

Ragnok in Mary Shelley's *Frankenstein*: The Revenge of the Hrimthursar

Abigail Heiniger, (Wayne State University)¹

Abstract

In April 1815, a volcano on the Indonesian island of Tambora erupted, devastating that region and causing a major climate change: 1816 was known in across the Atlantic as the "year without a summer." While many scholars have interpreted the notorious weather of that year as the catalyst for Mary Shelley's Frankenstein, scholars are only beginning to examine the depth to which that weather penetrated her work. This paper explores the ways that Victor Frankenstein's creature resembles a Norse weather monster, an Hrimthursar or a frost giant, and examines Shelley's distinctive message about the communal trauma of "a year without a summer."

Introduction

Scholars such as Brian Fagan in *The Little Ice Age* (2000) interpret the notorious weather of 1816 as a catalyst for the creative work of Mary Shelley and the rest of Lord Byron's entourage at Villa Diodati in Geneva, Switzerland (Fagan 171-72). The cold, stormy conditions that summer forced the pleasure party to stay inside and write for amusement. Mary Shelley composed a ghost story to entertain everyone; it was the first draft of her novel *Frankenstein* (1818).¹ In fact, she includes a parallel scene in her novel; Victor Frankenstein states:

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. (21)²

Reading Cornelius Agrippa inspires Frankenstein's aspirations: "what glory... if I could banish disease from the human frame, and render man invulnerable to any but a violent death!" (22); to this end, Frankenstein creates the creature. Thus, storms are an unintentional stimulus for the creative work of both Mary Shelley and her protagonist.

¹ Abigail Heiniger, English Department, Wayne State University, Detroit, MI 48202, Phone (586) 489-0987 ed1911@wayne.edu

The weather of 1816 was not merely stormy, it was catastrophic; it was known as “the year without a summer” (Fagan 170). It shaped the lives and physical capabilities of people living on both sides of the Atlantic Ocean. Recently, in “*Frankenstein* and Mary Shelley’s ‘Wet Ungenial Summer’” (2006), Bill Phillips documented how Mary Shelley’s experience with the weather in 1816 permeates her novel *Frankenstein*. Phillips reveals how passages in Shelley’s personal journals and letters from that year are recycled in that text, demonstrating that weather was not merely an external catalyst for the production of the novel; rather, the meteorological conditions of 1816 are integrated into the text.³ He concludes his rather provocative article with a question that remains unanswered: “Does the monster, then, represent weather?” (66). In response, this paper expands upon Phillips’ argument and explores the ways in which Frankenstein’s creature resembles a mythic embodiment of weather: an Hrimthursar or a Norse frost giant. The implications of this interpretation have the potential to alter the way scholars view Mary Shelley, her novel, and her relationship with her Romantic contemporaries.

Specifically, Mary Shelley’s use of Norse mythology sets her apart from the other members of the Byron-Shelley circle; she uses mythological allusions to express the communal trauma of a “year without a summer.”⁴ Despite her self-deprecating claims in the Preface to the first edition of *Frankenstein*, her mythic weather demonstrates her artistic independence. *Frankenstein* does not merely recycle Romantic tropes; its frost giant forges ahead into new territory.

Romantic Weather

Mary Shelley was immersed in an artistic tradition that was especially receptive to weather. According to Arden Reed in *Romantic Weather: The Climate of Coleridge and Baudelaire* (1983), the Romantics not only weave clouds, wind, and rain into their texts; they infuse these elements with symbolic meaning (17-18). For example, Reed explores how Samuel Coleridge uses weather to represent the chaos and sin of a fallen world (68).⁵ *Frankenstein* exhibits the conventional Romantic use of weather as a symbol: an external illustration of an internal reality. For example, the “dismal and wet” (35) weather the morning after the creation of the creature reflects Victor Frankenstein’s depression.⁶ However, weather is not merely a symbolic or metaphorical tool in *Frankenstein*. Mary Shelley dramatically expands the tradition she inherited: it is crystallized into the mythic figure of Frankenstein’s creature. By tapping into a different tradition, Mary Shelley embraces a new variation on this message about this force of nature; her mythological source allows her to express the trauma of what Phillips calls “the capacity of nature to instigate environmental crises of biblical proportions” (59). Phillip’s phrase is especially apt; it captures the sense of spiritual or supernatural agency that Mary Shelley incorporates into her depiction of weather.

Mary Shelley’s mythic weather also resonates with the religious fervor of 1816. Fagan states: “Inevitably, the widespread hunger brought a surge in religious devotion, mysticism, and prophecies of the imminent demise of the world” (172). This apocalyptic sentiment especially corresponds with Mary Shelley’s choice of Norse mythology. The tales recorded in the Norse *Edda* conclude with the inevitable demise of the gods in Ragnok, an apocalypse that will begin with three years of winter.⁷

Storms of Industrialism

Although the “year without a summer” is a justifiable impetus for the creature in Mary Shelley’s novel, this has not been widely acknowledged or explored by the academic community.⁸ While scholars like Marilyn Butler in “*Frankenstein* and Radical Science” (1996) and Ann Mellor in “A Feminist Critique of

Science" (1995) have noticed the relationship between the creature and an imbalance in nature, they do not recognize the weather as the source of this disruption.⁹ Instead, many scholars interpret the creature as an embodiment of the destructive forces of the Industrial Revolution; however, Phillips demonstrates the anachronistic nature of these interpretations of *Frankenstein*.¹⁰ Although the Revolution may have been initiated in London in 1784 by the installation of the "world's most powerful steam engine" (Phillips 60), historians generally agree that the social critics were not concerned with the human or environmental costs of Industrialism until the 1830s (60).¹¹ Moreover, Mary Shelley never mentions the Industrial Revolution in any of her extant letters or journals; Phillips states: "There is no evidence to suggest that Mary Shelley was concerned with industrialization at all, other than by its ominously Derridean absence in her writing" (60). Thus, the Industrial Revolution is not the most likely source for the monster.

However, the tendency to overlook the possibility of weather being the disruptive natural force in *Frankenstein* corresponds with the general trend of Modern scholars to dismiss the impact of weather on culture (Reed 3). Defending his text on weather in Romantic poetry, Reed claims that pervasive disregard for weather is a new development in Western culture since the Enlightenment:

That it should strike us as slightly off beat to write about weather is in itself, I think, a response worth pausing to consider, for there are a number of presuppositions that go into development.... the weather formed a major topic of Western philosophy and literature. (3-4)

Moreover, in 1816, weather shaped the fate of everyone in Western Europe like a capricious deity from the ancient world. Thus, the fact that Mary Shelley would incorporate this into her novel is not only plausible but also probable.

Tambora Eruption

The meteorological activity of 1816 began with the eruption of the Tambora volcano in 1815, both scientifically and in the Romantic cultural imagination.¹² Although Tambora is located in Indonesia, the eruption of 1815 was an international incident because the volcano was close to a British naval base on Java (Fagan 167-68).¹³ According to Reed, "'meteor' referred to any kind of meteorological activity... [including] some we would call astronomical or geological" (9). Thus, while the eruption was not perceived as the cause of the weather in 1816, it was widely recognized as the dramatic beginning of a long chain of meteorological phenomena. Immediately following Tambora, there were magnificent sunsets and sunrises; that winter, there were widespread reports of pink, yellow, and blue snow (Fagan 169). For informed Europeans, the eruption of Tambora seemed to mark the beginning of a noticeable shift in weather that would conclude with the last European-wide subsistence crisis.¹⁴

In the essay "Climactic, environmental and human consequences of the largest known historic eruption: Tambora volcano (Indonesia) 1815," Clive Oppenheimer reconstructs the human impact of the Tambora eruption in 1815. According to Oppenheimer, an eruption of this magnitude may only occur a couple times over the course of several millennia (253). Sixty-mega-tons of sulfur were shot forty-three kilometers into the stratosphere within the space of a few hours.¹⁵ The sulfur and other gases from Tambora then remained trapped into the stratosphere for years, blocking sunlight and lowering Earth's surface temperature by several degrees, thus causing a "year without a summer" (Oppenheimer 244).¹⁶ The slight decrease in temperature was especially devastating because it occurred at a time when Earth's temperature was already cooler due to the Little Ice Age.¹⁷

The “Year Without a Summer”

Fagan characterizes the summer of 1816, stating: “Heavy rain accompanied abnormally low temperatures in western and central Europe throughout the vital growing months.... Hailstorms and violent thunder showers battered growing crops.” (170). In nations like England and France, large grain reserves were available to feed the general population through the first half of 1816. However, “conditions rapidly worsened in remoter and mountainous areas” (Fagan 171) and there were no grain reserves in nations such as Germany and Switzerland, where Mary Shelley spent the summer. The travel journals of Carl von Clausewitz describe “ruined figures, scarcely resembling men, prowling around the fields searching for food among the unharvested and already half rotten potatoes that never grew to maturity” (Fagan 171). It may be assumed that Mary Shelley witnessed the same spectacle of starvation; her journal fragments from the summer of 1816 document the death of local peasants in the terrible storms, including the drowning of “two women, two cows and twelve black pigs” (Shelley 111). In fact, the scavenging of farmers resembled the way Frankenstein’s creature scavenges for food during the first years of his existence (68-69). More significantly, the creature shares their deathly appearance with his misshapen body, his pallid skin, and his stringy hair (34-35).¹⁸

“Spark of Being”

The creature is not merely a victim of his environment; the condensation of mythic allusions to weather is apparent in all aspects of Frankenstein’s monster, but especially in its relationship to lightning. It is born in a storm; the “spark of being” (34) that infuses life into the creature seems to be lightning. Despite this, lightning is not portrayed as a life force in the novel; it is not the life-enabling fire that Prometheus stole from Zeus to save mankind.¹⁹ Rather, the lightning in the novel is a destructive meteorological power that reflects the effects of the storms of 1816. Frankenstein is awed by the lethal power of lightning in the storm he witnesses as a child: it reduces “an old and beautiful oak” (23) to mere “ribbands of wood” (23); he states: “I never beheld anything so utterly destroyed” (23). Ironically, he harnesses this destructive power to overcome death and infuse life, but his experiment leaves him as “blasted” (59)²⁰ as the oak in the yard. More significantly, when Frankenstein catalogues the series of events that have cursed his life, they are all direct encounters with the creature (145). The creature confirms this after Frankenstein’s death, when he says in front of Walton, “I, who irretrievably destroyed thee by destroying all thou lovest” (153). This perilous lightning especially resembles the Norse representation of lightning: Thor’s war hammer Mjollnir, which is always destructive.²¹

Norse Mythology: the Hrimthursar in Niflheim

Mary Shelley could have utilized any number of mythological traditions to represent weather, but Norse frost giants offer a way to pair meteorological phenomena with monsters rather than refined deities.²² In contrast to the Classical weather god Zeus, the king of the gods who rules the world from the summit of Mount Olympus, or the Norse storm god Thor, frost giants are not a part of the Norse pantheon in Valhalla. Rather, they live on the fringes of the world of men in a realm called Niflheim; it is a world of ice and mist separated from the human world by forests and mountains.²³ In fact, the expedition in the frame story of *Frankenstein* would comprise a transgression of the world of the frost giants according to *Northern Antiquities* (1770) by Bishop Percy (94).²⁴ Percy further claims that the Vikings feared straying into Niflheim on their expeditions; explorers who did not return were considered to have transgressed the frost giant’s boundaries (94).

The creature's identity as a mythical Norse weather monster also creates another layer of thematic unity between the narrative of Victor Frankenstein and the frame story, where Robert Walton leads an expedition to the North Pole (7). This would be a journey into the very heart of Niflheim, comparable to the Norse god Thor's epic journeys to the frost giants' stronghold. These mythic quests are echoed in Walton's heroic ambitions; he describes the frozen north as irresistibly alluring in a letter to his sister where he states:

I feel a cold northern breeze play upon my cheeks, which braces my nerves, and fills me with delight. ... Inspired by this wind of promise, my day dreams become more fervent and vivid. 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. (7)

Thus, Norse mythology provides Mary Shelley with a paradigm in which the frozen north could be figured as an alluring and magical realm where heroes and gods are tested.²⁵ The mythically charged atmosphere of the frame story also has the densest concentration of allusions to divinity and mythology surrounding Frankenstein and his creature; the frame story could be read as a metaphorical supernatural space (143-56).

Thor's experiences in Niflheim also characterize it as a liminal space where established power hierarchies are challenged.²⁶ It remains a space populated by the giants and monsters that will eventually instigate the Norse Armageddon, Ragnok; in Norse mythology, Thor never conquers or subdues Niflheim. Similarly, Walton's dream of reaching the North Pole is thwarted; the realm of the frost giants remains an impenetrable mystery with the potential to continue undermining the patriarchal order. Walton writes his sister:

The die is cast; I have consented to return, if we are not destroyed. Thus are my hopes blasted by cowardice and indecision; I come back ignorant and disappointed.... It is past; I am returning to England. I have lost my hopes of utility and glory; – I have lost my friend. (150)

Moreover, in his final letters, Walton describes watching the "divine wanderer" (16), Victor Frankenstein, die without having fulfilled his quest of destruction (151-52). Although Walton calls himself "blasted" and feels hopeless, it is Frankenstein's destruction that most closely resembles the Norse Ragnok: creature and creator are united in fiery destruction (155). Although this passage has been interpreted as the inevitable end of Enlightenment scientific exploration or the destructive power of the Industrial Revolution, this encounter may be read as a mythic fate like the Norse Ragnok. There is no convenient villain to which the reader may lay blame. Instead, the reader is invited to revel in the grandiose fatalism just as Walton, Frankenstein, and the creature seem to do in the novel (148-54). This is an epic failure, a magnificent tragedy that could not be prevented any more than the Norse deities could prevent their own fate or the people of Europe could manipulate the weather of 1816.²⁷

Norse and the Romantics

Mary Shelley's audience would have been receptive to her Norse allusions and traditional Norse fatalism when *Frankenstein* was published in 1818. According to John Lindow in *Handbook of Norse Mythology* (2001), Norse mythology was especially influential during the Romantic era, and it was widely incorporated into Romantic art:

The era when Norse mythology was most known in more recent times was the Romantic period, when gods and myths were a popular source of inspiration. Paul Henry Mallet's *Introduction a l'histoire de Dannemarc ...* (1755) made Norse mythology widely known for the first time in a world language, and the work was translated into English in 1770 as *Northern Antiquities...* [by] Bishop Percy.... (37).

Both Mary and Percy Shelley included the book *Northern Antiquities* on their reading list in 1815, the year before *Frankenstein* was first written.²⁸ Norse mythology provided Romantic artists with an alternative to the Classical mythology that was so popular during the Enlightenment. However, even the subversive uses of Norse myth in Romantic poetry tend to be relegated to allusions to the pantheon at Valhalla according to Paul Cantor in "Politics of the Epic" (2007). Lord Byron and Percy Shelley avoided the frozen world of giants and monsters, which Mary Shelley embraces (Cantor 379). She uses the frost giant to explore trauma in the natural world rather than the political and social message often expressed through mythological allusions in Romantic poetry (Cantor 380). Thus, *Frankenstein* exceeds even the innovative mythic tropes of its era.

Mary Shelley's frost giant-like creature in *Frankenstein* specifically resonates with the revival of Norse mythology in German-speaking countries (Lindow 37). In "Giants in Folklore and Mythology" (1982), Lotte Motz claims that the giants from Norse mythology survived in nineteenth-century German folklore and stories of the supernatural (70), the sort of German folklore that Mary Shelley claims inspired her novel (Phillips 64). In fact, German folklore kept Norse mythology about giants alive in popular culture despite the fact that Norse mythology was not available in translation until the late eighteenth- and nineteenth-century. Thus, giants remained potent symbols for oral storytellers and folk traditions; Mary Shelley could trust in her reader's ability to interpret allusions surrounding her creature. By tapping into folklore, she creates a monster that resonates with the a broad public that had been immersed in folk traditions.

Popular Giants

Motz describes the giants of Norse mythology and later German folklore as traditionally addressing themes of struggle between chaos and order, death and life, earth and sky:

[G]iants are seen as ancestors to the gods, yet as their unrelenting enemies; as wise and powerful, yet often also as outwitted and defeated. Various attempts at probing the significance of this mythical race have yielded various conclusions: that giants symbolize meteorological phenomena, that they are the powers of untamed wilderness, an older dynasty of gods, demons of nature, swallows of corpses, agents of death or the dead themselves. (70)²⁹

However, Motz also points out that the chthonic and storm powers of mythic giants were most readily transferred to giants in Germanic folklore (71-72). Thus, these elements would have been most prominent for Mary Shelley and her audience, making giants and frost giants a powerful vehicle for expressing popular anxieties about the destructive weather of 1816.³⁰

Revenge of the Hrimthursar

However, the creature does not merely act out traditional beliefs about giants. Mary Shelley synchronizes destructive weather and the movements of the creature so that it almost seems that he symbolically inflicts catastrophic weather upon his surroundings. For example, when the creature is first sighted by the crew hired by Robert Walton, it is in the midst of a deep freeze (13). The icy weather coincides with the appearance of the creature; it falls suddenly, hemming the ship in with treacherous ice and allowing the creature to glide effortlessly over the frozen ocean (12-13). After the creature and his team pass out of view of the ship, the ice breaks up and Victor Frankenstein is stranded with a single dog from his dog team on a floating piece of ice drifting on the sea (13-14). This initial glimpse of the creature as a majestic being, traveling into the uncharted lands of the north, bringing cold weather and endangering men, aligns the creature with the Norse frost giants.

The creature's initial appearance foreshadows his manipulation of weather throughout the novel. Although Mary Shelley does not suggest that the creature actually controls the external natural world in the novel, weather follows him as if he does impact it. For example, when the creature torches the De Lacy's home, a "fierce wind arose from the woods" (94). After murdering Victor Frankenstein's brother William, the creature appears in a thunderstorm (48), and when the creature murders Elizabeth the wind turns against Victor Frankenstein and prevents him from going for help or pursuing the creature (136-38). Moreover, when Victor Frankenstein opposes the creature, he must fight against the weather: Victor is assailed by terrible storms while trying to destroy the bride of the creature (118-20). It is as if the weather is a projection of the creature's wrath. This resonates with the "jotun-rage" (35) described by Harold Hveberg in *Of Gods and Giants* (1962). When Norse frost giants are enraged, they become two-times as strong and exercised their supernatural powers, including weather powers (Hveberg 35). Mary Shelley strips away the explicitly supernatural aspects of frost giants in her construction of Frankenstein's creature; but the characteristics of jotun-rage still seem apparent. However, the implications of emotion-driven power also resonate with the idea of temperamental weather. The Norse undertones in these passages are simply one layer of possible meaning.

In fact, the creature's eruptions of rage divide him from humanity. Whenever the creature faces rejection, he becomes violent and exercises his extraordinary powers. For example, when the De Lacy family rejects him, he burns down their cottage in his fury; the creature states: "I, like the arch-fiend, bore a hell within me; and, finding myself unsympathized with, wished to tear up the trees, spread havoc and destruction around me, and then to have sat down and enjoyed the ruin" (92). Furthermore, since wild, dangerous weather accompanies all of these outbursts, the creature's presence is a threat to mankind. Similarly, the frost giants and their dangerous jotun-rage were a threat to mankind in Norse mythology, and therefore the frost giants were banished to Niflheim by the gods (Percy 402).³¹ In fact, the gods of Valhalla installed the mountains to protect the humans in Midgard from the frost giants surrounding them (Hveberg 9-12). Furthermore, the creature's various sites of refuge all resemble Niflheim: frozen, mountainous, and desolate locations (64-65).

Ragnok: Twilight of the Gods

Finally, the fatal union of the creature and Frankenstein in fire and ice resembles descriptions of Ragnok included in *Northern Antiquities* (102-03). Ragnok will begin with three years of winter and conclude with a conflict between frost giants and the gods of Valhalla; all the gods, including the creator god Odin, will be vanquished (Percy 102-03). As a "year without a summer," 1816 may have seemed like the

beginning of the Norse apocalypse. Frankenstein's constant sense of his own impending destruction³² also parallels the fatalism of the Norse gods who are aware of their impending doom (Percy 103). However, in the context of the last European subsistence crisis, the god-like Frankenstein also represents everyman. By elevating his otherwise pathetic demise, Mary Shelley revives the celebrated fatalism of Norse mythology as a means of coping with natural disaster.

The face of society was transformed by the catastrophic weather of 1816. According to Fagan:

Social unrest, pillaging, rioting, and criminal violence erupted across Europe in 1816, reaching a climax the following spring.... Whenever a food dearth and high grain prices loomed, the working poor took to the streets, as they did in response to poor harvests in France and other countries throughout the eighteenth century. But the grain riots of 1816/17 were marked by a level of violence unknown since the French Revolution. (Fagan 172)

Thus, society was dehumanized by the violence provoked by the famine; suicides and infanticides rose rapidly across Western Europe (Fagan 172). The fury of Mary Shelley's creature resonates with the weather as well as the starving people. However, unlike the violence that initiated the French Revolution, the rage behind the "Bread of Blood" riots was futile. It could not be directed at a guilty party within society or appeased through social reform (Fagan 172-73). Thus, *Frankenstein* could be interpreted as another voice of rage against the injustice of the capricious weather gods of 1816; the attempt at a communal expression of emotion makes this novel distinct from the Romantic tradition and its celebration of the individual poet hero. For Mary Shelley, weather is more than a symbol of chaos and destruction; she recognizes the impact of weather on the lives of mankind. Weather remains a force that separates men from gods; science and revolution cannot overcome it. This further demonstrates the distinctive nature of Mary Shelley's genius among her Romantic contemporaries, a subject of continuous debate since her work was first revived by feminists in the twentieth-century.³³

Endnotes

-
- 1 In the Preface to the first edition of *Frankenstein* (1818), Shelley writes: "I passed the summer of 1816 in the environs of Geneva. The season was cold and rainy, and in the evenings we crowded around a blazing wood fire, and occasionally amused ourselves with some German stories of ghosts, which happened to fall into our hands. These tales excited in us a playful desire of imitation. Two other friends ... and myself agreed to write each a story, founded on some supernatural occurrence."
 - 2 This paper utilizes the Norton Critical Edition of the 1818 publication of *Frankenstein*, edited by Paul Hunter. References to *Frankenstein* will be cited parenthetically throughout the paper.
 - 3 Specifically, in a letter to Fanny Imlay on 1 June 1816, Mary Shelley describes a storm she witnessed in Geneva. Lines from this description reappear nearly verbatim in the novel *Frankenstein*, demonstrating the direct connection between Shelley's experience of weather and her writing (Phillips 62-63).
 - 4 Helena Feder's "A blot upon the earth': Nature's 'Negative' and the Production of Monstrosity in *Frankenstein*" (2010) also addresses the supernatural connotations of the monster (64).
 - 5 According to Arden Reed, Mary's husband Percy Shelley combined meteorological and chthonic elements in his poetry (75). Thus, Mary was in the immediate vicinity of traditional Romantic weather symbolism.
 - 6 Mary Shelley even casts the doomed Henry Clerval as a quintessential Romantic poet who is inspired by the "scenery of external nature" (107), thus enshrining the poetic practices of Romanticism and reading weather poetically.

- 7 The first English translation of the Edda can be found in *Northern Antiquities* (1770) by Bishop Percy (102-03). According to *Handbook of Norse Mythology* (2001) by John Lindow, this was the primary source of Norse mythology during the Romantic era (31). This will be discussed at length later in this paper.
- 8 Phillips makes this claim in his article (59-62).
- 9 Phillips also makes a catalogue of other scholars who have supported the idea that *Frankenstein* is a novel primarily reflecting the “phenomenal transformation” (59) of the Industrial Revolution.
- 10 For example, in “A Feminist Critique of Science” (1995), Anne Mellor concludes by associating *Frankenstein*’s critique of the eighteenth-century’s scientific revolution with the assumption that Mary Shelley “was aware of the damaging consequences” (84) of the Industrial Revolution.
- 11 In “Proletarianization in the Industrial Revolution” (2000), John Langton supports Phillips’ claim that the effects of the Industrial Revolution were not felt until the 1830s in Great Britain (Langton 32).
- 12 Oppenheimer also demonstrates that the combination of the Tambora eruption and the meteorological events of 1815 and 1816 were perceived as an extensive but somehow unified phenomena (248-57).
- 13 For example, Sir Stamford Raffles, Lieutenant Governor of the British colony Java published articles on the eruption in the *Asiatic Journal* in 1816 and his *History of Java* in 1817, before Mary Shelley published *Frankenstein* in 1818. His text remains an important source of primary information on the Tambora eruption (Oppenheimer 232). However, there were also articles and communications published immediately after the eruption (Oppenheimer 232). While there is no indication that the Shelleys read Raffles’ articles, this information was widely circulated once it was published.
- 14 The European-wide famine of 1816 is the subject of J.D. Post’s *The Last Great Subsistence Crisis in the Western World* (1977). According to Oppenheimer, Post “implicates” (231) the eruption of Tambora in that famine.
- 15 The magnitude of this explosion may be best understood by contextualizing it with other volcanic activity. According to Terrence Gerlach’s article “Etna’s Greenhouse Pump” (1991), the 60,000 km-long mid-ocean-ridge volcanic system in the Pacific Ocean is estimated to emit between 30 to 65-mega-tons of sulfur and carbon dioxide over the course of an entire year; and most of these gases are absorbed into the ocean, they never reach the atmosphere (352).
- 16 Raffles’ accounts of the eruption describe the storm-like fallout of the volcano. In Raffle’s article for the *Asiatic Journal* (1816), it states: “It was now evident that an eruption had taken place from some volcano, and that the air was filled with ashes or volcanic dust, which already began to fall on the decks. By eleven the whole of the heavens was obscured, except a small space near the horizon to the eastward... every other part of the horizon was enveloped in darkness.” (Oppenheimer 239). Thus, Europeans associated volcanic eruptions with storms, at least metaphorically.
- 17 Unlike the worldwide cooling of the Little Ice Age, the effects of the eruption of Tambora were localized around the Atlantic (Fagan 169-70). According to Fagan, there were at least three major volcano eruptions between 1812 and 1817. This extraordinary volcanic activity also compounded the effects of the Tambora eruption (Fagan 169).
- 18 Through mythical allusions, Mary Shelley generates a figure with communal significance; the creature is the image of everyman in 1816.
- 19 This myth is included in Hesiod’s *Theogony* and it was well known to the Romantics. It is the myth referenced in the title of the novel: *Frankenstein or A Modern Prometheus*.
- 20 The term “blasted” occurs frequently in *Frankenstein*. It is a weather reference that reflects traditional Romantic symbolism; it describes the lightning strike to the old oak as well as Victor *Frankenstein*’s own morally depraved state throughout the novel. For example, *Frankenstein* states: “But I am a blasted tree; the bolt has entered my soul” (110).
- 21 This was a commonly known mythic association, but it is also included in texts like *Northern Antiquities* (1770) by Bishop Percy (94).
- 22 Zeus, the king of the Greek gods, and his Roman counterpart Jupiter, are weather gods. As Reed points out in *Romantic Weather*, weather gods are prominent in all the pantheons in Western Europe (3-4).
- 23 This is worked into *Northern Antiquities*, but it is also included in other texts on Norse mythology, such as *Of Gods and Giants* (1938) by Harold Hveberg (9-12).

-
- 24 Although Northern Antiquities is actually a translation of Paul Henry Mallet's Introduction a l'histoire de Dannemarc (1755), the Handbook of Norse Mythology refers to Percy as an author rather than a translator (Lindow 37). This is likely because Percy claims to have added new material to the translated text (Percy xv).
 - 25 In contrast with the magical and enticing nature of Niflheim, which also tempted Viking explorers during the Middle Ages (Percy 94), cold is often depicted as hellish and repulsive in Western literature. For example, the depths of Hell in Dante's "Inferno" are frozen (31.145-46).
 - 26 The implications of this liminal mythical space correspond to the novel's subversive messages about gender, which have tantalized scholars for decades. For example, on one of Thor's journeys to Niflheim, he is forced to dress as a bride to gain entrance to the frost giants' stronghold. Once he lays hands on his stolen war hammer, Mjollnir, he kills the entire bridal party in order to reassert his masculinity (Percy 450). This sort of gender transgression resonates with interpretations of Frankenstein such as "Horror's Twin: Mary Shelley's Monstrous Eve" (1978), where Sandra Gilbert explores the mythic "anxieties about femaleness" (39). She claims that Mary Shelley tells the tale of the miseries that the biblical Eve can bring to men (39).
 - 27 This use of epic mythical tropes sets Mary Shelley apart from Romantic poets such as Lord Byron, William Wordsworth, and Percy Shelley. According to Paul Cantor in "Politics of the Epic" (2007), the epic was transformed during the Romantic era from a genre about political and public life into a medium that celebrated the heroism of the poet (375-76). Although Mary Shelley's text includes a figure that resembles the Romantic poet, Henry Clerval, he is a relatively marginal character. However, this is not merely a parody of Romantic conventions, as Mark Hansen suggests in "'Not thus, after all, would life be given': technesis, technology and the parody of Romantic poetics in Frankenstein" (1997). Hansen states: "Mary Shelley lived a contradiction which informed her own 'deconstruction' of the male romantic ideology" (575). While she may engage in deconstruction, she is not trapped in inherited styles and tropes. Rather, Mary Shelley is appropriating the mythical tradition to express the communal trauma of cataclysmic weather in an independent and unique manner.
 - 28 According to the reading list compiled from *The Journals of Mary Shelley: 1814-1844*, this was on Mary Shelley's reading list in 1817. Thus, Mary Shelley not only had access to Norse myth, she was immersed in a group of writers and thinkers who were actively exploring its possibilities.
 - 29 The versatility of giants in folklore makes the creature in Frankenstein a versatile monster, which remains open to a wide variety of interpretations. While this paper argues that Mary Shelley used the creature to represent a mythic embodiment of cataclysmic weather, the creature may continue to represent different traumas to each new generation of readers. Similarly, the monsters in oral tales continue to transform to meet the needs of the audience; oral tales are constantly being transformed by the storyteller.
 - 30 This tradition seems to be included in text through William Frankenstein's first response to seeing the creature (William is Victor's youngest brother). William states: "'Monster! Ugly wretch! You wish to eat me, and tear me to pieces – You are an ogre – Let me go, or I will tell my papa.'" (96). William does not ask what the creature is; he immediately identifies it with ogres and giants. He also projects the characteristics of giants onto the creature: he assumes it will devour him.
 - 31 The rebellious and enticing figure of the Byronic hero is echoed in the mythic frost giant of Norse mythology. In fact, Loki, the trickster or Satan figure in the Norse pantheon, is a frost giant. He is especially comparable with Milton's Satan in *Paradise Lost* (Percy 96), whom the creature overtly identifies with in Frankenstein (87).
 - 32 Victor Frankenstein repeatedly refers to his impending doom. He knows that his pursuit of the creature will destroy him. For example, before pursuing the creature into the frozen north, he states: "I, the native of a genial and sunny climate, could not hope to survive. Yet at the idea that the fiend should live and be triumphant, my rage and vengeance returned... I prepared for my journey." (144). Moreover, these references increase as his death approaches (148-53).
 - 33 See Mark Hansen (575).

References

- Alighieri, Dante. *The Divine Comedy*. John Ciardi, trans. New York: New American Library, 2003. Print.
- Cantor, Paul A. "The Politics of the Epic: Wordsworth, Byron, and the Romantic Redefinition of Heroism." *The Review of Politics* 69.3 (2007): 375-402. Web. 1 Sept. 2008.
- Fagan, Brian. *The Little Ice Age: How Climate Made History 1300-1850*. New York: Basic Books, 2000. Print.
- Feder, Helena. "'A blot upon the earth': Nature's 'Negative' and the Production of Monstrosity in Frankenstein." *The Journal of Ecocriticism* 2.1 (2010): 55-66. Web. 15 July 2010.
- Gilbert, Sandra. "Horror's Twin: Mary Shelley's Monstrous Eve" (1978) *Critical Essays on Mary Wollstonecraft Shelley*. Ed Mary Lowe-Evans. London: Prentice Hall International, 1998. Print.
- Hansen, Mark. "'Not thus, after all, would life be given': technesis, technology and the parody of Romantic poetics in Frankenstein." *Studies in Romanticism* 36.4 (1997): 557-609. Web. 1 Sept. 2008.
- Hveberg, Harald. *Of Gods and Giants: Norse Mythology*. Oslo: Johan Grundt Tanum Forlag, 1938. Print.
- The Journals of Mary Shelley: 1814-1844*. Eds., Paula R. Feldman and Diana Scott-Kilvert. Oxford: Clarendon Press, 1987. *Romantic Circles*. Web. 12 February 2010.
- Langton, John. "Proletarianization in the Industrial Revolution." *Transactions of the Institute of British Geographers* 25.1 (2000): 31-49. Web. 1 Sept. 2008.
- Lindow, John. *Handbook of Norse Mythology*. Santa Barbara, California: ABC CLIO, 2001. Print.
- Mellor, Anne. "A Feminist Critique of Science" (1995). *Critical Essays on Mary Wollstonecraft Shelley*. Ed Mary Lowe-Evans. London: Prentice Hall International, 1998. Print.
- Milton, John. *Paradise Lost*. 1668. New York: W.W. Norton & Co., 2005. Print.
- Motz, Lotte. "Giants in Folklore and Mythology: A New Approach." *Folklore* 93.1 (1982): 70-84. Web. 1 Sept. 2008.
- Oppenheimer, Clive. "Climatic, environmental and human consequences of the largest known historic eruption: Tambora volcano (Indonesia) 1815." *Progress in Physical Geography* 27.2 (2003): 230-59. Web. 1 Sept. 2008.
- Percy, Bishop. *Northern Antiquities; An Historical Account of the Manners, Customs, Religions, and Laws, Maritime Expeditions and Discoveries, Language and Literature of the Ancient Scandinavians*. 1770. London: George Bell and Sons, 1884. Print.
- Phillips, Bill. "Frankenstein and Mary Shelley's 'Wet Ungenial Summer.'" *Atlantis* 28.2 (2006): 59-68. Web. 1 Sept. 2008.
- Post, JD. *The Last Great Subsistence Crisis in the Western World*. Baltimore, MD: The John Hopkins UP, 1977. Print.
- Reed, Arden. *Romantic Weather: The Climate of Coleridge and Baudelaire*. London: UP New England, 1983. Print.
- Shelley, Mary. *Frankenstein*. 1818. Ed. J. Paul Hunter. New York: W.W. Norton and Co., 1996. Print.