosophy is a product of fate or destiny, and we must determine the role of fate in Victor's scientific pursuits if we are to label him a villain or a victim. Shelley's revisions of the 1818 edition of *Frankenstein* only make this determination more difficult, but Anne K. Mellor's assessment helps:

The most striking thematic differences between the two published versions of the novel concern the role of fate, the degree of Frankenstein's responsibility for his actions, the representation of nature, the role of Clerval and the representation of the family. (32-33)

The differences between the two editions involve different perspectives of the role of fate, and our conceptions of Victor and his stubborn pursuit of antiquated science depend upon our understanding his character as a product of fate as much as nature. Mellor distinguishes the two conceptions of fate in both editions of Shelley's text:

In the 1818 version, Victor Frankenstein possessed free will: he could have abandoned his quest for the "principle of life," he could have cared for his Creature, he could have protected Elizabeth. But in the 1831 edition, he is the pawn of forces beyond his knowledge or control. (36)

The role of free will and fate are integral to our understanding of good and evil in the novel. If Frankenstein's Monster is a product of his scientific experiments, those experiments may be the source of the evil that pervades the novel. Since Victor's scientific pursuits involve both his stubborn desire to master life and death and the antiquated science that he practices to master them, we must determine whether it is the practice of "unhallowed arts" or Frankenstein's pursuit of them that is inherently evil.¹⁵

The ramifications of this philosophical inquiry show the true horror of Victor's endeavour. If his stubborn pursuit of antiquated science at the cost of social isolation is evil, he is responsible for the destruction that it causes. If alchemical studies are indeed "unhallowed arts," then his scientific body of knowledge is evil. We cannot judge him too harshly since he is a victim of the scientific inquiry that he practices. Though Shelley's revisions of *Frankenstein* complicate our assessment, we must examine whether scientific education or scientific character are being criticized.

Since the 1831 edition is the predominant text read today, we may assume that Shelley intends to minimize free will and demonstrate the power of fate over Victor's scientific studies. The narrative characterizes Victor by

what he does rather than who he is. His upbringing exemplifies an idealistic picture of a family in which any interest or pursuit may be fulfilled. Supported by his benevolent family, Victor can choose to study anything. As critic David Seed asserts,

When she revised the novel for the 1831 edition (the standard text) Mary Shelley increased the details of the family's idyllic life, as if to rule out any possible reason for Frankenstein's dissatisfaction with it. (328)

Victor's family supports him even though he isolates himself in his studies. If Victor's values are shaped by his family, we expect an ideal character from an upbringing filled with wealth, love, and benevolence. His desire for scientific knowledge not only shows the degree to which he values knowledge but also his misplaced esteem of it.

When we find the moment that changes Victor's life, we see the role of fate in Shelley's narrative. Victor confesses a childlike curiosity as a youth to discern the causes of nature. He contrasts his wonder of nature to Elizabeth's in his memories of his home in Switzerland:

While my companion contemplated with a serious and satisfied spirit the magnificent appearance of things, I delighted in investigating their causes.

The world was to me a secret which I desired to divine. (42)

In looking back to this contrast, Victor fails to see the importance of appearance as well as causation in his later experiments. This failure in reason is the first evidence of Victor's predilection toward alchemical studies in the novel. His scientific predilection for causation is somewhat aggravated by his discovery of the works of Paracelsus, Cornelius Agrippa, and Albertus Magnus. As Victor tells Walton,

When I was thirteen years of age, we all went on a party of pleasure to the baths near Thonon; the inclemency of the weather obliged us to remain a day confined to the inn. In this house I chanced to find a volume of the works of Cornelius Agrippa. I opened it with apathy; the theory which he attempts to demonstrate, and the wonderful facts which he relates, soon changed this feeling into enthusiasm. A new light seemed to dawn upon my mind (44)

This "new light" of alchemy influences all of Victor's studies. If we attribute the existence of the Monster to these influences, we must judge Victor's character with them in mind.

Victor's pursuit of science is never hindered by the social constraints of eighteenth-century Aristotelian science; his studies enrapture him to the point of social isolation. Victor already assumes that the potential of natural philosophy is real without understanding the scientific community's rejection of antiquated alchemists; he likewise fails to appreciate the ethical constraints of applied science. Relying on antiquated theories, he studies in a scientific vacuum from the beginning of his scientific education. As a result, the idealistic Victor is never aware of the ethical dilemmas which arise from his research. This method of scientific practice is quite Paracelsian, and I will now demonstrate the analogy between Victor's studies and those of his sixteenth-century mentor.

When Victor goes to Ingolstadt to study science at the university, he enters the town where his mentor practiced two centuries earlier. Like Paracelsus he enters Ingolstadt with a scientific ideology that is anachronistic to his contemporaries. Unlike his mentor, Victor receives two different scientific predispositions from M. Krempe and M. Waldman. Professor Krempe represents the traditional ideas about natural philosophy in his denunciation of them:

"Every minute," continued M. Krempe with warmth,
"every instant that you have wasted on those books
is utterly and entirely lost. You have burdened

your memory with exploded systems and useless names. Good God! in what desert land have you lived, where no one was kind enough to inform you that these fancies, which you have so greedily imbibed, are a thousand years old, and as musty as they are ancient? I little expected, in this enlightened and scientific age, to find a disciple of Albertus Magnus and Paracelsus. My dear sir, you must begin your studies entirely anew." (49)

Krempe's ridicule of the "exploded systems" that Frankenstein idealizes serves to isolate Victor from the scientific community in Ingolstadt, circumstances with which Paracelsus was also quite familiar.

In trying to reconcile his beliefs with those of his scientific contemporaries, Victor seeks out M. Waldman, a professor whose well-rounded scientific theories seem more like his own. During a lecture on the history of chemistry, Waldman speaks what Victor refers to as "the words of fate, enounced to destroy me" (51). Waldman contrasts the alchemists with modern scientists:

"The ancient teachers of this science," said he, "promised impossibilities, and performed nothing But these philosophers [Paracelsus, Cornelius Agrippa, and Albertus Magnus], whose hands seem only made to dabble in dirt, and their

eyes to pore over the microscope or crucible, have indeed performed miracles. They penetrate into the recesses of nature, and show how she works in her hiding places. They ascend into the heavens: they have discovered how the blood circulates, and the nature of the air we breathe. They have acquired new and almost unlimited powers; they can command the thunders of heaven, mimic the earthquake, and even mock the invisible world with its own shadows." (50-51)

As Seed asserts, "this is the most forceful articulation of Frankenstein's dream of power in the novel" (329). When Victor meets Professor Waldman later, he misunderstands the professor's praise of the "indefatigable zeal" with which the alchemists studied (51). Waldman's attempt to temper Victor's scientific enthusiasm fails because he acknowledges the scientific prominence of alchemy. Victor sees this from his socially-isolated scientific viewpoint as an implicit acknowledgment of his own studies. When Waldman helps him learn laboratory techniques, this only reaffirms that acknowledgment.

Paracelsus lived, like Victor Frankenstein, as an anachronistic scientist. Practitioners of fifteenth-century medicine still believed in Galen's four humors as the primary causes of disease. Though well-versed in Galenic

medicine, Paracelsus believed that treatment of a disease depended on a thorough knowledge of *how* the body operated rather than how the symptoms of that disease presented themselves. Paracelsus's study of the active human body was firmly grounded in his scientific ideology. On the importance of theory and practice in medicine, Paracelsus wrote:

Theory and practice should together form one, and should remain undivided. For every theory is also a kind of speculative practice and is no more and no less true than active practice. But what would you do if your speculation did not jibe with findings based on practice? Both must be true or both must be untrue. . . . Practice should not be based on speculative theory; theory should be derived from practice. (51-52)

This ideology is directly analogous to Victor's scientific interest in the cause rather than the appearance of scientific phenomenon. By trying study the function rather than the form of the human body, Paracelsus believed that he could better diagnose and treat his patients.

As a student of medicine, Paracelsus rejected the common practice of anatomical dissection in universities. He believed that the body could only be studied by looking at the functioning organism. He saw the disparity between

the Galenic four-humor system and the practice of anatomy. Paracelsus's theories would overturn the Galenic school of medicine eventually, but he would not live to see it (Pachter 41-42). Paracelsus was an innovator in medical thought and practice, but his adherence to alchemical methods of treatment gave him an infamous reputation after the emergence of Aristotle's theories in medicine. Paracelsus also suffered from an extreme lack of diplomacy and an extreme sensitivity to criticism. Though his treatments were more successful than those of Galenic practitioners (when they were successful at all), his trial-and-error approach to medicine was harshly criticized by the medical community. Paracelsus defied traditional medicine by teaching openness in medical treatment:

Regardless how much knowledge or skill a physician may have, he can be surprised by an anomaly--like a white raven--which confounds all the books; and all his experience, everything he has learned at the sickbed, is suddenly gone. Therefore study each day without respite, investigate and observe diligently; despise nothing, and do not lightly put too much trust in yourself. Do not be arrogant when in fact you are helpless, and do not regard yourself as a master at the outset; for no one can achieve mastery without labour. . . .

[F]rom time to time he must consult old women, gypsies, magicians, wayfarers, . . . and learn from them; for these have more knowledge about such things than all the high colleges. (57)

Paracelsus believed in a treatment based on the individual's symptoms; as a result, he provided no definitive treatment for any given disease. Paracelsus believed in using what worked before, but he did not stubbornly refuse like his Galenic contemporaries to try something else when it didn't work. His humanistic approach to medicine was not understood by students of the traditional schools, and he felt victimized by their harsh criticism of his ideas.

By rejecting a widely-accepted theory of medicine, Paracelsus willingly abandoned the standards of the scientific community. He did not receive a medical degree from Ferrara where he studied, and he preached a novel form of scientific empiricism. Pachter describes his approach:

The word empirical . . . had two special meanings in the parlance of contemporary doctors. Both, we shall find, fit Paracelsus. An empiricist, first, was a practitioner without academic standing who had picked up his knowledge of medicine outside the colleges. They were the lowly ones of medicine. . . . Among these empiricists, however, were a number who experimented in a rather

different way. They tested the properties of stones and metals, prescribed certain new drugs which, in some cases, achieved cures where Galenic remedies failed. (54-55)

Carl Jung asserts that "the authenticity of one's own experience of nature against the authority of tradition is a basic theme of Paracelsian thinking" (115). At this point we begin to see the analogy between Victor's scientific experiments and those of Paracelsus. Both worked as empiricists in the first sense of Pachter's definition. Neither Victor nor Paracelsus received degrees from their universities. Both worked from a scientific ideology that was considered antiquated by their contemporaries. Yet both achieved successes where no one else could at that time. The most important analogy between the two scientific pioneers is that they both worked outside of the scientific community. As a result, their theories could not be accepted; nor could their contemporaries learn from them.

If we return to Victor's scientific education, we find that his tremendous progress at the university required him to serve two masters: the modern Aristotelian sciences taught there and his own pursuit of natural philosophy.¹⁶ His capacity for science greatly surpassed that of other students, and Victor attributes this to his devotion:

A mind of moderate capacity, which closely pursues one study, must infallibly arrive at great proficiency in that study. . . . When I had arrived at this point, and had become as well acquainted with the theory and practice of natural philosophy as depended on the lessons of any of the professors at Ingolstadt, . . . I thought of returning to my friends and my native town, when an incident happened that protracted my stay. (53)

His discovery of "the cause of generation and life" (54) would eventually alienate him from society for the rest of his life, but his single-minded dedication to discovering it had already left him estranged from society. By studying natural philosophy in seclusion, his work has no social context. Although his scientific advances surpassed the abilities of twentieth-century scientists, he "rejects the central tenets of scientific practice: application, dissemination, or exchange" (Rauch 233). Herein lies the social criticism of science in *Frankenstein*. Paracelsus was an outcast among medical scholars because his scientific theories seemed antithetical to them. Pachter describes the inept manner in which Paracelsus responded as an outcast:

With somnambulistic lucidity Paracelsus linked his ideas on virtue and nature with his struggle for the recognition of the unlearned physician and of

folkloristic medicine. Religion, nature, and humanism, he thought, were on the side of the people, and he almost conducted his campaign for his new medicine as a class war. (200)

Paracelsus's great difficulty with gaining acceptance into scholarly society arose because he could not disseminate his research. As a result, he was criticized until years after his death. Like Paracelsus, Victor is an anachronism among scientists because he practices a self-serving science in the pursuit of glory. The Monster, his creation, represents his entire body of scientific knowledge, but he cannot morally disseminate his research. As a result, he suffers the repercussions of his creation as the Monster ruins his life in much the same way that Paracelsus's infamy haunted him during his life.

The elements of Gothic horror in Victor's scientific education present themselves in his dreams after creating the Monster:

I thought I saw Elizabeth, in the bloom of health, walking in the streets of Inglostadt. Delighted and surprised, I embraced her; but as I imprinted the first kiss on her lips, they became livid with the hue of death; her features appeared to change, and I thought that I held the corpse of my dead mother in my arms; . . . I started from my sleep

with horror; . . . when by the dim and yellow
light of the moon, . . . I beheld the wretch--the
miserable monster whom I had created. (58)

Now Victor confronts his creation, and the horror that the Monster instills in him follows the scientist until his death. This often-quoted passage is one of the most horrifying moments in the novel, yet few critics have acknowledged the allegorical significance of it. In the dream Victor's love is converted into a ghastly image of his dead mother. This allegory reinforces the social isolation caused by Victor's scientific pursuits. The ruin of his family and his subsequent recognition of it horrifies him because he has estranged himself from them during the two years of his own pursuits. The realization of the horror when Victor wakes proves that the horror is not supernatural; that is, it does not have a fantastic or incredible origin. The Monster is Victor's creation and as believable to Victor as himself.

The careful methodology with which Victor describes his scientific inquiry demonstrates the credibility of the narrator. Shelley's creation of Victor's narrative circumvents traditional science; we are not allowed to doubt the existence of the monster. There is no argument that Victor can create the Monster by a process which we cannot understand and he refuses to divulge. The close association

between Victor and the Monster in the novel reminds us that Victor's scientific ideology haunts him in a very tangible form, the Monster. As readers of Victor's narrative, we are as isolated from his society as Robert Walton. Critic Alan Rauch is correct in his assertion that

[t]he scientist needs to recognize that all knowledge has a monstrous quality and the only way to introduce knowledge is to de-monstrate it, that is, to display it and in doing so, to demystify it. (237)

By keeping his experiments secret, Victor reinforces the monstrous qualities of the creation that he calls "the Monster." The Monster is mysterious because of these secrets and because he is unique.

If the Monster is mysterious to Victor's audience, critics will agree that Victor himself is no less confounding. Unlike Paracelsus, he demonstrates an utter ignorance of self during his studies in Ingolstadt. This lack of self-knowledge hinders our perception of Victor as a credible narrator and confounds our attempts at distinguishing good from evil in *Frankenstein*. Seed asserts:

One of Frankenstein's standard narrative tactics is to refer everything--retrospectively, of course--to fate or destiny, which suggests a

negative inversion of his original belief that he was destined for some great enterprise. . . . The contradiction reflects Frankenstein's lack of self-knowledge since he never really admits his responsibility. . . . (338)

Victor attributes his downfall to fate, and his frequent use of the passive voice shows the lack of self-blame that makes him so reprehensible. Victor describes his destiny after reading the works of Cornelius Agrippa:

When I look back, it seems to me as if this almost miraculous change of inclination and will was the immediate suggestion of the guardian angel of my life. . . . Her victory was announced by an unusual tranquillity and gladness of soul, which followed the relinquishing of my ancient and latterly tormenting studies. It was thus that I was to be taught to associate evil with their prosecution, happiness with their disregard. . . . Destiny was too potent, and her immutable laws had decreed my utter and terrible destruction. (46)

Victor lacks the qualities of a credible narrator because he shows little or no depth of character in his single-minded pursuit of natural philosophy. We cannot contest the scientific procedures that, in the name of social good, he does not explain to us, but we can ask why he performs them

at the cost of his health, his loved ones, and his sanity.

Critic Warren Montag proposes a good answer:

[H]is destiny is neither personal nor individual: Frankenstein has been an instrument of science. A seemingly chance encounter with the works of Cornelius Agrippa, his father's too casual dismissal of Agrippa, the reduction of a tree to splinters by lightning, the decision to attend the University of Ingolstadt: each of these moments was a ruse of scientific and technological progress, realizing itself through him but without his knowing it. His life as it is narrated assumes a nightmarish coherence; every experience, sensation, and feeling was a step on the road to his damnation. (306)

Victor's narration is appropriate if we accept him as a victim of destiny. Though Victor's lamentable destiny may be attributed to scientific fascination, Shelley develops the social criticism in *Frankenstein* much by describing Victor's scientific education.

The Gothic horror framework in Shelley's novel needs an allegorical "Everyman" to shock readers into philosophical thought, thereby distinguishing the novel from its Gothic predecessors. By offering us a scientific narrator who has experienced an idealized youth but who devotes himself to

education and studies which ultimately kill him and those he loves, Mary Shelley makes Victor Frankenstein such an allegorical figure. For the novel to be plausible, Victor must alienate himself from the society that could convince him of the ethical limitations of science.

Though the origins of Victor's fascination with the alchemists is accidental, the education he receives (both self-taught and from the university) plays a crucial part in shaping his character. It is, in fact, the only defining element of his character before he creates the Monster. The horrific chain of events begins not with the success of his experiments (as some critics would believe) but with his exposure to natural philosophers like Paracelsus. His idealized childhood promises a fantasy of happiness which he abandons to further his studies, and he is never able to return to a happy life like that of his childhood.

In his alchemical studies, Paracelsus referred to the substance in an herb or powder called "arcanum," meaning secret power (Pachter 56). The secret to Victor's success in his experiments may likewise involve "arcanum," but the scientific restraint that comes with any discovery of power cannot be judged without considering some degree of social context. Misunderstood by their contemporaries, both scientists suffered criticism. Their exploits are seen in science and literature as models of how scientists should

not behave. The analogy between Paracelsus and Victor Frankenstein reinforces the Gothic convention of social commentary. In her Introduction to the 1831 edition of *Frankenstein*, Mary Shelley tells of a conversation between Percy and Lord Byron in which

various philosophical doctrines were discussed, and among others the nature of the principle of life, and whether there was any probability of its ever being discovered and communicated. They talked of the experiments of Dr. [Erasmus] Darwin, (I speak not of what the Doctor really did, or said that he did, but, as more to my purpose, of what was then spoken of as having been done by him). . . . (22)

Shelley reveals in this narrative that the importance of a scientist's discoveries is how they are received rather than the details of how they emerged. If this is the point of Shelley's novel, her social commentary about scientific discoveries is clearer in the framework of multiple narrators. The relative lack of emphasis on Victor's methods accounts for why he does not explain them to us. His isolation from society is a greater crime because he cannot understand what he has done. The secrecy and isolation that surround Victor's studies illustrate that he depends on a Paracelsian model of scientific education. By

invoking images of Paracelsus in Victor Frankenstein's scientific studies, Shelley reminds us of the perils of social isolation in science. We understand *Frankenstein's* main character only in terms of this social criticism, and Victor's fate seems inordinately cruel without it.

CHAPTER 4

SCIENTIFIC NARRATIVE IN *FRANKENSTEIN*

"You will rejoice to hear that no disaster has accompanied the commencement of an enterprise which you have regarded with such evil forebodings" (25-26). The opening lines of Robert Walton's first letter to Margaret Saville are also the first lines of Mary Shelley's novel, and they prepare us for the horrible account of Frankenstein and the Monster. The tone belies the accounts of the scientific journeys that follow. It is a tone similar to the one that we hear upon reading the novel's full title: *Frankenstein, or the Modern Prometheus*. Shelley's allusion to the myth of Prometheus reminds us of discovery and the perils of over-reaching, as Walton's opening tells us of "enterprise," yet includes the possibility of disaster.

The opening letters from Robert Walton to Margaret Saville have a much more important purpose in the structure of Shelley's novel than literary convention. Since the novel begins with a series of letters, we expect narrative distance from the main characters in an epistolary novel. What follows, however, is a complex set of narratives in which Victor Frankenstein's story is filtered through Robert

Walton to Margaret Saville and the reader. The first question we may ask ourselves is why Mary Shelley utilizes so many narrators to tell the story of Victor and the Monster. Each narrator unknowingly criticizes the scientific experiments in the novel. The multiple narrators also bring Victor's story from Geneva through the Arctic back to England, thereby adding plausibility to what would otherwise be a distant legend. Victor even remarks to Walton:

Were we among the tamer scenes of nature, I might fear to encounter your unbelief, perhaps your ridicule; but many things will appear possible in these wild and mysterious regions, which would provoke the laughter of those unacquainted with the ever-varied powers of nature. . . . (37)

The great courier of Victor's tale is Robert Walton, a scientist who embarks to traverse the Arctic to reach the North Pole. Walton begins his letter to Margaret by describing his youth and early predilections for scientific discovery, and we begin to see the analogy between Victor and himself. As the first narrator to hear Victor's tale, Walton has the greatest potential to be influenced by it. The similarity between their hopes of scientific glory reveals much about who they are as well as the effect of science upon them. By exhibiting the similarities and

differences between them, Walton inadvertently teaches the moral lesson in Victor's tale. By ending his expedition before its completion, Walton does what Victor did not; that is, he shows proper restraint in his pursuit of scientific discovery. That these two scientists are similar illustrates that Frankenstein is a victim of bad choices rather than bad fortune.

The first comparison between Walton and Frankenstein is their scientific enterprise. Both strive to conquer the impossible. One wants to conquer the world geographically--the other wants to conquer death. Both pursuits are seen as impossible by the prevailing scientific community, yet each scientist persists in serving his love of glory. Walton writes to his sister, "I shall satiate my ardent curiosity with the sight of a part of the world never before visited, and may tread a land never before imprinted by the foot of man" (26).

This remark reminds us of Frankenstein's words as he sought to generate life in a corpse:

Life and death appeared to me ideal bounds, which
I should first break through, and put a torrent of
light into our dark world. A new species would
bless me as its creator and source; many happy and
excellent natures would owe their being to me.

(55)

Both men are driven by a need for recognition in the scientific community. They realize that inquiries into "realities of little worth" would neither gain that recognition nor satisfy the drive for knowledge they seek (50).

Victor Frankenstein and Robert Walton also share self-education through books. Both scientists as adolescents read books that their fathers considered harmful. Victor is disappointed after he reveals of his discovery of the alchemists to his father, for his father implores, "My dear Victor, do not waste your time upon this; it is sad trash" (44). Similarly, Robert's father does not approve of his son's love of seafaring. In his first letter to his sister, Walton reminds her:

You may remember, that a history of all the voyages made for purposes of discovery composed the whole of our good uncle Thomas's library. My education was neglected, yet I was passionately fond of reading. These volumes were my study day and night, and my familiarity with them increased that regret which I had felt, as a child, on learning that my father's dying injunction had forbidden my uncle to allow me to embark on a seafaring life. (27)

By going against the wishes of their fathers, both men endanger themselves in their pursuit of scientific glory. Though this would seem to indicate an estrangement from their families (as in Victor's case), each man experiences a different degree of social isolation. Victor neglects his family while performing the experiments that eventually destroy him, but Walton frequently writes his sister and maintains contact with the ordinary world of eighteenth-century London. Both describe the all-encompassing rapture of scientific inquiry, but Walton shows proper restraint that is not evident in Frankenstein. Though psychoanalytic critics might attribute their love of scientific glory to a need for recognition from their father as a symbol of society, Walton and Frankenstein treat their families differently. This distinction characterizes both scientists, and I believe shows Mary Shelley's first criticism of unrestrained science.

Both scientists also attempt to describe the consuming desire inherent in scientific inquiry. Walton writes, "I try in vain to be persuaded that the pole is the seat of frost and desolation; it ever presents itself to my imagination as the region of beauty and delight" (26). Frankenstein similarly claims:

I doubted at first whether I should attempt the creation of a being like myself, . . .; but my

imagination was too much exalted by my first success to permit me to doubt of my ability to give life to an animal as complex and wonderful as man. (55)

They are very different men, however. As a narrator, Robert Walton demonstrates more humanity and compassion than his Genevese counterpart. He writes with great fondness of everyone he encounters except the Monster. Given the largely pejorative treatment of the Monster in Victor's narrative, this is understandable. Walton unknowingly demonstrates the profound effect that Victor's narrative has had on his otherwise-compassionate demeanor. When Walton describes his first impression of the Monster upon meeting him in the Arctic, he writes of "the daemon, as he called him" (34). He accepts Frankenstein's pejorative epithet because Walton has been looking for a friend. That he has found one in Frankenstein makes him that much more susceptible to the prejudices of his guest. After Frankenstein's narrative we see its influence on Walton in his treatment of the Monster:

. . . my first impulses, which had suggested to me the duty of obeying the dying request of my friend, in destroying his enemy, were now suspended by a mixture of curiosity and compassion. I approached this tremendous being; I

dared not again raise my eyes to his face, there was something so scaring and unearthly in his ugliness. (182)

Though Walton by nature feels compassion, he cannot ignore the monstrosity of Victor's creation. His friendship with Victor controls his reception of the Monster, but recoiling is not his natural tendency. This element of Walton's narrative also increases our pity for the Monster because we can only imagine his hideousness; Victor and Walton have seen him. In this sense we are like Old De Lacey the cottager who senses humanity in the Monster because he is blind to his hideousness.

At this point it is important to discuss the Monster's narrative. We, like Robert Walton, have for many pages only Frankenstein's horrific description of the Monster. The Monster's narration is his best and only defense of his humanity and, as such, proof of the ambiguity of good and evil present in Shelley's novel.

The Monster defends his actions as the products of social neglect and abuse and blames Frankenstein for abandoning his creation like a bad father. He believes that his "heart was fashioned to be capable of love and sympathy" (180), and his argument is sound, though true in only a literal sense. With the highest hopes Frankenstein creates the Monster, but the creation is limited by the faults of

its creator. As a creator Victor is working in a context devoid of social attachment and proximate love.

Frankenstein's creation is just as "capable of love and sympathy" as its creator, but such emotions are not likely to occur in that context. We see the Monster as estranged from society, and we pity him for the faults of his creator. The Monster describes his pathetic condition:

Yet I seek not a fellow-feeling in my misery. No sympathy may I ever find. When I first sought it, it was the love of virtue, the feelings of happiness and affection with which my whole being overflowed, that I wished to be participated Once I falsely hoped to meet with beings, who, pardoning my outward form, would love me for the excellent qualities which I was capable of unfolding. . . . But now crime has degraded me beneath the meanest animal. (183)

Unlike Walton, the Monster no longer desires companionship, for he is embittered by society's treatment. His oration reiterates that he has a heart "capable of love and sympathy," but he is the "victim" of "crime." Whether that crime is Victor's neglect, society's rejection, or the murders he himself commits, we pity the Monster because we too believe he is a victim. If society cannot see beyond his appearance, he will avoid the pain that it brings. We

are reminded by his rhetoric of our initial reactions to Frankenstein's account of the Monster, and we strive to see beyond his "outward form" in a way that Frankenstein and Walton cannot.

After examining the complex narrative structure of the novel, I propose that Shelley intends a gradual introduction of scientific horror into nineteenth-century English society. Each narrative has a different degree of plausibility. If we cannot accept the Monster's narrative because of his mysterious origin, we may accept Frankenstein's because he is a man of science. If we disbelieve Frankenstein's narrative because of his scientific obsession, we may believe Walton's narrative because he is humane and compassionate. Finally, if we doubt Walton's testimony, Walton's anticipation of Margaret Seville's reactions, described in his final letters to her, invite us to accept her belief in it. The epistolary framework of *Frankenstein* establishes a realistic viewpoint from which we can see Frankenstein's tale as plausible.

Critic Mary Lowe-Evans perceptively asserts that:

this first letter implies a contract between reader and text. The reader, man or woman, is invited to assume an eighteenth-century, sisterly attitude toward the words on the page: loving, kind, and generally affirming. (219)

In this context the narrative distance reinforces the plausibility of the Gothic horror tale and demonstrates the evolution of the Gothic genre from the supernatural tales of Anne Radcliffe and Horace Walpole to the philosophical Gothic of Mary Shelley. Though the Monster may be "lost in darkness and distance" (185) to Robert Walton, he endures in literature through Shelley's narrative structure.

CONCLUSION

If the study to which you apply yourself has a tendency to weaken your affections, and to destroy your taste for those simple pleasures in which no alloy can possibly mix, then that study is certainly unlawful, that is to say, not befitting the human mind. (57)

Victor Frankenstein's "moralising" summarizes the social criticism in *Frankenstein*. In criticizing the pursuit of knowledge as a joy which must be tempered by restraint, she fulfilled the promise of Gothic horror and moved it to a philosophic level. She shocks into an intellectual malleability to make us open to considering her point. After such consideration, we become convinced that good and evil are inherently difficult to define and even more difficult to judge in the absence of social context, and that the pursuit of knowledge can corrupt individuals whether they exhibit Faustian pride, Promethean over-reaching, or simple curiosity.

I have argued that Mary Shelley's *Frankenstein* should be considered a Gothic horror novel that also embodies the characteristics of the later, more philosophical side of the genre. Later Gothic literature commonly contained sophisticated

social commentary, and *Frankenstein* is no exception. I have also set forth several other criteria by which a work may be considered Gothic in an attempt to reconcile the disagreement between critics of the period. One of these concepts is the ambiguity of good and evil. Few critics like the idea of intentional ambiguity; therefore, some critics are troubled by the ambiguity in the novel. I have argued that Shelley's intentional ambiguity adds a greater understanding of the novel than does the popular belief that it is just a good ghost story.

I have also illustrated an analogy between the scientific studies of Victor Frankenstein and the studies of Paracelsus. The legendary status of one of the founders of empirical medicine greatly influenced Shelley as she tried to capture the darker mysteries of life. Though Victor is inspired by the alchemists, critics tend to devalue his research as they examine the interactions between Victor and the Monster.

Finally, I have demonstrated the importance of narrative structure in Mary Shelley's novel. By using the epistolary novel form to frame her Gothic tale, Shelley makes plausible a set of circumstances that would otherwise be implausible. Her adroit use of structure distinguishes *Frankenstein* from its Gothic predecessors and verifies the philosophical Gothic novel as still worthy of study almost two hundred years later.

NOTES

¹See Johanna M. Smith, ed., *Frankenstein*, by Mary Shelley (Boston: St. Martin's Press, 1992) for an anthology of critical essays from a variety of literary perspectives. See also George Levine and U. C. Knoepfelmacher, eds., *The Endurance of Frankenstein: Essays on Mary Shelley's Novel* (Los Angeles: U. of California Press, 1982) for an earlier collection of essays on *Frankenstein*.

²The edition of *Frankenstein* used in this study is Johanna M. Smith, ed., *Frankenstein*, by Mary Shelley (Boston: St. Martin's Press, 1992) 44. All citations from the text will be cited internally for the remainder of this study.

³Shelley describes the Gothic tales that she could not forget in her introduction to *Frankenstein*:

There was the History of the Inconstant Lover,
who, when he thought to clasp the bride to whom he
had pledged his vows, found himself in the arms of
the pale ghost of her whom he had deserted. There
was the tale of the sinful founder of his race,
whose miserable doom it was to bestow the kiss of

death on all the younger sons of his fated house,
just when they reached the age of promise (21).

⁴See Henry M. Pachter, *Magic into Science: The Story of Paracelsus* (Scranton: Henry Schuman, 1951) for a dissemination of myth and fact in Paracelsus's biography. I am greatly indebted to Pachter for the unbiased biographical account of Paracelsus's life and works.

⁵See Robert D. Hume, "Gothic versus Romantic: A Reevaluation of the Gothic Novel," *PMLA* 84 (1969): 282-90.

⁶See Robert Donald Spector, *The English Gothic: A Bibliographic Guide to Writers from Horace Walpole to Mary Shelley* (Westport: Greenwood Press, 1984, pp. 225-26) for a discussion of the unfavorable reviews that *Frankenstein* originally received after its publication.

⁷Robert D. Hume provides the most detailed definition of the Gothic genre to date. Although recent literary study provides a great deal of analysis of the subgenres of Gothic literature, Hume's categories provide a good basis from which to work. For further analysis of the Gothic genre, see David H. Richter, "Gothic Fantasia: The Monsters and the Myths," *The Eighteenth Century* 28.2 (1987): 149-170, and Robert Miles, "The Gothic Aesthetic: The Gothic as Discourse," *The Eighteenth Century* 32.1 (1988): 39-57.

⁸See Heller, pp. 326-327, for a historical account of the growing concern of corruptive literature.

⁹See Heller (328) and Hume (283) for descriptions of and reactions to these intermediate forms of literature.

¹⁰The quotation from Anne Radcliffe is cited from the *New Monthly Magazine*, Vol. VII (1826).

¹¹See Frederick S. Frank, "The Gothic Romance: 1762-1820," *Horror Literature: A Core Collection and Resource Guide*, ed. Marshall B. Tymn (New York: R. R. Bowker Co., 1981) pp. 8-9, for another good attempt at classifying the subgenres of Gothic literature.

¹²See James P. Carson, "Bringing the Author Forward: *Frankenstein* Through Mary Shelley's Letters," *Criticism*, 30.4 (1988): 431-453. This article clearly distinguishes Mary Shelley as an emerging author who struggles to maintain a separate literary identity from her husband.

¹³See Anne K. Mellor, *Mary Shelley: Her Life, Her Fiction, Her Monsters* (New York: Routledge, 1989) and Sandra Gilbert and Susan Gubar, *The Madwoman in the Attic: The Woman Writer and the Nineteenth-Century Literary Imagination* (New Haven: Yale U. Press, 1984) for discussions of allegorical figures in *Frankenstein*. See also James P. Carson. For an examination of Victor and the Monster as allegorical figures, see Thomas Dutoit, "Respecting the Face as the Moral (of) Fiction in Mary Shelley's *Frankenstein*," *MLN*, 109 (1994): 847-871.

¹⁴This interpretation of the Monster as a victim of bad parenting is discussed in recent studies of Mary Shelley's biography. See Anne K. Mellor, *Mary Shelley: Her Life, Her Fiction, Her Monster* (New York: Routledge, 1989) and William Veeder, *Mary Shelley and Frankenstein: The Fate of Androgyny* (Chicago: U. of Chicago Press, 1986).

¹⁵Shelley, in her introduction to the 1831 edition, remarks about the horror of Frankenstein's task:

I saw the pale student of unhallowed arts kneeling
beside the thing he had put together . . .
Frightful must it be; for supremely frightful
would be the effect of any human endeavour to mock
the stupendous mechanism of the Creator of the
world. (22-23)

Shelley's description asserts the act is morally evil, but this introduction was not present in the 1818 edition in which free will had more influence on Victor's character.

¹⁶By modern I mean eighteenth-century medicine. Though there is evidence that Paracelsian science persisted until the sixteenth and seventeenth century (see Allen G. Debus, *The Chemical Philosophy: Paracelsian Science and Medicine in the Sixteenth and Seventeenth Centuries*, 2 vols. (New York: Science History Publications, 1977) for a lengthy discussion of Paracelsian influence in science), it was still considered antiquated by the eighteenth century.

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