

ACHIEVING INCLUSIVE FITNESS THROUGH BIOLOGICAL AND CULTURAL
REPRODUCTION: CASE STUDIES IN ENGLISH LITERATURE

by

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I. INTRODUCTION

Using Literary Darwinism, this thesis will examine how the characters in *Frankenstein* (1818) by Mary Shelley, *Beowulf* (c. 1000), and *Grendel's Mother: Saga of the Wyrd-Wife* (2015) by Susan Morrison seek inclusive fitness through both biological and cultural reproduction. Literary Darwinism is concerned with the evolutionary constraints placed upon humans. Such a theory is useful for interpreting these texts because the characters in each story have in some ways reverted back to their evolutionary instincts in the face of monstrosity. Each text reflects the values and needs of survival, and shows how monstrosity reflects the values of each society at the time each narrative is written. The characters in *Beowulf*, the earliest text, depend more heavily on the basic survival instincts of their society. Grendel and his mother are presented as straightforward monsters, posing more of an overt threat than the other monsters discussed in this thesis. The Creature in *Frankenstein* has a monstrous body but tragically human qualities. Though capable of atrocities as devastating as the monsters in *Beowulf*, the Creature offers the opportunity for peace. His monstrosity surfaces when he is provoked and spurned by humanity, though the humans he encounters instinctively treat him as a threatening monster. *Grendel's Mother* features humans who are made monstrous by the values of their culture.

It is useful to compare and contrast *Beowulf* and *Grendel's Mother* because they are the same story written in different times, reflecting different values and motivations. Though this thesis discusses only the 1818 edition of *Frankenstein*, it is important to note that the 1831 edition changes the relationship between Victor and Elizabeth. The earlier edition presents Elizabeth as a cousin, while the later edition presents her as an orphan

adopted into the family. Even a difference of thirteen years can change how a story must be presented to a society with ever-changing values. This thesis will focus on the 1818 edition in order to examine how the incestuous relationship increases the monstrous qualities of the text. Regardless of when the text was written, each narrative contains characters that exhibit Darwinist qualities in the search for inclusive fitness.

Evolutionary theory, in particular Literary Darwinism, is concerned with human universals. This theory seeks to explain how evolutionary constraints might affect the motivations and behaviors of characters in literary texts. Joseph Carroll, a major contributor to Literary Darwinism, proposes that readers can make sense of any text using Darwinist principles. In his text *Literary Darwinism: Evolution, Human Nature, and Literature*, Carroll writes that “If Darwinism gives a true account of the human mind, and if the human mind produces all literary texts, all literary texts are susceptible to a Darwinian analysis” (190). Because literature comes from human imagination, stories must have characters, actions, aspects, etc. that are logical in the scope of human nature. If the representations of humanity in a literary work are not true to human nature, then the story loses plausibility. Authors are able to reconstruct the world in which they live to accommodate the various narratives they wish to tell; part of this reconstruction depends on accurately depicting human motivations and behaviors. These motivations and behaviors are influenced by those traits Darwinism has exposed through the concept of survival of the fittest.

In constructing a plausible world, authors must create situations and behavior that would reasonably arise from some evolutionary force or instinct. Carroll writes, “Plausible reconstructions require not just the absence of contrary evidence on any one

specific form of behavior; plausible reconstructions require positive evidence for behaviors that could reasonably be expected to accompany the behavior in question” (170). Based on Carroll’s criteria, the coherence of a novel depends on an author’s ability to plausibly reconstruct evolutionary motivations and behaviors. A conventional Darwinist reading looks at seven evolutionary behavioral systems: survival, technology, mating, parenting, kin, social, and cognition. These behavioral systems help readers examine human nature and behavior within the boundaries of literature.

Carroll explains the many systems that can be applied to a piece of literature in order to examine the Darwinist principle underlying the characters’ actions. Under survival the characters avoid predators, obtain food, seek shelter, and defeat enemies. In technology the characters shape cutters and pounders, use levers, attach objects, and use fire. To exhibit mating behaviors characters must assess and attract sexual predators, overcome competitors, and avoid incest. In parenting the characters exhibit behaviors like nursing, protecting, providing, nurturing, and teaching. The fifth behavioral tier is kin, where characters distinguish kin, favor kin, and maintain a kin network. Social behaviors include building coalitions, achieving status, and monitoring reciprocity. The final behavioral system is cognition. This system involves telling stories, painting pictures, forming beliefs, and acquiring knowledge (Carroll *Literary Darwinism* 201). Carroll describes how each of these systems has a motive and a behavior to fulfill that motive:

The mate selection system arouses desire and fulfills it in successful coupling.

The parenting system arouses concern for children and achieves fulfillment in the successful rearing of children. The social interaction system arouses desire for forming coalitions and finding a place within a status hierarchy, and achieving

those goals offers pleasure and provides a sensation of satisfaction. The cognitive behavioral system arouses a need for conceptual and imaginative order, and that need fulfills itself and provides satisfaction to the mind through the formulation of concepts, the construction of religious, philosophical, or ideological beliefs, the development of scientific knowledge, and the fabrication of aesthetic and imaginative artifacts. (198)

The ultimate end goal of these behaviors, the motivation behind them, is the need to achieve inclusive fitness.

An individual's inclusive fitness is the number of offspring or offspring equivalents that an individual rears. An offspring equivalent could be anything from an adopted child, a foster child (as Hygelac fosters Beowulf), or any person in a parent/child relationship (as we see with Frankenstein and his creature). In a conventional Literary Darwinist reading, the interpretation focuses on how the characters in a novel adhere to the seven behavioral systems. When a character is successful in each system, it leads them to have a higher inclusive fitness. Each system aids the characters by allowing them to survive long enough to reproduce. The second chapter of this text will do a conventional reading of *Frankenstein*, and the third chapter will do a conventional reading of *Beowulf* and *Grendel's Mother* by Susan Morrison. These two chapters will outline how many of the characters in all texts fail to reproduce, parent, build social coalitions, or survive. Based on these aspects, the characters in these texts fail to have inclusive fitness because they fail to biologically reproduce. Because conventional Darwinist readings prioritize biological reproduction, characters who fail to procreate in that manner cannot have inclusive fitness. All behavioral systems are structured to look at

how individuals operate in their world to survive and subsequently reproduce. Put another way, individuals are motivated by their need to have a genetic presence in future generations.

The fourth chapter in this thesis will explore how cultural reproduction can lead to inclusive fitness, for both author and characters. The characters in *Beowulf*, Grendel's Mother, and *Frankenstein* do not biologically reproduce; rather, they all pass on cultural products in order to hold a cognitive presence in future generations. Conventional Darwinist readings fail to explain individuals who choose not to reproduce. All behavior can be traced to the interaction of genes and environment, and no behavior can be unnatural because every action arises from this natural interaction (Carroll "3 Scenarios" 61). Therefore, the choice to not reproduce is a behavior that must be explored. Conventional readings do not allow much deviation in the reproduction aspect, but an alternative option must be offered in the search for inclusive fitness. Where conventional readings offer motivation through biological reproduction, this thesis will offer a new reading where individuals are motivated by the need to culturally reproduce. Though Carroll does offer some motivation through his cognition system, there are many characters who prioritize their cultural impact over their genetic impact. Evolutionary theorists in general struggle to accommodate the significance of literature and culture within human evolution. Within literature, there are narratives containing characters with motivations and behaviors that can be interpreted. The seven behavioral systems can be applied to these motivations and behaviors, leading to a Darwinist reading. It is more challenging to apply these systems to other forms of literature, such as imagist poetry, because these texts may lack the narrative structure that allows for a Darwinist reading.

Though narratives are more readily subjected to Darwinist interpretations, it is important to note that literature as a whole still plays a role in evolution.

The story within a written or oral narrative can be subjected to a Darwinist reading. Such a narrative can be confined to a Darwinist reading because the world is constrained within the words. The author depicts the world and characters according to his or her vision. Narratives show evidence of Darwinist behavioral systems, while literature as a whole acts as a mechanism of Darwinist natural selection. Narratives show how characters are motivated by the need to reproduce, while literature and cognition are the mechanism by which individuals culturally reproduce.

Where biological reproduction fulfills the need to have a genetic presence in future generations, cultural reproduction fulfills the need to have a cognitive presence in future generations. In both cases of reproduction, the individual must survive long enough to create some type of product. Biological reproduction requires the transmission of genes through biological product. Cultural reproduction can be transmitted through any number of ways. Cultural products can be passed orally, textually, nonverbally, and symbolically. The important aspect is the transmission of one individual's beliefs, knowledge, or stories to another individual. Just as biological products are passed from parent to child, cultural products can be passed from teller to listener. In both situations, an individual is motivated by the need to survive in future generations, whether that survival is through a biological or cultural presence.

This thesis shows that literature and cognition are not merely instruments to entertain, instruct, or produce cognitive order. Literature acts as a cultural artifact that passes the author's presence into future generations. Characters in a text may write some

form of literature to pass their presence to future generations. Similarly, the author of the text himself has written the narrative in order to satisfy his need to survive throughout the generations. The author of a narrative creates characters who seek to make a cultural impact; in doing so, the author has also made a cultural impact.

II. BIOLOGICAL FITNESS IN *FRANKENSTEIN*

Frankenstein by Mary Shelley demonstrates how individuals must adhere to the seven behavioral systems, as outlined in the introduction, in order to survive and thrive. Frankenstein and his Creature are unable to uphold the behavioral systems because they do not exhibit the behaviors of genetically successful individuals, and so must perish at the end of the novel. Because Frankenstein and his Creature systematically fail throughout every system, they cannot survive long enough to reproduce. Each individual is cut off from the social existence needed to achieve inclusive fitness. Neither is able to appropriately mate, parent, or form links to society. Though both excel in the cognition system, particularly in technology, their success isolates them from the chain of social existence. Using these behavioral systems, a Darwinist reading provides possible motivations to the behaviors performed by Frankenstein and his Creature.

Frankenstein's primary instinct is to survive, the first behavioral system, and in order to do so he must avoid enemies and predators. When Frankenstein returns to his apartment after fleeing from his creation, he is relieved to find that his "enemy had fled" (Shelley 38). The Creature, through constant threats of danger and harm, proves to be Frankenstein's enemy. The Creature promises to be "the scourge of your fellow humans, and the author of your own speedy ruin" (Shelley 69). In his displeasure, he destroys the majority of Frankenstein's friends and family, and effectively ruins his creator. Though the Creature promises to be benevolent after a female is created, Frankenstein still worries about the Creature's malice towards humanity. Not only does he fear the Creature will "have a companion to aid [him] in the task of destruction" (Shelley 103), but also that she will "turn with disgust away from him to the superior beauty of man; she might

quit him, and he be again alone, exasperated by the fresh provocation of being deserted by one of his own species” (Shelley 119). Frankenstein’s greatest fear is that the two creatures will reproduce. Frankenstein worries that “a race of devils would be propagated upon the earth, who might make the very existence of the species of man a condition precarious and full of terror” (Shelley 119). As the Creature has proved so effective in terrorizing humanity so far, Frankenstein’s suspicions are well-founded.

With these fears laying heavily on his mind, Frankenstein decides to put the survival of the human race above the survival of his own personal genes. The Creature has already proved that he poses a very real danger to Frankenstein and Frankenstein’s kin, but the creator feels more obligated to protect the human race over his own creation. He recognizes that “in a fit of enthusiastic madness [he] created a rational creature, and was bound towards him, to assure as far as was [his] power, his happiness and well-being” (Shelley 156). Frankenstein accepts his duty towards his creation, “but there was another still paramount to that” (Shelley 156). The duty of the creator to his creation is nothing compared to the duty felt by one member of a species to the rest of humanity. Jennifer Egan speaks about apparent altruism in *Shakespeare and Ecocritical Theory*. “What appears to be altruistic behavior, such as individuals surrendering their lives for the benefit of others in a group, had long been misunderstood as action for the greater good of the group” (47). What might seem to be a noble sacrifice on Frankenstein’s part is in fact motivated by Darwinism because “what looks like altruism from the individual’s perspective can in fact be selfishness from the gene’s point of view” (47). A gene does not care which individual is carrying it, only that some copy of the gene is passed on. While Egan stresses that the individuals must be related for this altruism to be

effective, Frankenstein takes a more universal view on his situation. His creature is essentially of a different species than humanity.¹ If this individual from a different species threatens humanity, Frankenstein's genes must take this into account. Rather than considering only the related genes of a family, Frankenstein must consider all genes of humanity that could be potentially wiped out by the Creature. Frankenstein realizes this and tells us, "My duties towards my fellow-creatures had greater claims to my attention, because they included a greater proportion of happiness or misery" (Shelley 156). The happiness and survival of humanity takes precedence before alleviating the creator's guilt and his Creature's misery.

Frankenstein's ability to include technology, another behavioral system, in his life is paramount to the novel. He learns the most advanced technologies and sciences in order to facilitate his creation: "After days and nights of incredible labour and fatigue, I succeeded in discovering the cause of generation and life; nay, more, I became myself capable of bestowing animation upon lifeless matter" (Shelley 32). Living in a culture that has already surpassed the basic behavioral mode of technology, Frankenstein nonetheless manages to transcend the normal bounds of technology. At this scale, there are no basic defense mechanisms that prevent individuals from exceeding the boundaries of technology. Technology evolves faster than the genes that regulate such behavior. The Creature, for example, learns how to use fire and retracts his hand when the heat becomes too much to handle. The Creature's reaction to withdraw his hand is his body's attempt to regulate technological behaviors, and keep the individual safe. Frankenstein has no

¹ The Creature himself recognizes that he must be of a different species. When he asks Frankenstein for a bride he clarifies that his "companion must be of the same species" (Shelley 101).

instinct to protect him from the technology that pushes past boundaries.² With this in mind, it would perhaps be safe to say that this behavioral system encourages people to excel in technology, but also to be wary of proceeding too quickly past human boundaries.

While Frankenstein is skillful in technology, he starts to deviate from genetically fit norms when his mating behaviors are examined. Mating is an important behavioral system, but he is so immersed in technology that he has no thoughts for attracting sexual partners. When he does find a mate in Elizabeth, there is an undercurrent of incest. Though she is not biologically Frankenstein's sibling, she holds a place within his family as a sister-cousin. Egan explains an evolutionary model involving sexual relations within a family:

The taboo against incest is a biological and not a cultural construct, but of course it depends on knowing who one's siblings are. Natural selection operates not upon perfect knowledge of relatedness but by generating rough-and-ready rules that meet most cases, and in human families the rule is to feel revulsion at the thought of having sex with the co-evals one grew up with. This simple rule works most of the time because, usually, one's co-evals are one's siblings. (82)

Elizabeth is Frankenstein's co-eval. When Elizabeth's father offers her to Frankenstein's father, the Italian Gentleman says that it is his wish "that you should consider her as your own daughter, and educate her thus" (Shelley 20). Throughout childhood, Frankenstein and Elizabeth share the same father and mother. She was raised as his sister and he calls

² Frankenstein tells Captain Walton that a man who accepts his lot in life is happier "than he who aspires to become greater than his nature will allow" (Shelley 32). Frankenstein recognizes that he reached too far past his human boundaries, and that is the source of his misery.

her his cousin. By all accounts Elizabeth and Frankenstein are co-evals, and should feel innate repulsion at the thought of a sexual relationship. Frankenstein subconsciously understands this when he feels that “the idea of an immediate union with my cousin was one of horror and dismay” (Shelley 108). Elizabeth brings joy into Frankenstein’s life, but his reluctance to marry her may indicate a genetic concern. While Elizabeth is brought up as Frankenstein’s family, and is nurtured to be his future wife, Frankenstein may have some residual evolutionary doubts about an incestuous marriage. In the end, Frankenstein marries Elizabeth but is unable to consummate the possibly incestuous relationship because the Creature takes the situation into his own murderous hands.

In the parenting system as well, Frankenstein fails to exhibit the appropriate behavioral characteristics. Frankenstein is essentially the Creature’s father. The Creature learns of his creator’s existence through Frankenstein’s papers: “You were my father, my creator” (Shelley 97). Though they share no biological tie, the creator is inextricably tied to his creation. From the start, the relationship has an unequal power balance. As father/creator, Frankenstein holds innate authority over the Creature. Frankenstein can be viewed as a god-like figure to the Creature: “From the Monster’s point of view, though, Victor is a ‘god’ of sorts” (Baldick 182). Frankenstein uses his advanced technological skills to assemble his Creature from non-living parts and is able to bring what is fundamentally a new species to life. Though Frankenstein is able to perform miraculous deeds, “the monster’s ‘god’ comes to be seen as an ineptly negligent creator whose conduct towards his creation is callously unjust” (Baldick 182). Whether as a ‘god’ or a father, Frankenstein is an incredibly negligent and irresponsible creator. Though Frankenstein abandoned the Creature on the very day of his birth, the Creature still has

hopes that Frankenstein will do right by his creation: “Frankenstein himself is a father, the creator of the monster, and the novel is in part an examination of the responsibility of the father to the son” (Levine 314). Frankenstein is responsible for parenting his creation, and his duty is to provide for and protect the Creature, but he fails to do so in every aspect: “Successful parental care produces children capable, when grown, of forming adult pair bonds, becoming functioning members of a community, and caring for children of their own” (Carroll *Reading Human Nature* 14). The Creature is not able to be a functioning member of society because humanity is repulsed by him, and Frankenstein actively prevents the Creature from having and caring for children of his own. Frankenstein disappoints the Creature’s parental need, and by doing so he fails to uphold his own parental behavior system.

There is only one moment when Frankenstein understands his parental responsibilities: “For the first time, also, I felt what the duties towards his creature were, and that I ought to render him happy before I complained of his wickedness” (Shelley 69-70). He attempts to uphold some type of parental concern for the Creature by creating a female: “The monster asks Frankenstein for the gift of a bride to alleviate his solitude. Frankenstein’s father in effect gives Frankenstein a bride, and a sister... Frankenstein’s father, in bestowing the gift and in caring for him, behaves to his son as the monster would have Frankenstein behave” (Levine 314). Frankenstein receives the benefits of parental love, but is unable to bestow those benefits upon the Creature he brought to life. He understands “that to create another like the fiend I had first made would be an act of the basest and most atrocious selfishness” (Shelley 123). Realizing, perhaps subconsciously, that his altruism is in fact selfishness on the part of his genes, he decides

to put the needs of humanity above the needs of his creation, and wants “to extinguish that life which I had so thoughtlessly bestowed” (Shelley 62). Frankenstein is not prepared for the responsibilities involved in parenting a creation and cannot provide the care that the Creature craves; he instead chooses to maintain humanity’s survival at the cost of his creation’s well-being.

In choosing the individually self-less and genetically selfish act of maintaining humanity’s gene pool, Frankenstein directly and indirectly fails to maintain his kin network. When he decides to pursue his Creature’s downfall, who is in essence his offspring, Frankenstein does not demonstrate his willingness to maintain or favor his kin. Additionally, Frankenstein’s reluctance to help his creation sparks a rage that leads to the destruction of Frankenstein’s created and biological kin network. Egan discusses “the paradoxes that arise from an organism’s creating a descendent that is like itself. For Shakespeare, this offers an explanation for the existence of morality as a consequence of what we would call homeostasis, because bad behavior is self-punishing. Morality is self-regulation” (52). For Frankenstein, parental irresponsibility reflects directly back on him and leads to the destruction of his family and his self. “Having offspring like oneself can be a form of self-punishment: the parents’ wrongdoing rebounds on them when their children behave in the same selfish way” (Egan 53). Frankenstein’s careless malice is repaid to him with his Creature’s determined malice.

Frankenstein fails his Creature in many ways, and these failures cause the Creature to seek his creator’s ruin. The Creature begins Frankenstein’s destruction with the annihilation of his family:

Every death in the novel is a death in the family, literal or figurative: what Frankenstein's ambition costs him is the family connection which makes life humanly possible. William is his brother. Justine looks like his mother, and is another kind of sister, though a subservient one. Clerval is a "brother." Elizabeth is both bride and sister (and cousin). And as a consequence of these losses, his father dies as well. Frankenstein kills his family, and is, in his attempt to obliterate his own creation, his own victim. (Levine 315)

One by one, Frankenstein loses the family that ties him to the world. Without kin or any social network, he does not have much reason to continue living in the world.

Frankenstein's carelessness, by first creating his Creature and then failing to properly parent him, causes him to bear such losses that he eventually loses the will to live in such a world. Determined to decimate the Creature that has ruined his life, he only manages to exhaust himself to death.

Frankenstein attempts to exhibit social behaviors, but he is unable to maintain any type of social coalition as part of the social behavioral system. Though Clerval is like a brother to him, Frankenstein emotionally withdraws from him while they travel together: "I often refused to accompany him, alleging another engagement, that I might remain alone" (Shelley 113). Frankenstein withdraws from school, family, and friends as he despairs over his wayward creation. Frankenstein realizes that the Creature is trying to alienate him, in a plan to further destroy his creator, and "from the outset, Frankenstein attempts to fortify himself against such destruction by identifying his place within a larger network of national, political, and family ties" (Gigante 580). Frankenstein begins his tale to Captain Walton by saying, "I am by birth Genevese; and my family is one of

the most distinguished of that republic” (Shelley 18). From the beginning Frankenstein places himself within this larger identity, in order to situate the perspective of his identity. Gigante argues that Frankenstein’s identity begins to unravel with the deaths of his mother, brother, sister(s), and father: “His family skin becomes fissured, and he is driven to renounce the national identity so important to his sense of self: ‘My first resolution was to quit Geneva forever’” (582). When the Creature destroys Frankenstein’s ties to the world, Frankenstein is forced to withdraw into himself to salvage some sense of identity. This withdrawal is doubly an anti-social behavior because it prevents Frankenstein from monitoring his reciprocation and his creation. The Creature gives Frankenstein the respect and love expected of an offspring and expects Frankenstein to repay him in kind. The Creature cannot expect any kindness from the rest of humanity, who scorn him for his monstrous appearance: “You, my creator, abhor me; what hope can I gather from your fellow-creatures, who owe me nothing? They spurn and hate me” (Shelley 68). The Creature believes that Frankenstein is the only one who owes him any kindness: “But on you only had I any claim for pity and redress, and from you I determined to seek that justice which I vainly attempted to gain from any other being that wore human form” (Shelley 98). Frankenstein, who is gifted with the potential to adequately teach and parent offspring, should share his social wealth with his creation.

The Creature, similar to his creator, struggle to meet many of the behavioral systems.

From the moment of his birth, he is abandoned and left helpless by his creator and father. Though the Creature may look like an adult, he enjoys none of the advantages a fully developed adult has: “Frankenstein’s creature has been constructed as a fully developed

man, from adult body parts, but his mind is that of a totally undeveloped infant. He has no memory, no language, no conscience. He starts life virtually as a wild animal” (Holmes 189). Infancy is a gift to normal humans, where they can properly learn how to use their bodies and how to navigate the social world. Infants are evolutionarily small, so that large adults will intuitively want to help and protect such small humans. The Creature, with his unnaturally large body, has an infant’s mind but is unable to enjoy the protective advantages of infancy. The Creature does not follow the regular stages of human infancy, but evolving “rapidly through all the primitive stages of man... First he learns to use fire, to cook, to read” (Holmes 189). He is forced to learn survival through trial and error, while he “was a poor, helpless, miserable wretch” who “knew, and could distinguish, nothing” (Shelley 70). He seeks shelter in a forest where he learns to satisfy his hunger and thirst, and bumbles through survival until he comes across a village. In this village the Creature learns to recognize humans as possible enemies that he must protect himself against. When the Creature enters a house, the women and children scream in terror: “The whole village was roused; some fled, some attacked me, until, grievously bruised by stones and many other kinds of missile weapons, I escaped to open country” (Shelley 73). In order to avoid the predators in the form of villagers, and to seek shelter, the Creature finds himself in a hovel next to the De Lacey home: “Here then I retreated, and lay down, happy to have found a shelter, however miserable, from the inclemency of the season, and still more from the barbarity of man” (Shelley 73). Despite the hardships of his difficult life, the Creature clings more firmly to his survival instinct. He recognizes humans as potential enemies, he collects berries and roots as his food, and manages to seek shelter from the elements. Most importantly, the Creature wants to

survive: “Life, although it may only be an accumulation of anguish, is dear to me, and I will defend it” (Shelley 68). He exhibits the most important behavior of survival, which is the will to live.

The Creature exhibits his skill with the technology system when he learns to use fire. His mastery of fire enables him to survive in every aspect, helping him prepare foods and stave off the elements: “One day, when I was oppressed by cold, I found a fire which had been left by some wandering beggars, and was overcome with delight at the warmth I experienced from it “(Shelley 71). He learns the dangers of fire when he thrusts his hand into the live embers, and is forced to “quickly draw it out again with a cry of pain” (Shelley 71). While Frankenstein uses technology that is too far advanced to have such basic and evolutionary cautions, the Creature learns that fire is both useful and dangerous. He applies this knowledge to burn the De Lacey's cottage. He places “a variety of combustibles around the cottage” (Shelley 97) and destroys every vestige of the family that refused to accept him into their social circle. The Creature's disappointment with the De Lacey family shows his skill at technology in another aspect: from them, he learns “the science of words or letters” (Shelley 75) and is able to acquire knowledge after that.

In an attempt to garner some humanity, the Creature “hides in a womblike hovel, as if it could be born again into culture by aping the motions of the family it spies upon” (Poovey 352). The Creature gains the science of language, and is astonished at the emotions evoked in him while he learns how to socially navigate the world. Carroll theorizes that the arts bridge the gap between animal instinct and the possibility for higher intelligence (*Literary Darwinism* 69). The Creature attempts to overcome his

animal instincts, and indeed is able to overcome some of his more primitive urges. He realizes that his need to eat is causing hunger to the De Lacey family, so he stops taking their food in order to spare their hunger. However, as with the other aspects of technology discussed in this chapter, there is a painful aspect to this capacity. With his newly acquired language, the Creature is able to recognize the grievances done to him by others. It is this capacity that enrages and devastates him so much that he feels the need to burn his benefactors' cottage down.

In going through the primal stages of humanity, and learning the capacity for sympathy along with the capacity for rage, the Creature above all discovers the need for companionship. He wonders: "Shall each man find a wife for his bosom, and each beast have his mate, and I be alone?" (Shelley 120). The Creature understands the essential need for a mate, especially for one that could potentially be attracted to him amongst all the humans that spurn his society. He asks Frankenstein to create a companion that "must be of the same species, and have the same defect" (Shelley 101). He figures that a female as "deformed and horrible as himself" would not deny herself to him. He "demands a creature of another sex, but as hideous as" himself (Shelley 102). The Creature wants more than just a companion, however. If he were content with friendship only, he would have asked for another male creation such as himself. He is looking for a mate that will be sexually attracted to him, in addition to one that will relieve him of loneliness. He tells Frankenstein, "It is true, we shall be monsters, cut off from the world; but on that account we shall be more attached to each other" (Shelley 102). They will be chained together even as they are cut from the chain of events.

The Creature bases his monstrosity of himself and his bride off of their hideous appearances, yet the union would be monstrous based on its incestuous possibilities. The Creature asks Frankenstein for a bride; in fashioning a bride for the Creature, Frankenstein would also be fashioning a sister for his “son.” The Creature’s wish to mate with a being who shares the same father is a wish grounded in incest. In one sense, the Creature and his bride would be co-egals. They would certainly need to grow up together, and would necessarily grow an innate repulsion at the thought of sexual relations with each other. In a sense, the Creature would become a father figure to his bride. The Creature was born mentally an infant, so his bride would doubtless be born in the same state. Frankenstein would assuredly fail in parenting the bride, so the Creature would need to take up this mantle. He would need to teach her how to navigate the world. At this point, the bride becomes a sister-bride-daughter to the Creature, one he will never be able to meet. The Creature wants to find a sexual partner but, taking after his father, his attempt is misled by incestuous motives. Frankenstein rips apart the female’s body, effectively ruining the Creature’s hopes to consummate a sexual relationship.

Due to Frankenstein’s choice to destroy the Creature’s bride and possibility for happiness, the Creature is unable to parent any offspring. However, he exhibits parenting behavior towards the De Lacey family. They shelter him from “the barbarity of man” (Shelley 73), and allow him to learn about humanity in a different light than he was accustomed. In exchange, the Creature cares for the family from afar almost like a quasi-father. However, the De Lacey family is not related to the Creature. They are very likely not even in the same species, so how is his altruism explained? “In order to account for social interaction beyond the kin group, evolutionary social scientists invoke the principle

of ‘reciprocation’ or ‘reciprocal altruism.’ This is simply the principle of mutual back-scratching” (Carroll *Literary Darwinism* 156). The Creature is taking advantage of this reciprocal altruism, though he may not consciously realize that he is expecting the cottagers to repay him. When he realizes that he was inflicting pain on the cottagers by stealing their food, he “abstained, and satisfied [himself] with berries, nuts, and roots” (Shelley 77). He furthermore wanted to assist them in their labours by collecting wood for the family fire. The day after the Creature first does this, the young man who normally chopped the wood was able to spend the day “repairing the cottage, and cultivating the garden” (Shelley 77). The Creature appreciates the De Lacey family because they are unknowingly reciprocating the Creature’s kindnesses: they allow him to learn language, reading, and love. In this way, the De Lacey family is unwittingly parenting the Creature. He has been culturally reborn in the “womblike hovel” (Poovey 352) and learns many things from the cottagers.

When the Creature approaches Father De Lacey, he describes his love for the family: “I am now going to claim the protection of some friends, whom I sincerely love, and whose favour I have some hopes” (Shelley 93). Though the Creature loves this family, and has been “for many months in the habits of daily kindness towards them” (Shelley 94), the family is repulsed by the Creature and runs from him. Until this point, the Creature has been taking care of the De Lacey family, and they have been taking care of him. It is only when the Creature shows himself that the reciprocal altruism fails. The Creature is devastated by this rejection, but he still has parental instincts in him when he comes across the little girl in the forest. She falls in the rapid stream, so the Creature rushes from his “hiding place, and, with extreme labour from the force of the current,

saved her, and dragged her to shore” (Shelley 99). The girl’s father is frightened by the Creature’s appearance and shoots the being who saved his daughter. Even so, the Creature tries once more to exhibit nurturing behaviors. When he runs into William, he thinks that the child will not have “imbibed a horror of deformity. If, therefore, I could seize him and educate him as my companion and friend, I should not be so desolate in the peopled earth” (Shelley 100). The child, however, loathes the Creature and is filled with horror at the sight of him. The Creature has an innate monstrosity that causes people to inherently hate him. The Creature attempts to silence the child’s cries and hatred, but instead leaves him dead. At this moment, the Creature has moved past his parental instincts and begins to understand the power of creating desolation.

The Creature is unable to maintain any kind of kin network because he is rejected by everyone he tries to get close to:

And what was I? Of my creation and creator I was absolutely ignorant; but I knew I possessed no money, no friends, no kind of property. I was, besides, endowed with a figure hideously deformed and loathsome; I was not even of the same nature as man. I was more agile than they, and could subsist upon coarser diet; I bore the extremes of heat and cold with less injury to my frame; my stature far exceeded their’s. When I looked around, I saw and heard of none like me. Was I then a monster, a blot upon the earth, from which all men fled, and whom all men disowned? (83)

His Creator rejects him to the point of obliteration, the De Lacey family move away when the Creature reveals himself to them, and every human that the Creature comes across feels fear, hatred, and disgust towards him. He wishes to “become linked to the chain of

existence and events, from which [he is] now excluded” (Shelley 103), but he does not exhibit the social behaviors that would allow him to become part of a linked society, nor does he have any kin to tie him into existence. When the De Lacey family leaves, the Creature feels true despair: “My protectors had departed and had broken the only link that held me to the world” (97). The Creature’s anguish is understandable; he recognizes that without a kin network, he cannot hope to participate in the world. Frankenstein is the last connection the Creature holds to the world, and “as he dies, he severs the monster’s last link with life so that, appropriately, the monster then moves out across the frozen wastes to immolate himself” (Levine 315).

Though the Creature exhibits social behaviors, he is constantly prevented from participating in social activities. Watching the De Lacey family, the Creature longs “to join them, but dared not” (Shelley 76). He remembers the treatment he received at the hands of the villagers, and he continues to remember the treatment he is given throughout his short life. The Creature cannot build social coalitions because every human turns away from him in revulsion. He also cannot build status: “All men hate the wretched; how then must I be hated, who am miserable beyond all things” (Shelley 67). He is a wretched being who will never gain enough status to climb out of his wretchedness. He tries to monitor his reciprocity, and the reciprocity of those around him. He protects and helps the De Lacey family, only to have them reject him. He saves the little girl from the river, only to have her father hate him: “This was the reward of my benevolence! I had saved a human being from destruction, and, as a recompense, I now writhed under the miserable pain of a wound, which shattered the flesh and the bone” (Shelley 99). He gives kindness to the world, and only receives hate and malice in return. He realizes the

unfairness of his situation, where humanity may participate in reciprocal altruism and only he received loathing:

Am I to be thought the only criminal, when all human kind sinned against me?
Why do you not hate Felix, who drives his friend from his door with contumely?
Why do you not execrate the rustic who sought to destroy the saviour of his child?
Nay, these are virtuous and immaculate beings! I, the miserable and abandoned,
am an abortion, to be spurned at, and kicked, and trampled on. (Shelley 160)

With no chance at achieving any social behaviors, the Creature ceases to depend on his and others' benevolence. If he has "no ties and no affections" he will accept "hatred and vice" as his portion. He believes his "vices are the children of a forced solitude" (Shelley 103). Because society will not accept the Creature, he feels as if vice and malice are his only options.

Society cannot accept the Creature because he is innately monstrous to humanity. Physically, the Creature presents a terrifying image. Frankenstein makes him a "being of a gigantic stature; that is to say, about eight feet in height, and proportionably large" (Shelley 33). The Creature is plainly not of a human stature, posing a physical threat to anyone he encounters. David Gilmore sets out monstrous markers in "Our Monsters, Ourselves." He explains that monsters are "vastly, grotesquely oversized. Looming intimidatingly, they pose a special challenge" (174). Large sizes translates into superior strength, meaning the Creature would have a distinct physical advantage over anyone he encounters. The Creature's gigantism strikes fear into humanity because humans subconsciously imagine the damage he can easily inflict upon them. Without even realizing his superior strength, the Creature attempts to silence William and leaves him

dead at his feet (Shelley 100). Frankenstein sees the Creature's shape after this murder, and knows who is responsible for the act: "A flash of lightning illuminated the object, and discovered its shape plainly to me; its gigantic stature, and the deformity of its aspect, more hideous than belongs to humanity, instantly informed me that it was the wretch, the filthy daemon to whom I had given life" (Shelley 50). Frankenstein is convinced that "nothing in human shape could have destroyed that fair child" (Shelley 50). The misshapen creature, who is ugly and gigantic, contrasts against the fragile and fair child William.

Because the Creature is ugly he is perceived as an evil being; because William is beautiful, he is perceived as good and angelic: "With regard to the human figure... the ideal of beauty is related to the idea of good... If beauty entails the idea of good, and if ugliness is the implied opposite of beauty, then it would seem that the ugly entails the idea of evil" (Gigante 576). The image of an individual impacts the way that person is perceived, as we see with both the Creature and William. This comparison is even more striking with Elizabeth and the Creature, who are the two main focuses in Frankenstein's life. Frankenstein describes her as "docile and good tempered" with a disposition that was "uncommonly affectionate." Elizabeth possesses an "attractive softness" and her figure is "light and airy." Most importantly, "her person was the image of her mind" (Shelley 20). Elizabeth's beautiful and fragile appearance corresponds to her benevolent temperament, and the innate goodness she signals to the world. The Creature, on the other hand, is ugly and perceived to be innately evil.

Frankenstein selects the Creature's "features as beautiful," but the beautiful features combine into a monstrous and deformed creation:

His yellow skin scarcely covered the work of muscles and arteries beneath; his hair was of a lustrous black, and flowing; his teeth of a pearly whiteness; but the luxuriances only formed a more horrid contrast with his watery eyes, that seemed almost of the same colour as the dun white sockets in which they were set, his shriveled complexion, and straight black lips. (Shelley 35)

Gigante explains that the Creature's ugliness does not bother anyone until he comes to life (566). The shock of ugliness comes when the Creature awakens and uses the beautiful features that his creator so thoughtfully picked for him. Gigante contrasts the "celestial stamp" on Elizabeth's features with the Creature's massive and grotesque flesh: "The Creature's skin struggles unsuccessfully to conceal the raw physicality of his gigantic... stature" (574). Elizabeth's otherworldly demeanor is a reminder of goodness in the world, but the Creature's otherworldly appearance serves to remind humanity that he is hopelessly different: "While a clear eye serves as a proverbial window into the soul, the Creature's eye is little more than a reminder of his existence: a lump of vile jelly attached to the skull" (Gigante 571). The Creature's physical advantages are in fact no advantage at all. His gigantic stature strikes fear into those who perceive him, his death-defying birth causes horror to his creator, and his ugliness serves as a reminder that he is different than those around him. Humans harbor an innate loathing of the Creature because he poses a threat in many ways to them, and as such they refuse to allow him to join any kin or social network.

Frankenstein is intimately tied with the Creature's identity. As his creator-father, Frankenstein impacts how the Creature is molded. Because Frankenstein is monstrously negligent, the Creature becomes monstrous. Even more, without Frankenstein, there is no

Creature. The Creature is born nameless, known only as “Frankenstein’s monster.” The Creature loses his creator and identity with one death, and therefore “expresses a longing for self-destruction, for the pleasure which will come in the agony of self-immolation, and for an ultimate peace in extinction” (Levine 316). In this longing the Creature fails the most important behavioral system-- the will to survive.

By the end of the novel, both Frankenstein and the Creature have lost the will to live. They have both been cut from the chain of social existence by the malicious acts committed by and towards each other. Frankenstein cut his Creature’s ties, so the Creature cuts his creator’s ties. Both individuals fail to exhibit appropriate behaviors, are not genetically successful, and so die without leaving a presence in their world. A traditional Darwinist reading would see them as almost complete failures. They each fail to survive, mate, parent, or have social interactions. Though they both excel in technology and cognition, their excellence works against them. That excellence does not distinguish them amongst humanity; it creates a distinction between them and other people, and only serves to distance them farther from the chain of existence they need to live a fulfilling life.

III. BIOLOGICAL FITNESS IN *GREDEL'S MOTHER* AND *BEOWULF*

As in Chapter Two, this chapter will examine how the characters in *Grendel's Mother: Saga of the Wyrd-Wife* and *Beowulf* adhere to Darwinian behavioral systems, and how those systems achieve inclusive fitness for each individual. Though each text arises from different cultures and authors, it is still useful to examine them together because the characters in each narrative share the same evolutionary instincts. The characters share many of the same motivations, but may exhibit different behaviors to achieve the same goals. Though all seven behavioral systems affect the motives in any novel, *Grendel's Mother* and *Beowulf* exhibit a strong dependence on mating, parenting, kin, and social structures. Characters in the texts build coalitions (a major aspect of social systems) by participating in peaceweaving marriages; these coalitions are consolidated with reproduction, and fostering further strengthens social coalitions. *Beowulf* and *Grendel's Mother* are coherent recreations of Anglo-Saxon society because the characters uphold an evolutionary standard. Kinship and social coalitions play a vital role in this society; such coalitions play a role in survival and the monstrous aspects of both Grendel's and Brimhild's lives.

All evolutionarily successful humans strive for inclusive fitness, which shapes “motives and emotions so as to maximize the chances that an organism will propagate its genes, or copies of its genes in its kin” (Carroll *Reading Human Nature* 14). Anglo-Saxon societies achieve inclusive fitness through a complex combination of mating, parenting, and social systems. These mechanisms of natural selection emerge in the form of peaceweaving marriages. In *Grendel's Mother*, Ealhild cautions Brimhild that such a marriage is the best option: “Love whom you choose. But pick as your groom only the

enemy, only the adversary, only the treaty breaker, only the antagonist. For that marriage alone can weave a peace, that bride alone can help her land, that man alone can heal ancient wounds” (Morrison 74). When discussing the mating aspect of Literary Darwinism, scholars look at examples of assessing and attracting sexual partners and overcoming competitors. A peaceweaving marriage is not a natural phenomenon, but is instead a bio-cultural phenomenon that transforms mating into a social coalition: “The role of women in *Beowulf* primarily depends upon ‘peace-making,’ either biologically through her marital ties with foreign kings as a peace-pledge or mother of sons, or socially and psychologically as a cup-passing and peace-weaving queen within a hall” (Chance 156). The women in *Grendel’s Mother* are judged by their ability to peaceweave: Ealhild is a peace-pledge to Healfdane, while Wealhtheow is a peace-pledge to Hrothgar. For both men, their marriage to a foreign bride marks their ability to overcome competitors, attract a sexual mate, and build social coalitions. Both women show the same success when they marry their captors. They provide an important biological and social service to their kingdom: they bring and perpetuate peace, and consolidate that peace with children.

Ealhild and Wealhtheow fulfill their feminine duties by marrying enemy kings. Though Brimhild does not marry an enemy, she still acts as a peaceweaver to Hrothgar within the meadhall. In fact, it is Brimhild’s play at peaceweaving that first brings her into Ealhild’s notice at court: “She showed them how to do it as in the old manner. She bore the studded cup to an imaginary king, then to the trustworthy thanes, reliable retainers. The girl, pretending princess, then drank from the gold goblet herself, made

words of welcome” (Morrison 36). Even children understand the importance of peace-weaving, and the social implications of such actions:

Woman functions domestically within the nation as a cup-passer during hall festivities of peace (*freoðo*) and joy (*dream*) after battle or contest. The mead-sharing ritual and the cup-passer herself come to symbolize peace-weaving and peace because they strengthen the societal and familial bonds between lord and retainers. First, the literal action of the *freoðeuwebbe* “peace-weaver” (1942) as she passes the cup from warrior to warrior weaves an invisible web of peace: the order in which each man is served, according to his social position, reveals each man’s dependence upon and responsibility toward another. (Chance 156)

Ealhild, Wealhtheow and Brimhild hold the peace by enforcing social ties and becoming the symbol of those social ties. In a society that depends on these ties for survival, this is a huge role for women to play. Peaceweaving marriages combine all of the behavioral systems into one cohesive behavior. Such a marriage is an example of mating, kin and social relations, survival, and parenting.

More than her ability to weave social peace in the meadhall, a good peaceweaver should be able to bear children that ensure peace in future generations. “Such a role is predicated upon the woman’s ability to bear children, to create blood ties, bonds to weave a ‘peace kinship’” (Chance 156). Blood is the strongest tie, particularly from a Darwinist perspective. When speaking of altruism and reciprocity, it is always blood relations that receive the most distinction: “Only babies whose blood comes from enemy sides could build brotherhood, even when the bride was unhappy” (Morrison 59). Whereas peace-pledges are a social pledge of brotherhood, children born from such peace-weavings

become biological pledges of brotherhood. Enemies are less willing to pursue conflict with a group if that group contains an individual with similar genes. One aspect of inclusive fitness, and a major explanation of altruism, is the idea that genes are selfish. It does not matter to a gene exactly which individual survives with the gene, only so long as one copy of that gene survives on to the next generation. Because Ealhild and Healfdane married as enemies, and begat children in a peaceweaving marriage, their “rule was no failure” (Morrison 74). Wealhtheow and Hrothgar might be able to claim the same if Hrothgar had not first married Brimhild.

Though Brimhild does uphold most peaceweaving duties, she and Hrothgar do not have a peace-weaving marriage. They marry for love and lust, rather than for duty. Ealhild claims that “it is best for rulers to marry for peace. The only true marriage is between a ruler and his land” (Morrison 73). Because “loving a king can interfere with your obligations” (Morrison 73), Ealhild does not want Hrothgar and Brimhild to be married. Such a marriage is selfish in many ways, particularly because marriage should be a tool to consolidate power. Hrothgar gains no advantage by marrying Brimhild, and indeed puts himself at a distinct disadvantage with this union. He cannot assert dominance over the conquered enemy by taking a peace bride, he has no wife to weave peace in his hall and through his bloodlines, and no children to become a physical manifestation of the peace he holds with the enemies he has dominated. Brimhild and Hrothgar fail to choose the best possible mate, they do not build proper social or kin coalitions, and they do not mate or parent in a way that will leave a genetic presence in future generations. Especially in Anglo-Saxon society, where peace-weaving marriages play such a vital behavioral and evolutionary role, Brimhild and Hrothgar fail to behave

appropriately. Ealhild insists that “politics supercede the lure of love” (Morrison 59) because survival supersedes the lure of love. Only powerful kings can keep their kingdoms in power; Hrothgar compromises his political, social, and genetic strength by marrying Brimhild.

Beowulf is cursed to never enjoy the advantages of children, marriage, or peace-weaving. He takes Brimhild’s son from her, and in so doing takes her chance at inclusive fitness.³ Brimhild takes vengeance on him by preventing any inclusive fitness he might strive for. Beowulf takes her genetic future, so she takes his: “Beowulf was to be no woman’s husband. Later, Beowulf would wed no peace bride, have no heir” (Morrison 160). Brimhild prevents Beowulf’s genetic future by drenching him in her monthly blood, stripping him of his “manly prowess.” This manly prowess, which is surely tied to Beowulf’s ability to attract mates and have children, is also called “Beowulf’s weapon” (Morrison 160). Beowulf’s ability to mate is tied to his evolutionary success. If he cannot marry, he cannot exert dominance over the enemies he has conquered. He has no option to beget children from this business transaction; such children could reinforce the power he gained, and the peace enforced, by peace-weaving marriages. *The Penelopiad*, another feminist retelling of a famous epic, describes how influential children can be: “To have a child was to set loose a force in the world. If you had an enemy it was best to kill his sons, even if those sons were babies. Otherwise they would grow up and hunt you down” (Atwood 24-25). Children are weapons to wield against the world. They inherit their

³ Egan writes of moral homeostasis, where bad behavior is self-punishing when an individual’s children rebound that behavior back upon the parent (53). She also outlines why childless men might turn to brutality: “Had they to face the transgenerational consequences of passing on these traits they would learn that selfishness is self-defeating” (54). Beowulf’s brutality may indicate his ignorance in relation to transgenerational consequences.

battles from their parents: genes, bloodlines, feuds, and obligations dictate how a child's life is lived or taken. Children from peace-weaving marriages uphold the obligation of the peace that is woven from a feud. For example, Beowulf inherits the obligations of his father, and helps Hrothgar to alleviate the burden of those obligations.

Children can sustain the peace that is woven from a peace-pledge, sons will murder your enemies, and daughters can breed more weapon-men. They are an army of propagation and revenge; Beowulf, childless, is at an evolutionary and social disadvantage. With the bloody drink dripping down his shoulders and chest, he feels his "powers recede" (Morrison 160). Brimhild has tamed his virility and stolen his power of reproduction, much like Beowulf stole the power Brimhild had garnered from her own act of reproduction. Beowulf's weapon is more than his reproductive organs. His weapon is the act of mating, in all aspects. Without a peace-pledge or children to wield, Beowulf is at an evolutionary disadvantage. Through her curse, Brimhild has made Beowulf genetically and socially useless. He will never be able to attract social partners, and therefore will not be able to accept a peace-pledge from a hostile tribe. Beowulf cannot participate in the necessary social coalition of peaceweaving, and cannot have the children that would stabilize such a social contract. His kingdom is "doomed to destruction" (Morrison 160) because he cannot follow the proper behavioral systems.

Brimhild very pointedly specifies that Beowulf will "have no heir" (Morrison 160), meaning that he is prohibited from having either biological children or fostered children. Without biological or fostered children, Beowulf cannot achieve inclusive fitness. Throughout the novel, and in Anglo-Saxon society in general, fostering provides an essential service. In a society where the men must achieve status primarily by raping

and murdering the native population, and revenge killings abound, children are often left without parents. Beowulf himself is a foster child under the care of his uncle, and has no biological siblings. Though Beowulf is unable to foster any children, his uncle Hygelac participates in a principal function of the society by fostering his sister's son. Joseph Carroll explains how fostering family contributes to inclusive fitness:

Humans share roughly half their genes with their siblings. A human being who never reproduced but who sacrificed his or her own reproductive opportunities to benefit two or more reproductively successful siblings-- say a maiden aunt who gave up the prospect of marriage in order to devote herself to the care of the orphaned children of her siblings-- would thus have achieved reproductive success. The logic of selection at the level of the gene has shaped our motivational systems, and as a consequence sociobiologists and evolutionary psychologists now recognize "kin assistance" as one of the elementary human behavioral systems. (*Literary Darwinism* 156)

Though Hygelac has children of his own, he believes that Beowulf is the best choice to rule after his death, and the death of his son Heardred. Recall the concept of selfish genes. A gene does not care which individual survives, so long as some copy of the gene is passed on. Hygelac and Hygd can afford to expend parental effort on Beowulf because he shares the same genes as Hygelac. Further, Beowulf demonstrates early on in life that he will most likely survive long enough to achieve a high inclusive fitness. He is a promising child who, by all accounts, should live long enough to reproduce many times. It is in Hygelac's best interest to foster Beowulf because Beowulf is likely to successfully pass on the genes that both Hygelac and Beowulf share. Hygelac's inclusive fitness

increases because he rears his biological children and a child from his brother, who shares many of the same genes.

Such reproductive costs and benefits are essential in calculating inclusive fitness: “Altruistic actions, which are costly to the actor but benefit others, are more likely to be directed toward relatives” (Birch 22). The altruistic action of fostering a relative’s child is favored by natural selection because the benefits outweigh the cost. A gene that codes for such social behavior maximizes inclusive fitness. Altruistic actions that reduce personal fitness, but increase inclusive fitness, enhance an organism’s “reproductive output” (Birch 26). In *Grendel’s Mother*, Hrothgar’s reproductive output is large, considering his children by Brimhild, Wealhtheow, and fostering. At the time when Hrothgar took his brother’s son into the household, Brimhild has birthed Grendel but Wealhtheow has not arrived. Little does Hrothgar know that Hrothulf is much more valuable than simply a fostered nephew: “His and Grendel’s presence could not assuage [Brimhild’s] desire for another child of her own. Brimhild became pregnant once more, only to birth bloody bits after a few months” (Morrison 98). Hrothgar cannot father another child with Brimhild because he is her father, and the genetic taboo of incest makes children incredibly difficult to conceive. Before Wealhtheow is captured and married, the only chance Hrothgar has to increase his reproductive fitness is to increase his inclusive fitness. Though Hrothulf is not Hrothgar’s biological son, he carries a similar genetic layout to Hrothgar. By parenting his nephew, Hrothgar is making sure his genes are passed on to the next generation: “Kin selection... emphasizes the relatedness between social partners as the crucial factor mediating the spread of a prosocial behavior” (Birch 27). Altruistic

behavior depends on how closely related the two parties are, so Hrothgar's decision to foster such a close relative is favored by natural selection.

Hrothgar spends parental effort on Hrothulf and his own children because the copies of their familial genes selfishly want to be passed on. When Hrothgar expends parental effort on Beowulf, he introduces a complex strain on his own inheritance system. Hrothgar neglects his parental duties by offering so much altruistic effort to Beowulf: "Hrothgar's sons, while heirs of the king's body, are not fit to assume the throne-- apparently the warrior troop recognized that they cannot do those things that are necessary for kings to do. Blood is not enough" (Drout "Blood and Deeds" 201). Particularly in the original *Beowulf* text, there are scenes where Hrothgar appears to adopt Beowulf into the line of succession for the throne. Hrothgar tells him, "Nū ic, Bēowulf, þec, / secg betsta, mē for sunu wylle/ frēogan on ferhþe" ["Now I will cherish you, / Beowulf, best of men, like a son/ in my heart; hold well henceforth/ your new kinship"] (*Beowulf* lines 946-949).⁴ Michael Drout explains in his article "Blood and Deeds: The Inheritance Systems in *Beowulf*" that Hrothgar's actions possess dynastic implications (201). He outlines two systems to pass on the throne: inheritance by blood, where Hrethric and Hrothmund would hold claim to the throne, and inheritance by deeds, where Beowulf's "deeds, rather than his lineage, allow him to be identified as a potential heir" (202). Beowulf and Grendel in both *Beowulf* and *Grendel's Mother* pose a threat to the traditional system of inheritance by blood.

Inheritance by blood is the province of biological reproduction and the kin group: "Under this system, power and identity passes along the line of genetic descent, from

⁴ All quotes in Old English and translation in Modern English are from Liuzza.

father to son” (Drout “Blood and Deeds” 202). Peace-weaving marriages play an important role in this inheritance system, because those children hold the power and promise to uphold peace:

By instantiating agreements in marriages, men can make permanent, in the bodies of their children, their contracts with other men. The body of a living child cannot be divided into the two halves of his parents, and thus as long as the child lives, so does the agreement between men, tribes, nations, and any “peace-weaving” will be successful. (Drout “Blood and Deeds” 207)

Ealhild is peace-pledge to Healfdane, and their child Hrothgar is the culmination of their peace-weaving. He inherits the throne because his blood is the bond of that peace-pledge, but Hrothgar does not enjoy the same faith in such a system: “The rule of blood constrains political and cultural flexibility. Inheritance by blood retards social change by preserving a given social order that has been at least somewhat adaptive for a culture” (Drout “Blood and Deeds” 207). Hrothgar's succession shows the constraints of inheritance by blood. In both *Grendel's Mother* and *Beowulf*, Hrothgar allows Grendel to lay waste to his meadhall and people. In *Beowulf*, Grendel is an unknown monster terrorizing a king past his prime. In *Grendel's Mother*, Grendel is the incestuous spawn who takes vengeance on the father-king who disowns him. In both texts, Hrothgar requires help to defeat the enemy who threatens his kingdom. That is no good king. In *Grendel's Mother*, Hrothgar exhibits many questionable behaviors that point to his genetic and evolutionary inferiority. He may subconsciously realize his inferiority and reaches out to Beowulf in order to introduce a system of inheritance by deeds.

Inheritance by deeds is most prominent in the warrior band, where men inherit through masculinity and brave actions: “In its simplest form, inheritance by deeds is the transfer of goods, power, or identity across generational boundaries in which the transfer is based not on the genetic relationship of two individuals but upon the performance of certain culturally valued behaviors” (Drout “Blood and Deeds” 210). This system cuts across cultural boundaries because any man who proves himself fit may take the throne. Hrothgar did not need to prove himself in order to gain his throne, and he ends up being a less than adequate king. Beowulf performs a massive deed when he destroys Grendel and Grendel’s mother: Hrothgar rewards Beowulf by symbolically adopting him and inviting him into the system of inheritance. Beowulf, however, does not support such a system. Hrothgar passes him gifts, another way to symbolically adopt him, but Beowulf passes these gifts on to Hygelac: “By giving Hrothgar’s dynastic gifts to Hygelac, Beowulf voids Hrothgar’s potential inclusion of Beowulf in the Danish succession” (Drout “Blood and Deeds” 208). Though Hrothgar is eager to adopt Beowulf, the hero passes on the social implications of the king’s gifts in order to void any possible inclusion in the inheritance system.⁵

These two inheritance systems also show a contrast between Germanic inheritance and Christian inheritance. The Germanic inheritance chooses from a broad kin group, whereas the newer Christian ideals focus on sons. The Christian inheritance introduced the new requirement that heirs “should be born of lawful unions” (Biggs 718).

⁵ Wealtheow also presents Beowulf with treasure, who then passes on that treasure to Hygd. “Hȳrde ic þæt hē ðone healsbēah Hygde gesealde, / wrætlicne wundurmáððum, ðone þe him Wealhðeo geaf” [I heard that he gave the necklace to Hygd, / the wondrous ornamented treasure which Wealtheow had given him”] (*Beowulf* lines 2172-2174). Biggs contrasts the gifts given by the rulers: “Unlike the king’s weapons, which embody the role of kin in selecting a new leader, [the neck ring] suggests, because it may be lost or stolen, the possibility of a line’s dying out” (737). Wealtheow’s gift to Beowulf represents the anxiety she feels at the possibility of Beowulf contending for the throne, taking the place of her own children.

Additionally, heirs “are not to be those begotten in adultery or incest” (Biggs 718). This, of course, is significant in Morrison’s reconstruction of the traditional *Beowulf* epic. Grendel would not be able to take the throne as a child begat through incest. Grendel and his mother present a threat to succession, as they are “apt images of the threat of kin violence when too many heirs contend for the throne” (Biggs 711). Hrothgar first opens the door to adversity by not monitoring his kin relations. Hrothulf, whose father should have been king, has a rightful claim to the throne. He asks: “How do you think it feels to be obligated to someone you feel should not be king. How do you think I feel to be duty-bound to my uncle, my foster-father? I am indebted to him, yet I resent him” (Morrison 105). Hrothgar alienates Hrothulf further by allowing Inga to be sacrificed. Grendel is biologically the next in line for succession, being the oldest son, but Hrothgar disowns and isolates him. Hrothgar offers Beowulf fostership, and essentially a place in his inheritance, which alienates Hrothgar’s own biological relations.

Hrothgar fails in fostering, parenting, social relations and, the most important behavioral system, survival. This system entails the need to avoid predators and defeat enemies. Though Hrothgar achieves status in his youth by defeating his enemies, he is unable to do so at the time that the texts take place. In both *Grendel’s Mother* and *Beowulf*, Hrothgar is unable to fight off the individual who is terrorizing his home and people. He must depend on a foreign youth to take care of the massive problem that Grendel becomes. In *Grendel’s Mother*, his choice in wife fails proper mating strategies. The third main behavioral system of mating, along with attracting sexual partners and overcoming competitors, is avoiding incest. Hrothgar fails at these aspects in his first marriage. Brimhild is no peaceweaving bride, but she is his daughter. When her

parentage is revealed, she exclaims, “You begot me? ... You married me!” (Morrison 117). Hrothgar, like Beowulf, fails to adhere to most of the behavioral systems: his incestual relationship is not an appropriate mating strategy; he marries Brimhild for love rather than for peace-weaving; he does not maintain his kin network; and he is unsuccessful in parenting Grendel.

Hrothgar’s parental irresponsibility reflects back on him when Grendel displays his father’s violence. Egan describes moral homeostasis in relation to parent/offspring relations: “Having offspring like oneself can be a form of self-punishment: the parent’s wrongdoing rebounds on them when their children behave in the same way” (Egan 53). Hrothgar’s bad behavior is self-punishing because his offspring emulates the behavior. Hrothgar uses violence to establish himself in the world, much like Grendel tries to use violence to reclaim his place at Hrothgar’s court. Similar to Frankenstein, Hrothgar’s negligence is rebounded upon him. Like the Creature, Grendel strikes out at the father who estranges him from the social ties that make life worth living. He kills because of the solitude forced upon him by his father. Hrothgar carelessly created this incestuous product, and just as carelessly casts him away. Hrothgar’s violent negligence is repaid with Grendel’s determined violence.

Grendel carries Hrothgar’s genes, more genes than a typical non-incestual offspring would, but Hrothgar encourages Beowulf to kill his child. Æschere declares that “even if we kill him, he can never be defeated” because “the people still love Grendel and his mother” (Morrison 134). Hrothgar should be able to protect his meadhall from any threat, so he inherently loses status when he cannot keep Grendel from terrorizing his people. Hrothgar can not kill Grendel himself because he has an evolutionary need to

preserve his genes, and must rely on Beowulf to dispatch with the threat. Hrothgar's instincts appear when the product of his incestual relationship dies: "Hrothgar smiled grimly to see his boy, the child of love, the grandchild of lust and violence, cut and bloodied, dirty with death" (Morrison 153). Hrothgar neither destroyed the rotten genes of his offspring himself nor would "avenge his own son's death," as Brimhild claims is his duty (Morrison 159). Because Hrothgar fails to adhere to evolutionary behavioral systems, his genes will not survive. "His punishment comes in the end of his family, no heirs shall survive, the hall shall be twisted black beams and empty embers, decayed and deserted" (Morrison 180). Hrothgar's parental irresponsibility reflects directly back on him and leads to the destruction of his family, home, and legacy

Grendel, as the culmination of Hrothgar's genetic inheritance, reflects the actions of his father. As a product of incest, it is no surprise that Grendel forms an incestuous relationship with his sister Freawaru.⁶ Incest is an evolutionary taboo, but Joseph Carroll claims that there is no unnatural behavior.⁷ "All of these forms of behavior can be traced to the only possible source of all behavior: the interaction between genetically transmitted dispositions and specific environmental conditions" (Carroll "Three Scenarios" 61).

Incest as a human behavior cannot be deemed unnatural, so there must be some evolutionary advantage. Incest and inbreeding "confer an inclusive fitness benefit

⁶ James Earl speculates that Hrothulf is also the product of incest's product. Hrothgar and Halga have an unnamed sister in the epic. Earl writes that she is sister only to Hrothgar; she is the Yrse named in other epics, who is Halga's daughter and wife. "Halga married his own daughter and Hrothulf (hrolf) is the son of their incestuous union" (292). Paralleling Hrothgar and Grendel, it is no surprise that Hrothulf attempts to initiate an incestuous relationship with his co-eval Inga.

⁷ Though outside the scope of this thesis, Carroll expands this idea: "No culture can deviate from human universals (by definition), but many individual people can and do deviate from species-typical norms of behavior... The behavior that is depicted in literary texts does not necessarily exemplify universal or species-typical behavioral patterns, but species-typical patterns form an indispensable frame of reference for the communication of literary meaning in literary representation" (*Literary Darwinism* 203-204).

stemming from increased relatedness between parents and inbred offspring” (Duthie 1). Inbreeding produces children that are more genetically similar to the parents than outbred children, so more of the parents’ genes are passed on. The overall evolutionary advantage of incest pertains to the frequency of recessive alleles.⁸ Inbreeding does not cause evolution directly, but “it can speed the rate of evolutionary change. More specifically, it increases the rate at which natural selection eliminates recessive deleterious alleles-- alleles that lower fitness--from a population” (Freeman 462). If two siblings produce a child, the child is in danger of experiencing the full effect of bad genes. In order for recessive deleterious alleles to manifest, the child must receive recessive deleterious genes from both parents. Both parents, as siblings, could have a hidden defect that is transferred to their child in full force through incest. Because inbreeding “increases the frequency of homozygous recessive individuals,” genetic variation declines in a society where incest runs rampant (Freeman 462). Lack of genetic variation forces offspring to manifest harmful genetic defects, and those offspring generally die from those defects. The morbid advantage of incest is its ability to eradicate genetically unfavorable defects and offspring.

Grendel, unlike his mother and father/grandfather, knowingly chooses his incestual mate. Freawaru and Grendel are half-siblings, but they intentionally partake in an incestuous love affair. “The sibling lovers mingled their loins and slept” (Morrison 152). This could potentially be an evolutionary strategy to eradicate Hrothgar’s unfavorable genes. Reproductive investment in inbred offspring becomes an acceptable

⁸ An allele is a variant form of a gene located at the same place on a chromosome. A recessive trait will only be expressed if two of the same recessive alleles are inherited from each parent. If a dominant allele is present, the recessive allele will not be expressed.

option in two scenarios. If an individual's reproduction is limited by resource availability, "resources will be invested in less fit inbred offspring instead of fitter outbred offspring" (Duthie 2). It does not matter if an individual has inbred or outbred offspring because the lack of resources will prevent any genetically fit offspring. Grendel is cast out to the mere and has few resources to give his offspring. Whether he has an incestual child or a genetically sound child, the offspring will receive limited and inadequate resources. If an individual's reproduction is limited by mate availability, they can inbreed or outbreed as necessary. Grendel, an incestuous product labeled monstrous, has no available mates, so Freawaru becomes his only opportunity at reproductive fitness. As far as Freawaru is concerned, Grendel is a force that can protect her. Hrothgar cannot defend his hall from attacks, but Freawaru remembers how Grendel "protected her from the taunts of the warriors" (Morrison 134). Grendel is able to provide her with a sense of protection that she may not feel within Hrothgar's halls, because Hrothgar is no protector.

Though Freawaru sees Grendel as protector and lover, he has many monstrous qualities. The most obvious quality depicted in *Grendel's Mother* is his incestual parentage.⁹ He becomes a cultural outcast, a symbol of social deformity cast out by his incestual status. He is genetically monstrous, and in many ways physically monstrous. While Grendel's monstrosity in *Beowulf* is based on his appearance and behavior, his monstrosity in *Grendel's Mother* is based both on his status as an incestual product and his actions after his disownment. Grendel is "earmsceapen/ on weres wæstmum wræclāstas træd, / næfne hē wæs mǣra þonne ænig man oðer" ["misshapen, / marched the

⁹ Earl writes that *Beowulf* noticeably lacks the usual horrors of Germanic folklore, such as rape, incest, cannibalism, and infanticide: "Among the many things the Grendels embody, or symbolize, is the incest theme that the poet has suppressed from his version of the narrative" (301).

exile's path in the form of a man, / except that he was larger than any other"] (*Beowulf* lines 1351-1353). The Grendel in *Beowulf* is larger than any man, meaning he is going to pose a much larger physical threat to any human he comes across. In "Our Monsters, Ourselves" David Gilmore describes common characteristics of monsters, one of which is grotesquely gigantic size: "Size relates in a generic sense to all animals, not only to humans, for large size means superior strength, which translates into the power advantage in confrontations" (Gilmore 174). Grendel is able to wreak havoc on Heorot for so long because his strength and size overwhelm the men that guard Hrothgar's hall. Grendel rips men apart with his bare hands, and eats those men as he rends them.

Gilmore's second monstrous attribute is the "emphasis on the colossal mouth as an organ of predation and destruction" (176). In *Beowulf* Grendel is characterized by how he kills men. Not only does he rip the bodies apart, he eats them:

Nē þæt se āglāca yldan þōhte,
 ac hē gefēng hraðe forman síðe
 slaépendne rinc, slāt unwearnum,
 bāt bānlocan, blōd ēdrum dranc,
 synsnædum swealh; sōna hæfde.
 unlyfigendes ealgefeormod,
 fēt ond folma.

Not that the monster meant to delay--
 He seized at once at his first pass
 A sleeping man, slit him open suddenly,
 Bit into his joints, drank the blood from his veins,
 Gobbled his flesh in gobbets, and soon
 Had completely devoured that dead man,
 Feet and fingertips.

(*Beowulf* lines 739-745)

Grendel kills this man while simultaneously eating him. This act is all the more horrifying because it combines eating, a necessary and generally pleasurable fact of life,

with death, a concept that humans instinctively avoid. Gilmore explains that “the gaping, tooth-lined, flesh-tearing mouth is a universal synecdoche for monstrous predation” (180). Described as a “mānscaða” [“maneater”] (*Beowulf* line 737), Grendel’s attacks seem to partly be provoked by hunger. He is “grim ond grædig” [“grim and ravenous”] (*Beowulf* line 121) when he attacks the thanes, and his flesh-eating encounters are described in great detail. The description of Grendel’s final attack, quoted above, is in stark contrast with the description of his mother’s attack. “Hēo wæs on ofste, wolde ūt þanon, / fēore beorgan, þā hēo onfunden wæs; / hraðe hēo æþelunga āne hæfde/ fæste befangen, þā hēo tō fenne gang” [“She came in haste and meant to hurry out, / save her life, when she was surprised there, / but she quickly seized, fast in her clutches, / one nobleman when she went to the fens”] (*Beowulf* lines 1292-1295). Grendel’s attack is described in grotesque detail because his monstrous mouth devours the men he dispatches, while his mother merely murders a man in honor of her slain child.

Though the Grendel in *Beowulf* has powerful jaws that can tear a man in two, he is unable to speak. Gilmore describes monsters as “wordless, speechless” (186). He explains that there is a primordial world where only sounds, images and emotions exist; and everything is experienced through the mouth: “This oral primacy also explains the form of aggression associated with monsters: the tears and rending, the gobbling mouths, the gnashing teeth, the cavernous maws, cannibalism itself...” (187). Gilmore hearkens this oral primacy back to infantile helplessness, and further back to mental remnants of a primordial stage. The monster is “a metaphor for retrogression to a previous age and time” (188). As a monster that holds over from pagan times, he represents a primitive pagan culture primed to rend the newer Christian values. *Beowulf* is the Christian hero

who murders in God's name, and Grendel is the monster who murders for bloodlust. Grendel represents a reversion back to paganism, symbolizing primitivism and barbarity, meant to present a contrast to the newer and more civilized ideas in Christianity.¹⁰ Not part of the Christian ideals followed by Beowulf and Hrothgar, he is a monster condemned by the Creator as part of Cain's cursed race (*Beowulf* lines 106-107). Described as "Godes andsacan" ["God's adversary"] (*Beowulf* line 786), he obviously is not part of the Christian line of morals set up throughout the text.

As a social outcast, Grendel is very similar to Frankenstein's Creature. Sandra Gilbert describes the Creature's monstrosity in a way that parallels Grendel's monstrosity: "[his] moral deformity is symbolized by the monster's physical malformation, the monster's physical ugliness represents his social illegitimacy, his bastardy, his namelessness" (344). The monsters in both *Frankenstein* and *Beowulf/Grendel's Mother* are characterized by these qualities. Both are disowned by fathers who create offspring without realizing the consequences of their actions. They are unable to form social ties because of their status as bastard outcasts¹¹, and both strike out in order to take vengeance on the father that barred them from participating in the chain of existence. In *Grendel's Mother*, Grendel cannot expect to take part in his inheritance (and loses the familial tie that gives his name meaning, therefore becoming a nameless monster), he cannot be part of his father's group of warriors, and he cannot expect to be

¹⁰ Though Beowulf follows the new Christian ideals, he is "disturbingly like Grendel: he is outsized, aggressive, fearless, and has the same superhuman powers and limitless stamina. Like Grendel, he mutilates his vanquished foes in battle, even the females, decapitating Grendel's mother and displaying the grisly remains as a trophy" (Gilmore 191). While Beowulf's behavior is meant to contrast Grendel's bestial instincts, the division between civilization and bestiality becomes blurred.

¹¹ In *Beowulf*, Grendel has no named father. "nō hīe fæder cunnon/ hwæþer him ænig wæs ær ācenned/ dynra gāsta" ["They knew no father, / whether before him had been begotten/ any more mysterious spirits"] (lines 1355-1357). In *Grendel's Mother*, Grendel is named a bastard after his incestuous origins are revealed. His birth becomes illegitimate because he is born from an incestuous union.

included in the warrior's code of honor. He tries to force his father into acceptance, or at least acknowledgement, but is unsuccessful in participating in human society. John Leyerle describes how monsters are outside Anglo-Saxon society: "for them, treasure is an object to be hoarded under ground. They receive no gifts and do not dispense them" (149). Monsters, including Grendel, do not participate in the Anglo-Saxon ritual of treasure exchange. When Grendel kills, he does not offer *wergild* in recompense for the murdered man's life. Particularly in the original *Beowulf* text, Grendel is notably not part of the social contracts that apply to individuals in his society:

sibbe ne wolde
 wið manna hwone mægenes Deniga,
 feorhbealo feorran, fēa þingian,
 nē þær nænig witena wēnan þorfte
 beorhtre bōte tō banan folmum
 (ac se) æglæca ēhtende wæs

He wanted no peace
 With any man of the Danish army,
 Nor ceased his deadly hatred, nor settled with money,
 Nor did any of the counselors need to expect
 Bright compensation from the killer's hands,
 for the great ravager relentlessly stalked.

(*Beowulf* lines 154-159)

Monsters give and receive no gifts; they also give and receive no *wergild*. In Grendel's case, he must rely on his mother to achieve the revenge that his death demands.

This revenge is what makes Brimhild so monstrous. Chance explains in "The Structural Unity of *Beowulf*: The Problem of Grendel's Mother" how her monstrosity comes from her masculine qualities. Especially when compared to Wealhtheow's domestic tranquility, Grendel's mother takes a very different path. Recall the importance of peaceweaving. Peaceweavers marry to establish peace, hold the peace, and produce

children that embody the peace. This is one of the most important roles that a woman can hold, and it is importantly a passive role.¹² The scop tells of Hildeburh's passive helplessness to requite the death of her son. Wealhtheow weaves words of peace, hoping to tie the men into a feeling of kinship and obligation, trying to forestall future danger to her sons: "Grendel's mother, intent on avenging the loss of her son in the present, attacks Heorot, her masculine aggression contrasting with the feminine passivity of both Hildeburh and Wealhtheow" (Chance 158). Whereas Hildeburh and Wealhtheow choose to weave peace, Grendel's mother is "mihtig mānscaða, wolde hyre mæg wrecan, / gē feor hafað fæhðe gestæled" ["a mighty evil marauder who means to avenge/ her kin, and too far has carried out her revenge"] (*Beowulf* lines 1339-1340). This choice makes Grendel's mother a monster in Anglo-Saxon society, where women are expected to be passive brides of peace. Just as her son is a social outcast, Grendel's mother is an outcast because she chooses vengeance over peace.

If Grendel's mother were a man, her actions would be accepted and encouraged.¹³

A male family member or a retainer should seek vengeance for the death of a loved one,

¹² This text does not use passive to mean indifferent. Women are very involved with the social interactions of a peaceweaving marriage. Even to say the women are passive as an act of submission would be inaccurate. Men mean for the role to make conquered women submissive, but women weave with a sense of power. Rather, this text contrasts women's passive actions with men's active actions. Women accomplish through non-physical social interaction what men accomplish through physical action on the battlefield. Chance describes the situation a peace pledge often finds herself in: "The peace pledge must accept a passive role precisely because the ties she knots bind *her*-- she *is* the knot, the pledge of peace" (158).

¹³ Jeffrey Jerome Cohen discusses monstrosity in relation to cultural values in *Monster Theory: Reading Culture*. He writes that the narrator in *Beowulf* compares the terror evoked by Grendel and his mother. Grendel's mother evokes less terror than her son, "and this is a reflection of the contemporary attitude toward women" (36). However, the fact "that a monster *could* be female for the Anglo-Saxons (instead of a female becoming a monster, as in later texts) suggests that women were not as marginalized as they came to be in the later periods" (36). Cohen continues by discussing Frankenstein's refusal to create a female for his Creature: this is "a recognition that it was not possible in [Shelley's] society to allow a woman monster to be created" (36). Cohen's discussion is important in the scope of this paper because he demonstrates how monstrosity is affected by the cultural values of the author.

but because Grendel's Mother is a woman her vengeance is unacceptable. Chance summarizes the unique situation:

It seems clear from these epithets that Grendel's mother inverts the Germanic roles of the mother and queen, or lady. She has the form of a woman (*idese onlicnes*, 1351) and is weaker than a man (1282ff) and more cowardly, for she flees in fear for her life when discovered in Heorot (1292-93). But unlike most mothers and queens, she fights her own battles. (155)

She must fight her own battles. By the time she beheads *Æschere*, she has no ties to the world. Her connection to Grendel, the child who defines her identity, breaks when Beowulf kills him. In the original *Beowulf* text, the mother is nameless, known only as Grendel's mother. Without Grendel, she is mother to no one. Once she loses her identity as mother, she is no longer connected to the chain of human events. Like Frankenstein's Creature, who is thrown into violence and despair at the death of his bride, Grendel's mother strikes back at the ones who kill her loved one.: "Tribeless, now kinless, forced to rely on her own might, she seizes and kills *Æschere*, Hrothgar's most beloved retainer, in an appropriate retribution for the loss of her own beloved 'retainer' and 'lord' -- her son" (Chance 159). Grendel and his mother were from the beginning outside of society, living in the mere away from humanity, but Grendel's death throws his mother out of her identity. With no ties to humanity or society Grendel's mother, like the Creature, chooses vengeance and inevitable death.

Grendel and his mother live in a borderline place, in both a physical and social sense. They live in literal and metaphorical exile, unable to participate in the society that has shunned them: "Whatever the people in a particular culture demarcate as wilderness,

as noncultural space, as unexplored territory, there are monsters” (Gilmore 192). Isolated because they pose a physical threat to Hrothgar’s people, they choose as their place of exile the borderlands of that culture. In *Grendel’s Mother*, the mere that Grendel and Brimhild retreat to previously belonged to Ælfsciene. She “abided on the border of known lands, neither land nor water, because she existed as neither woman nor man” (Morrison 121). This description is remarkably similar to Gilmore’s description of borderline spaces, outlining how monsters occupy the border between “the real and the unreal, [and] between the permitted and the forbidden” (192). *Beowulf* describes the mere as “nis þæt hēoru stōw” [“no good place”] (line 1373). It is a murky land with “Hīe dýgel lond/ warigeað wulfhleoþu, windige næssas/ frēcne fengelād” [“wolf-haunted slopes, windy headlands, / awful fenpaths”] (*Beowulf* lines 1357-1359). It is a place of wonder where you can see nightly “fýr on flōde” [“fire on the water”] (line 1366), but it is also a “frēcne stōwe” [“fearful place”] (line 1378). The mere is importantly rife with watery imagery. Grendel’s mother dwells within the “wæteregesān” [“dreadful waters”] (line 1260) and she is described as the “Bær þā sēo brimwylf” [“she-wolf of the sea”] (line 1506). Such imagery supports the borderline wilderness that the monsters live in, recalling the primal imagery of birth.

David Gilmore remarks that monsters typically inhabit watery places, and that they are generally slimy or amphibious in appearance: “Like the neonate leaving the womb in birth, monsters emerge from the deep and nurturing waters to bellow and shriek. The water that surrounds and shelters the monster symbolizes not only the amniotic fluids of the womb, but also the primal element from which all life emerged” (189). In *Beowulf*, Grendel and his mother are speechless monsters that inhabit the amniotic waters of the

mere. Their inability to master human speech already sets them apart from humanity, their primitive nature exacerbated by the environment they inhabit. They hearken back to primordial humanity, before language and civilization, when primitive instincts ruled over the humans who hadn't evolved into advanced culture. In *Grendel's Mother*, Brimhild and her Grendel are intelligent outcasts who are reborn through the amniotic waters of the mere. Grendel learns of his true origins and is disinherited. Cast out to the mere, he is reborn as a more violent and monstrous version of his previous self. His life is fueled by revenge, his only happiness coming from the havoc he wreaks on Hrothgar's hall.

Brimhild has many watery rebirths throughout her life. The first comes when her mother sets her loose to sea: "Breathing in land wind, the girl-lady stirred, sensing the end of the flood, womb sheltered" (Morrison 2). Brimhild is described as a "marine monster" (Morrison 5) when Hildilid finds her, and brings the babe into "a second birth into a new life in a foreign haven" (Morrison 7). Brimhild's voyage is again described as a "second birth" (Morrison 18), emphasizing the importance her watery passage made on her life. That journey marks her journey away from Sif and her rebirth as Brimhild. When Brimhild is banished to the mere, she experiences another rebirth. Beowulf claims that she is "dead from this world of men and women. She has crossed over the borderland where frost giants and trolls reign" (Morrison 161). Brimhild crosses another borderland and becomes the Brimhild that is more closely aligned with Ælfsciene, the original dweller of the mere. She casts off the title of queen Brimhild and dons the mantle of healer and foster parent to Edith and Sif.

Though Brimhild fosters Edith and Sif, they contribute little to her inclusive fitness because they don't pass on Brimhild's genes. Her only genetic inheritance, and her ties to normal society, dies with her only son. She fails to appropriately mate, parent, build social coalitions, or continue her genetic line. Hrothgar suffers similar failures when judged by his relations with his first wife and son. Grendel, blameless in the actions that brought his misfortunes, suffers the worst fate. He endures through the decisions passed through his bloodline, forced to live his fate as an incestual product, and chooses violence as his only path in life. His parents create Grendel as genetically monstrous, so Grendel dies the monstrous fate of not achieving any appropriate behavioral system. In *Beowulf* as well, the characters fail to adhere to the Darwinist behavioral systems.

IV. CULTURAL FITNESS IN *FRANKENSTEIN*, *GREDEL'S MOTHER*, AND *BEOWULF*

Paralleling biological reproduction, where individuals need to have a genetic presence in future generations, cultural reproduction fills the need to have a cognitive presence in future generations. In order to achieve inclusive fitness, an individual must survive long enough to reproduce a biological or cultural product. In a traditional Literary Darwinism reading, biological products are biologically reproduced offspring or offspring equivalents. Cultural products are replicated intellectually. Biological products manifest through genes and flesh, whereas cultural products manifest through language, traditions, or anything that transmits social and cultural significance. This chapter will discuss those cultural products and how they contribute to a Literary Darwinist reading. This new reading describes cultural reproduction as happening through two routes, each creating a mental or material cognitive artifact. Intellectual reproduction is the abstract way that culture is replicated through memes, stories, knowledge, and mental artifacts. While physical reproduction¹⁴ is the tangible way that culture manifests itself through textual reproduction and material artifacts, this new reading gives individuals the opportunity to achieve inclusive fitness through cultural reproduction, in addition to biological reproduction. Either reproduction fills the need to survive through future generations, whether that presence is biological or cultural in manner.

Much like biological evolution, cultural selection seeks to conserve what is adaptive and useful (Baldus 217). Whereas biological evolution selects the best genes to pass on, cultural selection acts through entities called memes. Richard Dawkins

¹⁴ Not to be confused with biological reproduction, physical reproduction is the material way that culture reproduces.

introduces the concept of memes as “units of cultural symbolism that survive and replicate in a fashion parallel to that of ‘genes’” (Carroll *Literary Darwinism* xiv). Examples of successful memes are Christianity, Mickey Mouse, and the internet memes that are so integrated into modern culture. The loose parallel between genes and memes can be seen in how each survives. Though genes are self-replicating in an organism, and memes are repeated only if they activate a response in a human mind, both can only be passed on if they provide some beneficial quality to an individual: “Memes that can garner attention are more likely to be reproduced; however, perceptual and cognitive systems that can selectively filter memes, so that only those reproduce that are most beneficial to the organism of which the perceptual system is a part, are more likely to be themselves reproduced” (Drout “Meme” 124). Because memes need to activate responses in human minds, they must garner as much attention as possible in order to survive.

Genetic traits replicate biologically, but culture replicates through imitation: “Traditions begin with imitation. When one person imitates another person, whatever is imitated--a word, gesture, sentence, tune, or other behavior--is a meme, an entity that has managed to replicate itself from one mind to another” (Drout “Meme” 117). Less popular memes will not be repeated, and will subsequently be replaced by a more popular meme: “Through this process, memes will become more and more closely adapted to their environments. A culture can be seen as an ecosystem of competing and cooperating memes” (Drout “Meme” 117-118). These units of cultural symbolism compete to activate the strongest response in the human mind. Urban legends, for example, are a prevalent meme because they activate a strong response: “Urban legends exploit the human disgust response in order to spread” (Verpooten 24). Disgust was originally a biological reaction

“comprised of a diverse but highly coordinated set of elements, including affective, behavioral, and cognitive components, initially evolved to monitor food intake and protect against parasites and pathogens” (Verpooten 24). The response further evolved to elicit an emotional reaction when humans encounter certain stimuli. Urban legends succeed and replicate because of their ability to evoke an emotional response; the prevalence of any meme demonstrates that meme’s survival potential. Urban legends show the adaptive role that literature and memes play in culture.

In *Literary Darwinism*, Carroll outlines the traditional division of literary function:

Pinker follows the traditional division of literary function into two parts-- use and pleasure, or instruction and entertainment. As instruction, he says, literature serves as an adaptive function because it provides us with models for situations we might meet within our own lives. As a form of pleasure, literature is a nonfunctional byproduct of higher cognitive processes. (115)

This second category, pleasure, devalues the artifacts of the mind to mere sexual display. This category claims that anything coming from the human mind evolved through sexual display to delight the opposite sex. Conversation, art, music, and literature are nonfunctional mating calls to potential partners. The first category, use/instruct, gives more significance to literature. In this category, literature is a tool to instruct and inform society. Such stories reinforce social norms and pass on important information to future generations. A major focus of Literary Darwinism is to “identify literary forms that increase our ethical range by inhibiting intolerant behaviors” (Fletcher 468). Put in a different light, behaviors can be seen as memes. Tolerant behaviors (beneficial memes)

are replicated through positive feedback. Intolerant behavior (memes that invoke a disgust response) are not replicated, and do not survive to the next generation.¹⁵ Rather than individuals learning intolerant behaviors by trial and error, literature acts as “a means of conveying adaptively important information” (Carroll xix). Individuals can learn the difference between tolerant and intolerant behavior by listening to stories about such behaviors. Narrative provides models of behavior from which individuals can take social cues.

Closely related to, but much larger than, this category of use/instruction is the need to provide cognitive order. Carroll considers this need to be a behavioral system in itself:

The cognitive behavioral system arouses a need for conceptual and imaginative order, and that need fulfills itself and provides satisfaction to the mind through the formulation of concepts, the construction of religious, philosophical, or ideological beliefs, the development of scientific knowledge, and the fabrication of aesthetic and imaginative artifacts. (*Literary Darwinism* 198)

More than a form of sexual display or a road map to social interaction, the adaptive function of literature is to fulfill this cognitive need. The demand for cognitive order arises from the advantages and disadvantages of higher intelligence. When humans developed the ability to have complex thoughts, they gained a huge evolutionary advantage. Humans were able to plan for the future, prioritize, make long-term decisions, and plan other beneficial actions. However, the ability to think about the past, present and

¹⁵ Intolerant behavior survives only in a non-physical form through urban legends. Such behavior invokes a disgust response because it trespasses on a culture’s “purity norms” (Verpooten 24). Emotional responses to these trespasses ensure that the purity norms are upheld.

future is a mixed blessing. Humans also developed the capacity to worry, to have anxiety about how their world could and should be: “The large human brain has adaptive (survival) value, but that in solving some adaptive problems the brain produces a new adaptive problem--it causes confusion and uncertainty” (*Literary Darwinism* xxi). While the human brain solves complex problems, it is capable of thinking up even more complex problems. General intelligence allows humans to make choices beyond rigid instinct. In order to have flexible responses to variables in their environment, humans must be able to cut their cognitive reasoning from instinct. In this confusing and dangerous world, uncertainty can be fatal.

Humans created art to cope with this uncertainty. Cognitive artifacts regulate the complex cognitive machinery that differentiates between thought and instinct: “Literary works can be understood as products of an adaptive need to make sense of the world in emotionally and imaginatively meaningful ways--to produce cognitive order” (*Literary Darwinism* 164). Any cognitive artifact--including literature, art, religion-- helps the human brain cope with the stress of the world. Literature “contributes to personal and social development and to the capacity for responding flexibly and creatively to complex and changing circumstances” (*Literary Darwinism* 116).

Needless to say, crucial to the development of literature is language itself. Carroll makes the parallel between DNA and language: “One can speak of DNA itself as a form of ‘language,’ but this is just a metaphor, and it does not take one very far into the formation of personal and social identity” (Carroll “Three Scenarios” 57). Biology speaks through DNA while culture speaks through language. The cognitive use of literature depends on the adaptive function of language. Language is perhaps the first tool that

humans use to provide cognitive order in their world: “It is on language, Darwin speculates, that all higher cognitive human development develops” (Carroll *Literary Darwinism* viii). The ability to communicate is necessary in order to build complex social structures, and those structures are vital to building advanced civilizations. “Once humans have acquired language, they use spatial orientation and language interdependently to comprehend how they are situated in the world” (*Literary Darwinism* 93). Through language, humans are able to provide cognitive order to their ever expanding world.

Language, providing such an important service to humanity, presents both a problem and solution to the Creature in *Frankenstein*. The humans he encounters, all capable of language and complex cognition, have heard stories of monsters. These stories have warned them to run from strange monstrous bodies, and their instincts tell them to preserve their lives in any way necessary. The Creature learns language, and learns of the predicament his monstrosity puts him in. With language, and the acquisition of complex thought, he understands the destitution his life must be lived in. The Creature only becomes monstrous to himself when he learns language. As Felix teaches the Arabian lessons, the Creature learns as well: “The words induced me to turn towards myself... I cannot describe to you the agony that these reflections inflicted upon me; I tried to dispel them, but sorrow only increased with knowledge” (Shelley 83). Language is the tool he requires to enter into social relations, but it is also the tool that enables him to understand why he will never be a part of the chain of existence: “As a verbal creation, he is the very opposite of the monstrous: he is a sympathetic and persuasive participant in Western culture. All of the Monster’s interlocutors--including, finally, the reader-- must come to

terms with this contradiction between the verbal and the visual” (Brooks 371). Though the Creature was monstrous in size, he does not become a monster until he learns the language to describe himself as such. Richard Holmes discusses the Creature’s state of birth in his text “Mary Shelley and the Power of Contemporary Science”:

Frankenstein’s creature has been constructed as a fully developed man, from adult body parts, but his mind is that of a totally undeveloped infant. He has no memory, no language, no conscience. He starts life as virtually a wild animal, an orangutan or an ape. Whether he has sexual feeling, or is capable of rape, is not immediately clear. (189)

The Creature becomes monstrous when he understands the negligence that Frankenstein has shown him, and feels rage towards his creator when he learns the words to describe such rage. Without language, the Creature is an animal trying to survive. With cognition, the Creature learns the capacity for rage, sorrow, and monstrosity.

Language is an important distinction between human and animal. In film adaptations of *Frankenstein*, language is the most important contrast between Creature and Monster: “Mary Shelley’s unnamed Creature is transformed into the ‘Monster’, and made completely dumb. He is deprived of all words, whereas in the novel he is superbly and even tragically articulate” (Holmes 193). In *Beowulf*, by contrast, Grendel is speechless. He lacks the capacity for speech: his nonverbal, and therefore nonhuman, sounds add to his monstrosity. He is at the very base of humanity because he is not evolved enough to use speech. However, as with cognition, there are two aspects of language. The mental aspect includes the grammar of language, the thoughts that connect ideas, and the words spoken aloud to others. The material aspect is written language

itself. The invention of writing made language more of a solitary action. In “Beyond Words: Can Literary Darwinism Address the Unsaid and Inexpressible in Literary Creation and Response,” Ellen Dissanayake discusses the social role of literature:

Reading, which is not an adaptation, has obviously emerged from the human penchant (need?) for listening to and telling stories, apparently a human universal. Reading is a solitary act and listening/telling a social one. At the transition, people gathered in a crowd to be read to--still a social experience, like the participatory experiences in the arts that predominate in societies that have not undergone the process of modernity. (163)

Before written history, stories were passed on orally. There was a speaker and a listener, often many listeners. Storytelling was a social transaction where the narrator would pass stories, history, and culture to listeners. Written language allows these values and knowledge to be passed to a much larger range of people. Particularly with the invention of the printing press, written language can be reliably passed on to a huge group of listeners/readers. *Beowulf* demonstrates the unique relationship of spoken and written language. The first word “Hwæt” literally means “listen.” Though readers can only read this word, and can only imagine the scop in front of a group of people, the command is still effective: “Here written language is used to issue a request for the floor but in a manner that hearkens back to traditions of spoken storytelling, in which a narrator must indeed have to ask his or her interlocutors to ‘listen up’” (Herman 190). *Beowulf* bridges oral and written narrative, showing how literature may produce mental and material cognitive artifacts.

Further, *Beowulf* demonstrates how narrative is an effective social tool that produces cognitive order. David Herman and Becky Childs discuss how “stories provide crucial representational tools facilitating humans’ efforts to organize multiple knowledge domains, each with its attendant sets of beliefs and procedures” (177). *Beowulf* produces cognitive order in knowledge domains like social cognition and a variety of problem-solving activities that extend beyond the social sphere. Recall from Chapter Three the tradition of peace-weaving. A major aspect of this tradition lies in the words of peace spoken during the cup-passing. Those narratives set up a social structure and introduce possible solutions to current and future arguments. *Beowulf* establishes oral narrative as literature, and helps bridge Anglo-Saxon traditions of oral narrative with early transcribed medieval English literature. In addition, *Beowulf* demonstrates the transmission of communal and personal experiences, values, and culture through literature. Herman and Childs summarize the text’s importance:

Beowulf, in other words, testifies to the longlastingness of narrative as a tool for thinking. Further, with its inclusion of multiple embedded narratives; its representation of stories as a means of making promises, saving face, and navigating other aspects of social existence... the poem itself represents and thus helps illuminate the cognitive functions of storytelling. (177)

Before discussing the cognitive functions of literature as a whole, this chapter needs to discuss how monsters contribute to the need for cognitive order. The previous chapters discuss how monsters pose a physical threat; this chapter adds the idea that monsters pose a cognitive threat and are necessary for normal mental functioning.

Monsters challenge an individual's perceptions and assumptions of the world. They are vital to the development and growth of imagination because they pose literal and metaphorical challenges. David Gilmore describes how monsters are useful:

But there is also a paradoxical sense in which terrifying images, like those in bad dreams, are cognitively useful, not simply as outlets for repressed emotions, or as a way of letting off steam or literally "waking us up," as nightmares do, but acting as salutary spurs to the imagination, waking us up to new ideas, for example.

(190)

A very real application of this concept is the dream that sparked the idea for *Frankenstein*: "The fantasy of reanimating the dead occurred to Mary Godwin not just as a second-hand scientific speculation overheard from Byron, but as a most disturbing dream recorded in her journal in March 1815" (Baldick 175-176). Shelley's first child, a baby girl, was born prematurely and died nameless a few days after her birth. Soon after, Shelley had a dream in which she could renew life where death had taken over (Britton 4). Shelley's nightmare spurred her imagination enough to write a story about a monster that inspired the same perturbation.

Due to the story's interesting origin, *Frankenstein* takes on an additional meaning to its author. Shelley, grieving her dead child, dreamt up a story that fulfilled her dreams and nightmares. She dreamed of bestowing life, but also feared the consequences of such technology. Her text filled a very important cognitive role, and demonstrated her need to have a cognitive presence in future generations. Shelley, at that time, tragically did not fulfill her need to have a genetic presence in the future; she chose to reproduce culturally instead. There are two aspects of cultural/cognitive reproduction, both demonstrated by

Shelley and her *Frankenstein*. Intellectual reproduction is the mental, non-physical aspect of cultural reproduction. Memes replicate intellectually, and this category takes special care with a text's meaning to reader and author. Physical reproduction is concerned with the products of cognition, and the physical expression of cognition. Both categories handle the need to leave some type of legacy by producing cognitive artifacts. Herman and Childs discuss how "cognitive artifacts encompass material as well as mental objects - calendars, spreadsheets, and palm pilots, as well as proverbs, mnemonic techniques, and rules of thumb" (178-179). The mental objects passed on lend themselves to intellectual reproduction, while the material objects are part of physical reproduction.

Frankenstein demonstrates cultural reproduction in many ways. Looking at the traditional behavioral systems, cognition is the one system at which both Frankenstein and his Creature excel. Both men acquire knowledge through tales, and both pass knowledge through tales. The Creature learns language in order to reveal himself to the cottagers. He hopes that "knowledge might enable me to make them overlook the deformity of my figure" (Shelley 78). Once the Creature learns language, his education progresses in leaps and bounds. The Creature learns even more about human nature when he begins to read: "I can hardly describe to you the effect of these books. They produced in me an infinity of new images and feelings, that sometimes raised me to ecstasy, but more frequently sunk me into lowest dejection" (Shelley 89). These words teach the Creature how to feel empathy. Carroll indicates that "literature is a medium for cultivating our innate and socially adaptive capacity for entering mentally into the experience of other people" (*Literary Darwinism* 116). Because the Creature has learned from literature, he has also learned the capacity for empathy other humans must hold.

When asking Frankenstein to listen to his tale, the Creature says, “Let your compassion be moved, and do not disdain me” (69). He has been witness to words evoking passion, and he hopes that Frankenstein will also be moved by a narrative.

Other sources teach the Creature about the range of human emotions and action. For a long time he could not understand why men would murder, or what the purpose of laws and government were, “but when I heard the details of vice and bloodshed, my wonder ceased, and I turned away with disgust and loathing” (Shelley 83). These stories demonstrate how literary forms “increase our ethical range by inhibiting intolerant behaviors” (Fletcher 468). The Creature could not conceive of these intolerant concepts until he heard tales about them. When the Creature feels disgust at the details of vice and bloodshed, the story fulfills its purpose by increasing his ethical range. As discussed earlier in this chapter, stories that exploit the human disgust response are successful memes. The narrator of such tales tells the stories to pass on some sort of knowledge. Stories that successfully disgust the listeners or readers are more likely to be repeated; that strong response carries the narrative and its enclosed knowledge. The Creature learns the difference between tolerant and intolerant behaviors because those stories, as successful memes, replicated through enough people to eventually be heard by his own ears.

Frankenstein shows the impact of successful memes, and is itself an example of a successful meme. Victor Frankenstein tells his story to Captain Walton in order to spread the horror of his actions. He very adamantly refuses to tell Walton the process of his creation, but wants to pass on the story as a warning to others: “Learn from me, if not by my precepts, at least by my example, how dangerous is the acquirement of knowledge,

and how much happier that man is who believes his native town to be the world, than he who aspires to become greater than his nature will allow” (Shelley 32). Frankenstein sees the story itself as more important than the creation of a new being; the knowledge of his creation is too dangerous for common knowledge, but the story as a cautionary tale is a significant contribution to society. Frankenstein’s story exploits the human disgust response because his mistakes lead to the death of most of his family and, in the end, himself. The story also serves a more basic evolutionary response: “Creativity was seen as a source of confusion and uncertainty; the adaptive function of cultural rules was to rein it in and stabilize it” (Balduis 220). Frankenstein had this enormous burst of creativity, and, out of that burst, a new life was created. He went against the cultural norms whose purpose was to rein in his creativity, only to be rewarded with uncertainty, confusion, and heartache: “My imagination was vivid, yet my powers of analysis and application were intense; by the union of these qualities I conceived the idea, and executed the creation of a man” (Shelley 152). Frankenstein attempts to rectify his trespasses with the story he tells to Walton. The story acts as warning to others, and also an attempt to enact cognitive order on the story of Frankenstein’s life.

Frankenstein’s story acts as meme, urban legend, and warning to others; most importantly, his story acts as the cognitive product he passes on through generations. Chapter Two of this thesis claims that Frankenstein has no inclusive fitness because his only offspring, the Creature, dies. However, that traditional reading does not take into account the story that Frankenstein passes on to Captain Walton, who then passes on to his sister in letters, who surely passes it on to someone else, until eventually the text is bound and sold as a novel. As set forth in the introduction of this chapter, an individual’s

ultimate goal is to survive long enough to reproduce, whether that reproduction is biological or cultural in nature. Frankenstein lives barely long enough to pass his story on, but the story is passed on nonetheless. His story replicates, securing a presence in future generations. Shortly before his death, he tells Walton, “I must pursue and destroy the being to whom I gave my existence; then my lot on earth will be fulfilled, and I may die” (Shelley 153). Though Frankenstein intends to destroy his Creature, his story ensures the Creature’s cognitive survival for many generations. There is another level of narration in Frankenstein’s story: the Creature tells Frankenstein how he survives and evolves into a cognitively aware being, and Frankenstein relays this story to Walton, who then writes about it to his sister. Walton writes directly about his encounter with the Creature at the end of the novel, when the Creature comes to say his final farewells to his creator. A traditional reading dooms the Creature to evolutionary failure, but the Creature does in fact culturally reproduce. He is wrong when he says, “He is dead who called me into being; and when I shall be no more, the very remembrance of us both will speedily vanish” (Shelley 161). The story of Frankenstein and his Creature replicates through many people and many generations.

Hitchcock says that by the middle of the nineteenth century, Frankenstein’s myth and his name had entered the vernacular: “‘Frankenstein’ had become a code word for misguided ambition, for new ideas conjured up with good intentions but destined to grow and change beyond all reckoning, ultimately overwhelming those who conceived them” (263). Frankenstein’s story and his name became successful memes, able to replicate and adapt to new cultures. This aspect gives credit to Mary Shelley’s cultural fitness.

Happening at a time when she did not have inclusive fitness, this narrative acts as her offspring equivalent. She designates the text as such in her introduction:

And now, once again, I bid my hideous progeny go forth and prosper. I have an affection for it, for it was the offspring of happy days, when death and grief were but words, which found no true echo in my heart. Its several pages speak of many a walk, many a drive, and many a conversation, when I was not alone; and my companion was one who, in this world, I shall never see more. (Shelley "Introduction" 169)

Shelley's "hideous progeny" is her narrative; this language directly parallels Frankenstein's when he tells Walton that he must finish telling "what remains of my hideous narration" (Shelley 142). Shelley and Frankenstein both have inclusive fitness through their cultural reproduction. There are many linguistic similarities between Frankenstein and Shelley. When Victor Frankenstein first perceives his filthy creation, the language describes a stillbirth: "That is the key to its power: Shelley draws on her experience of the death of her own infant children or 'the trauma of the afterbirth'" (Lipking 418). Victor Frankenstein tells his personal story that gets passed on through the generations, and Mary Shelley similarly tells her personal story through Frankenstein's story. She parallels not only Frankenstein, but his Creature as well.

Though Shelley may seem more comparable to Frankenstein, in their author/narrator relationship, she seems to have put more of her personal story into the Creature's story. There is a resemblance between the Creature and Shelley's stillborn child. She wrote the text after her horrifying dream, where she tried to rub life back into her dead child. In a scene resembling a stillbirth, the Creature comes to life. The

Creature, and the story itself, in part take the space in Shelley's heart where her tragic stillbirth left an empty place. Shelley empathizes with the Creature because of its resemblance to her stillborn child, and also the Creature's resemblance to her own personal narrative. In "Female Gothic: The Monster's Mother," Ellen Moers describes Shelley's monstrous qualities:

Pregnant at sixteen, and almost constantly pregnant throughout the following five years: yet not a secure mother, for she lost most of her babies soon after they were born; and not a lawful mother, for she was not married-- not at least when, at the age of eighteen, Mary Godwin began to write Frankenstein. So are monsters born. (319)

Like Grendel and his mother, who must live on the outskirts of society because the incestuous actions make them monstrous, the Creature and Mary Shelley¹⁶ are labeled monstrous because they exceed social norms.

Shelley and the Creature, both well-spoken individuals made monstrous by their respective societies, also share parental tragedy and neglect.¹⁷ The Creature had no parental figures and learned to function in society through the literature he overheard at the De Lacey cottage. Literature teaches the Creature how to speak, understand, and live life. It gives him the capacity to make decisions based not on instinct, but on logic and emotion. Shelley seems to have attached similar sentiment to literature. Her mother died

¹⁶ Shelley is essentially the Creature's mother, and the reason he is labeled a monster. Born from Shelley's tragedy, the Creature's character is marked with monstrosity and devastation. Brimhild, born from tragedy herself, marks her child with her own devastation and monstrosity.

¹⁷ Shelley's trauma additionally manifests in the name "William." Britton describes the significance of this name: "It was her father's name and, until she was born, it was her name, constantly spoken of by expectant parents as they planned their son's education. Mary gave this name to her son, her second child, and it is the name she gives in her novel to Victor Frankenstein's little brother who is the Monster's first victim" (4).

soon after her birth. Though Shelley was raised by her father, he eventually married a woman that she disliked, and Shelley naturally felt distant from him. Growing up, Shelley endlessly studied her parents' works. It could be said that she "read her family and to have been related to her reading, for books appear to have functioned as her surrogate parents, pages and words standing in for flesh and blood" (Gilbert 331). Literature acted as an escape for Shelley, allowing her to create cognitive order in a world that seemed unfair and cruel to her.

For both Shelley and the Creature, literature plays an important role. Literature means education, parenting, and closure. Frankenstein tells his story to Walton before he dies, hoping for an end to his nightmare. The Creature speaks to Captain Walton and tells a beautiful speech (spoken literature) to end the nightmare that his life has been. Shelley tells their tale to ease the trauma of her stillbirth. It is not just her tale that she writes to unburden the guilt she may feel; she writes this complex narrative filled with emotion, devastation, and death to ease the heartbreak that she, Frankenstein, and the Creature feels: "Narrative is a resource for closure. Any particular telling of a narrative has to end, even if the narrative being told is presented as unfinished or unfinishable, and in coming to a conclusion tellings mark even the most painful or disturbing experiences as endurable because finite" (Herman 181). In this context, narrative presents a terminus that limits the power that trauma may have on an event. Each individual in the text produces a cognitive product when their biological products fail.

In *Beowulf*, and particularly in *Grendel's Mother*, most of the characters achieve inclusive fitness through cultural reproduction. As a cognitive artifact, *Beowulf* is an incredibly successful meme. The knowledge, values, and stories contained within this

text have replicated throughout hundreds of years. Orally and then textually, *Beowulf* replicates because it is a showcase of memes and behavioral protocols. Chapter Three discusses the difference between inheritance by blood and inheritance by deeds. This chapter would like to put inheritance by deeds in a different light. Drout says, “In its simplest form, inheritance by deeds is the transfer of goods, power, or identity across generational boundaries in which the transfer is based not on the genetic relationship of two individuals but upon the performance of certain culturally valued behaviors” (“Blood and Deeds” 207). The transfer of goods, power, or identity depends on an individual’s ability to uphold culturally acceptable behaviors: “Behaviors performed by an individual cause him or her to be selected to receive a social station. Culture is maintained and reproduced by the continued repetition of deeds-based inheritances. Such social reproduction is in fact quite similar to the ways actual warrior cultures reproduced themselves” (Drout “Blood and Deeds” 208).¹⁸ This warrior culture survives and replicates in a very similar fashion to memes, which survive and replicate in a way similar to genes. In lines 16-25 *Beowulf* demonstrates how such culture replicates:

him þæs Líffrea,
 wuldres Wealdend woroldāre forgeaf;
 Béowulf wæs brēme --blæd wīde sprang--
 Scyldes eafera Scedelandum in.
 Swā sceal ge(ong) guma gōde gewyrcean,
 fromum feohgiftum on fæder (bea)rme
 þæt hine on ylde eft gewunigen
 wilgesīþas þonne wīg cume
 lēode gelæsten; lofdædum sceal
 in mægþa gehwære man geþeon.

¹⁸ Morrison discusses Beowulf’s actions in the context of warrior society in *The Literature of Waste: Material Ecopoetics and Ethical Matter*: “Bodily survival is necessary for successful reproduction, something Beowulf himself fails to do at his nation’s cost. Because Beowulf does not reproduce, his style of action will die out; indeed, societies structured around lauded heroes such as Beowulf are doomed from the start if those heroes do not reproduce” (74). She describes how heroes are trapped in a self-defeating system, where they are encouraged to seek fame and engage in life-threatening pursuits. Beowulf, concerned more about fame than reproduction, “brings about the ultimate destruction of his people” (74).

... The Lord of Life,
Wielder of Glory, gave him worldly honor;
Beowulf, the son of Scyld, was renowned,
his fame spread wide in Scandinavian lands.
Thus should a young man bring about good
with pious gifts from his father's possessions,
so that later in life loyal comrades
will stand beside him when war comes,
the people will support him--with praiseworthy deeds
a man will prosper among any people.

These lines demonstrate many behavioral systems. A ruler must monitor reciprocity by spreading costly gifts and by achieving status. Importantly, under the cognition behavioral system, a ruler must accrue praiseworthy deeds so that people will tell commendable stories about him. With such stories backing him, he should be successful among any group of people.

These stories are vital because they speak to the nature of a man, while simultaneously reinforcing culturally valued behaviors. Hrothgar demonstrates the regard warrior clans hold for these stories: "During the celebration following Beowulf's victory over Grendel's mother, Hrothgar suggests that Beowulf's heroic acts, when recounted in the future, will constitute an object lesson for generations of warriors" (Herman 191). Narrative once again takes its place as an instructional tool, but Hrothgar also offers the possibility of narrative as a reward for heroic deeds. Because Beowulf has acted in accordance with the warrior code, his actions will be passed on as a standard for future generations: "Hrothgar also picks back up with the scop's tale of Heremod, concluding his re-narration of the story with a coda characterizing the tale as a source of (negative) behavioral protocols for Beowulf" (Herman 191). These stories replicate because they demonstrate how the warrior code should and should not be upheld. The stories reinforce

behavior protocols as well as the warrior code dictated by those protocols. When Hrothgar offers narrative to Beowulf as a reward, he is offering Beowulf the chance to achieve cultural reproduction. These stories act as intellectual offspring, replicated with each telling, spreading Beowulf's legacy into future generations.

Noticeably, the lines quoted above have a religious overtone. Dawkins specifically cites religion as one of the most successful memes, so naturally Christianity is a successful meme within the *Beowulf* text. Morrison brings this meme to the surface in *Grendel's Mother*. Brimhild pushes to meld Christianity with the beliefs she grew up with. Her need to understand her past ultimately leads to her banishment from the meadhall, as Jerome returns from his pilgrimage with Brimhild's mother and news of Brimhild's incestuous beginnings. Even so, Brimhild persists in replicating this meme, encouraging the teaching of Christianity while acting as healer to her community. She teaches this knowledge to her foster children, thereby increasing her cultural and inclusive fitness. Brimhild devotes more time to her cultural fitness than her biological fitness, successfully surviving until old age. "Cultural evolution may lead to behaviors that are maladaptive from the perspective of genes" (Verpooten 24), but the benefits of culture sometimes outweigh the needs of reproduction. At the beginning of the novel, Sif introduces Brimhild as her grandmother: "She was no bloodkin. Yet her life flows in my veins, warms the foamy sea of memory" (Morrison 4). As a member of the human race, Brimhild naturally wants to have some kind of presence in future generations. Her only son dies, but she is able to have a cognitive presence through the knowledge and stories (mental cognitive artifacts) she passes on to her foster children. Sif demonstrates the advantage of cultural fitness, where Brimhild's history and knowledge will be passed

down similar to the way that genes are passed through a bloodline. Though Brimhild does biologically reproduce, her child dies before he is able to pass their shared genes on to the next generation. Rather than continuing to pursue a biological presence, Brimhild chooses to live making a cultural impact in her community. In this way, she achieves cultural and inclusive fitness. Beowulf also fails to biologically reproduce, but Hrothgar is correct in saying that Beowulf's heroic acts would be recounted in the future. Beowulf's legacy is passed through many generations, much like his bloodline would have passed if he had biologically reproduced.

There are two characters in *Grendel's Mother* who warrant a closer inspection: Inga and Grendel. Both of these characters die young, arguably tragic, deaths. Inga is aware of the type of impact she would like to make. Rather than make a biological impact with children that would replicate her bloodline throughout the ages, Inga chooses to replicate the faith she believes in:

Inga could not explain her conviction that this was to be her end. "My sister and I were twinned at the death of our mother at Scylding hands. I have loved you on time borrowed from fate. You can rape me and deny me my moment of sacrament. I will not prize you for it. Let me create a life which signifies.

(Morrison 138)

In her mind, a life is important when it signifies something larger. Her sacrifice allows her to dedicate her body to a cause rather than to her genetic obligation. Grendel marks his presence in a very different manner. He creates his legacy through destruction and death. When Brimhild tells her son that such devastation will destroy him, he replies, "Revenge will save me" (Morrison 136). Though his actions lead to a horrendous death,

he is indeed saved by his revenge. The havoc he wreaks creates a narrative, a story that is embellished and warped and told to many people. *Æschere* fabricates expansive lore around Grendel to explain why he hasn't been killed yet: "No human warrior can match him. He is a shape-changer. His mother's magic protects him from detection. He can come and go here as he pleases, as an old man, perhaps next time as a luscious young woman" (Morrison 134). These tales become more elaborate as Grendel's revenge continues, until eventually Unferth calls him "a monster" (Morrison 157). In Hrothgar's hall, the poet recites a story of Ymir the frost giant: "All his kin were evil. From him are descended all ill-tempered trolls and evil elves. Grendel and his mother come from this stock" (Morrison 122-123). Grendel's monstrosity is such that it expands to mythological heights.¹⁹ *Æschere* correctly states, "Even if we kill him, he can never be defeated" (Morrison 134,) because Grendel's legacy expands and replicates even after his death. Choosing revenge over biological reproduction, Grendel stays near Heorot to torment Hrothgar rather than moving away to a new life. Even so, he manages to culturally reproduce because his revenge incites a legacy of monstrous deeds.

This chapter now comes to the second aspect of intellectual reproduction. Physical reproduction entails the tangible cognitive products that carry culture through them. The most evident cognitive artifact to arise from intellectual reproduction is the text that contains a narrative. Egan describes how closely textual reproduction resembles biological reproduction:

Shakespeare was right to see analogies between printing, sex, and genetic transmission of likeness, as a number of critics have shown. The printing press

¹⁹ Just as the Creature is more monstrous because he is a different species than human, Grendel and his mother are made non-human to increase their monstrosity.

made possible textual reproduction that was intellectually fecund just as sexual reproduction was biologically fecund. Manuscript writing, and even older technologies, had long preserved human thoughts beyond the decease of their thinkers. But printing revolutionized thought, because multiple copies of a piece of writing enabled thinkers across the known world to be in contact with one another. (91-92)

Previously this paper quoted Dissayanake as saying that reading was a solitary act, while listening/telling a story was a social act (163). In light of how the printing press revolutionized thought, it is apparent that reading is also a social act, on a much grander scale than oral narratives could hope to achieve. Whereas oral narratives are restricted to the interaction between teller and listener engaging in the story at that moment, written narratives can connect the writer and several readers at any time in any place. Oral narratives engage direct social interaction, while written narratives involve indirect social interaction. The narrator and writer cannot know who will read the text or at what time. Though oral narratives certainly survived through many generations, the manuscript followed by the printing press introduced the notion that human thoughts could accurately survive and replicate long after the original thinker had died. In other words, written texts could allow an individual's thoughts to have a presence in future generations after that individual has expired. Oral narratives transmit from the speaker's mind to the listener's through the words spoken into air. Written narratives transmit from the manuscript, where thoughts manifest in ink and parchment.

Shakespeare's metaphor of "printing being like procreation" (Egan 91) perfectly applies to thinking of how words are replicated and reproduced on a page, much like

children are replicated and reproduced through genetics. Dawkins describes how “structures (phenotypes) built by genes (genotypes) need not be confined to an individual organism’s body” (Egan 48). Egan uses beavers as an example. A beaver has the phenotype of sharp teeth because his DNA codes for the genotype of sharp teeth. Using Dawkins’ reasoning, Egan includes dams in the phenotypic expressions of beavers: “We can consider the dams built by beavers to be just as much a part of the phenotypic expression of beavers’ genes as are their webbed feet or wood-cutting teeth” (Egan 48). Beavers build dams because their genes code for it, so Dawkins includes the structures dictated by genes as part of that organism’s phenotype. Applying the same reasoning, written texts would also be a part of an individual’s phenotype. As discussed throughout this chapter, cognition, like religion, literature, and knowledge, is necessary to create cognitive order while the human brain creates so much confusion. By continuing to stretch this idea, it could be said that humans are genetically coded to produce cognitive artifacts in order to cope with the cognitive confusion caused by higher reasoning skills. Therefore, the structures that arise from this genotype would be considered phenotypes. These phenotypes are the cognitive artifacts produced by humans searching for cognitive order.

Applying these ideas to the texts under review, the narratives are an extension of an individual’s phenotype. Mary Shelley was searching for cognitive order, *needed* that cognitive order, so she wrote *Frankenstein*. That text is an extension of her phenotype surviving into future generations. She has this phenotype of the manuscript she wrote, and her thoughts are transmitted through that text.²⁰ Within *Frankenstein*, Captain

²⁰ Egan compares printing and reproduction: “That is, printed editions are made by something like mitosis (cloning) of the parent rather than by meiosis (sexual cell division). Meiosis, sexual reproduction, is a

Walton has the same inclination. His thoughts are transmitted through the letters he writes to his sister. In the novel's narrative, these letters are set up to reveal the story to the world. The story begins verbally with Frankenstein and his Creature; Walton gives the story flesh and blood through the ink and parchment he uses to record the events.²¹ However, ink and parchment is not the only way that cognitive artifacts can manifest. Egan writes that *structures* built by genes are extensions of that individual's phenotype. Those structures are not exclusively confined to verbal narratives and texts. Remember that cognitive artifacts are "something used by humans for the purpose of supporting or enabling cognition" (Herman 177), and need not be restricted to only oral and written narratives. Any object that passes on cultural symbolism can be a cognitive artifact.

The Anglo-Saxon culture is filled with material cognitive artifacts. Recall Grendel's first attack on Heorot in *Grendel's Mother*, when he leaves an artifact filled with meaning. He comes dressed as an old man, and leaves the murderous scene after placing a clasp on the giftstool for Hrothgar to find. "It had once belonged to his oldest son, now exiled from the hall, the clasp he gifted the old wanderer the eve before" (Morrison 133). Warriors in the meadhall ask Hrothgar if they should follow the attacker. Hrothgar responds, "It is no use. I know where he is. This is a message. Only I can respond" (Morrison 133-134). Though Grendel writes no words, he is able to send a message to Hrothgar. That clasp is a cognitive artifact: it enables Grendel's cognition by relaying his message, and supports Hrothgar's cognition by helping him make sense of

rather better metaphor for the reproductive creativity that happens in authors' minds, as described by Richard II in prison" (60).

²¹ Gilbert discusses how Shelley "read" her family in lieu of attentive parents, and how books functioned as her surrogate parents, "pages and words standing in for flesh and blood" (331).

the scene before him. Hrothgar gathers information from that event, from his warrior culture, and the history of the clasp in order to decipher a meaning from the clasp.

Helga and Inga hold beads that act as cognitive artifacts. Before they are to be separated, Helga tells Inga to swallow her bead: “That bead is me, the one I have swallowed is you. We will always be together this way. I will always have you in me. I don’t care if it takes thirty years, we will be together. We will not be separated” (Morrison 40). This cognitive artifact provides support to the sisters who may never see each other again. The beads mean hope, something they desperately need in order to keep living. The beads also send a message to Brimhild when she first sees Inga performing with the acrobats. Brimhild sees the “bead, dark yellow” (Morrison 94) and recognizes the message it is sending. The bead informs anyone who is aware of its history that the wearer is Inga, sister to Helga, so cruelly separated from her family. Without any writing, the bead transmits vital information to Brimhild and allows her to make an informed decision about Inga’s fate. Through the bead symbolizing the pact made between sisters, Brimhild fulfills the promise indicated by the cognitive artifact.

As Grendel, Helga, and Inga have shown, treasure holds immense cultural symbolism in *Grendel’s Mother* and *Beowulf*. In “Blood and Deeds: The Inheritance systems in ‘Beowulf’” Drout examines the significance of treasure in Anglo-Saxon culture:

The gift of “dynastic treasure,” that is, objects possessed of their own histories and lineages, invokes the lineage of the giver. By passing heirlooms to Beowulf, Hrothgar has created an unusual situation of inheritance, a situation of which Beowulf does not take advantage. Instead, after reciting the lineage of the gift and

giver, Beowulf passes Hrothgar's gifts to Hygelac. By giving Hrothgar's dynastic gifts to Hygelac, Beowulf voids Hrothgar's potential inclusion of Beowulf in the danish succession. (210)

Drout demonstrates the significance of a treasure's history and lineage: because each treasure is passed from one person to the next, the treasures are imbued with attributes from each owner. It is a different manner of inheritance by deeds, where the treasure inherits the deeds of its owner. Beowulf passes the dynastic treasures to Hygelac because he does not want to be trapped into the symbolism of those gifts. The gifts, as cognitive artifacts, act with more meaning and symbolism than ordinary objects. Just as Grendel's clasp transmits a larger message to Hrothgar, dynastic treasures act as culturally rich cognitive artifacts. Not only do dynastic treasures offer the opportunity for heroes to project their legacy into future generations, the gifts provide stability to society: "The strength and security of heroic society depend on the symbolic circulation of treasure" (Drout "Blood and Deeds" 149). By seeking treasure, warriors win fame and an opportunity to be praised by his lord: "A lord offers support and sustenance to his retainer who agrees in turn to fight unwaveringly for his lord, a bond of contractual force in heroic society" (Drout "Blood and Deeds" 149). Treasures symbolize this bond and act as cognitive artifacts that transmit legacies throughout generations.

Another Anglo-Saxon tradition encompassing cognitive artifacts is cup-passing. Though the cup being passed around must surely be a treasure to behold, it is the symbolic action of passing that holds more cultural significance. Chapter Three discusses exactly how important cup passing is in Anglo Saxon cultures, but this chapter is focused on how the cup and passer act as cognitive artifacts. The cup-passer is almost like a

cognitive artifact because she embodies the peace she strives to encourage. She is weaving “an invisible web of peace: the order in which each man is served, according to his social position, reveals each man’s dependence upon and responsibility toward another” (Chance 156). In addition, the peace-weaving takes a verbal form. The “speeches accompanying the mead-sharing stress the peace and joy contingent upon the fulfillment of each man’s duty to his nation” (Chance 156-157). That verbal and invisible web of peace is a mental cognitive artifact, while the cup itself is a material cognitive artifact. This tradition (recalling that traditions are groups of memes) is to tell stories (also memes) that reinforce good behavior and the tradition of peace-weaving itself.

It is important to note that peace-weaving encourages peace by weaving past stories with present situations: “Stories can be used not only to give support for positions presented in arguments but also as a resource for comparing and contrasting features of past and present situations” (Herman 179). During Beowulf and Unferth’s flyting, the disputant’s past behavior is used to undercut his present endeavors. Peaceweavers tell stories to highlight or undermine actions and behaviors that did happen and are currently happening: “They weave direct statement and classical tags together to produce verbal braids in which allusive literary references from the past cross and recross with the present subject” (Leyerle 138). This tradition of telling stories throughout stories, which happens throughout *Beowulf*, creates an imagery of weaving throughout the culture: “The pervasive importance of interlace designs in early Anglo-Saxon art establishes the historical possibility that a parallel may be found in poetry of the same culture... There is ample evidence that interlace design has literary parallels in both style and structure” (Leyerle 138). Cognitively, words and language manifest in the world through interlace

design. Narrative can manifest in ink and parchment, in a “verbal carpet page” (Leyerle 140); alternatively, narrative can manifest through past and present tales, with language and the spoken word, weaving through the room, into and through ears and minds. The scop in *Beowulf* “secg eft ongan/sīð Bēowulfes snyttrum styrian, / ond on spēd wrecan spel gerāde, / wordum wrixlan” [“began again/ to recite with skill the adventure of Beowulf, / adeptly tell an apt tale, / and weave his words”] (*Beowulf* lines 871-874). Whether material or mental, the cognitive artifacts in *Beowulf* manifest through some type of weaving. Those verbal braids are reminiscent of artistic designs of the period. The peace-weaver likely passed around a cup decorated with interlace designs, and the clasp Grendel lays upon the gift-stool was presumably embellished in the same manner.

Frankenstein also shows this type of interweaving, but in a different manner. Whereas *Beowulf*'s weaving was an artistic device meant to recall and reinforce past behaviors, *Frankenstein*'s interlace structure calls attention to the presence of a listener. The narrative structure in this text involves framed or embedded tales. At the innermost circle we have the Creature, who tells his story to Frankenstein. Frankenstein tells his story to Walton, who then tells his story to his sister: “The nested narrative structure calls attention to the presence of a listener for each speaker-- of a narratee for each narrator” (Brooks 369). This is significant because it recalls the cognitive need to leave a legacy. Each character has the need to leave a legacy through the production of mental or material cognitive artifacts. By drawing attention to the listener in each tale, the teller is ensuring that they receive credit for the story they are passing on. It is not a story being told *about* them, it is a story being told *by* them. That ownership is very important to the

narrator, who is trying to satisfy the need to produce cognitive order and the need to produce a legacy lasting throughout generations.

This alternate reading with Literary Darwinism offers an option to individuals who would otherwise be described as evolutionarily inept. Individuals are no longer constrained to the biological need to mate, procreate, and parent. Rather than making a genetic impact, individuals are open to making an equally significant cultural impact. Inclusive fitness now includes biological and cultural products, each of which pass on an individual's legacy into future generations. Especially as culture evolves into a more civilized society, the need to make a cultural impact becomes more sustainable. Society no longer needs every individual to procreate in order to thrive and survive. Humanity has evolved to a point where cultural contributions have as much impact as biological contributions. The characters in *Frankenstein*, *Beowulf*, and *Grendel's Mother*, all part of advanced evolving societies, are able to successfully reproduce in a cultural manner because their societies will not crumble if a few individuals choose to bypass biological reproduction. Indeed, their contributions serve to further the advancement of each society. Every narrative, every cognitive artifact, provides stability, promise, and knowledge to each community.

IV. CONCLUSION

This thesis discusses how the behaviors of characters in a novel can be interpreted using a Darwinist lens. By examining how characters adhere to the seven behavioral characteristics, a conventional Darwinist reading shows that the characters are evolutionarily obsolete. However, conventional readings leave much to be desired. Carroll includes cognition as one of his behavioral systems, but cognition takes a much larger role in evolution. Literature surpasses the roles assigned by scholars; it is more than a product of entertainment, instruction, or cognitive order. Literature, and all cognition, acts as a cultural artifact that passes the author's presence into future generations. For individuals who choose not to reproduce, cultural and cognitive reproduction offers an alternative option for inclusive fitness. To assemble an accurate Darwinist reading, it is necessary to examine both biological and cultural needs. Both aspects will inform the reader on the motives of the characters within each text. *Frankenstein*, *Beowulf*, and *Grendel's Mother* all offer narratives that can be interpreted with this biological and cultural lens. There are characters motivated by both the biological and cultural need to reproduce.

Importantly, the characters are not the sole individuals motivated by the need to have a genetic or cognitive presence in future generations. The author is also motivated by these needs. This helps to explain narratives that seemingly have no Darwinist principles. If an author's prime motivation is to survive in some way to future generations, it is in his or her best interest to write an engaging and entertaining piece of literature. Take, for example, *Twilight* by Stephanie Meyer. This narrative features a protagonist who is in love with a vampire, her natural predator. Using a conventional

analysis, the protagonist Bella Swan fails the majority of the behavioral systems. Focusing on cultural reproduction, Bella still fails to produce any type of cognitive artifact. The text does not exhibit Darwinist principles, and also fails to exhibit appropriate instructive values. This story seemingly offers nothing to society, and it is widely believed to be an example of poor writing, but it is a very successful text. This success is problematic to a Darwinist reading, which claims that all characters should be subject to evolutionary motives. In such scenarios, where literature offers nothing but entertainment to society, I propose that literature can be used solely by the author to carry their legacy into the next generations.

In order to reproduce intellectually and cognitively, the author must activate the strongest response in the reader's mind. Remember that memes must activate strong responses in order to replicate intellectually. This is the only way that an author's legacy will be passed on to future generations. The author's intent affects how a text can be viewed. If the author does not want to offer instructive value or cognitive order to his or her readers, the author may choose to construct a narrative outside the parameters of known human society and values. Darwinist principles cannot be held accountable for human motivations that lie outside plausible human behavior. Though these texts are not subject to a Darwinist reading, they are still examples of the Darwinist need to reproduce the author's legacy. While *Twilight* proves problematic to a Darwinist reading, it is an example of Meyer's need to produce a cognitive artifact. Such a distinction can be used to examine how aesthetics affect the role of literature in evolution.

A text that is widely believed to be well-crafted, such as *Frankenstein*, would seemingly have a better grasp on human nature. Shelley is able to provide entertainment,

instruction, and cognitive order with her narrative. Her story activates a larger response in the minds of her readers, and therefore has survived through many generations. *Twilight*, an example of a text that is not so well-crafted, was successful for a period of time but will likely not make such a lasting impression as Shelley's work. Though it still remains to be seen, it is unlikely that Meyer's text will last throughout the generations. The aesthetic qualities of a text prove problematic in Darwinist readings. The effect of craft on a text's evolutionary value needs to be further explored, but the subjective nature of the question makes the exploration difficult.

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