**Introduction**

At first glance, the modern genetic novel may seem far removed from early science fiction tales addressing, perhaps unknowingly, the field of genetics. However, the themes prevalent in early genetic novels remain prevalent in modern genetic novels; yet, they return with an almost desperate tone in modern tales as fears of overreaching scientific practices become realized. Thus, the modern genetic novel owes its origins to Mary Shelley, who became the first writer to render life-giving capabilities to the character of the scientist.[[1]](#footnote-1) In *Frankenstein*, Shelley recognizes the power of knowledge, in particular, scientific knowledge, and through her novel, she creates what Jon Turney deems “the governing myth of modern biology.”[[2]](#footnote-2) Essentially, the themes which Shelley introduces in *Frankenstein* become recycled and amplified in significant ways in later works.

Indeed, Shelley establishes the transformative power of genetic science even without any knowledge of genes and the genetic code. Even if Victor Frankenstein’s actual method of creating a human being is unclear in *Frankenstein*, by the time of H. G. Wells’ *The Island of Doctor Moreau*, vivisection emerges as the science of possibility. Just as Frankenstein exercises a power over life and even death, in the sense that he reanimates dead body parts, Doctor Moreau exercises the same power by vivisecting animals and accidentally killing many of them in the process of creating man-like creatures. Moreau, like Frankenstein, becomes obsessed with his genetic project, but he differs from Frankenstein in his entirely ruthless and unfeeling nature. His methods of creation are extraordinarily cruel and yet, he finds himself able to create over a hundred creatures by employing such painful surgical procedures. In *The Island of Doctor Moreau*, Wells takes Shelley’s scientist as his model, but molds him into an uncaring, morally deficient person.

In *Jurassic Park*, Michael Crichton combines *Frankenstein* and *The Island of Doctor Moreau* in notable ways. Again, the theme of the male creator figure that Shelley first emphasized emerges in *Jurassic Park*. However, Crichton additionally includes the island empire theme that Wells introduced in his novel. While Crichton certainly expounds on themes present in the works of Shelley and Wells, he additionally voices a concern about the commercialism of genetic science. He predicts the merging of business and genetics and points towards the dangerous nature of such a combination.

Ultimately, all three writers address concerns over the risks involved in genetic manipulation. They underscore the dark side of an otherwise grandiose and powerful field of science by depicting the grotesque methods employed in creation, as well as the grotesque nature of the creations themselves, at least in the case of Frankenstein’s monster and Moreau’s animal hybrids. Crichton focuses more on the grotesque manner in which Hammond resurrects the dinosaurs in an unfamiliar environment and then places them on display like circus freaks. In either case, the authors are preoccupied with the dangers of genetic manipulation. In the process, Shelley, Wells, and Crichton portray the dark sides of the scientists themselves by emphasizing their attraction towards establishing dominion over their creations.

Overall, a clear trajectory of the genetic novel emerges from a thorough analysis of *Frankenstein*, *The Island of Doctor Moreau*, and *Jurassic Park*. A genetic science that begins with the creation of just one life form evolves into a science capable of producing hundreds of life forms. In addition, the scientist himself evolves from a redeemable, sympathetic character to an unfeeling, unsympathetic character and finally, to a profit-minded, entertainer character. Finally, with each novel, as the genetic science grows in its power and scope, the dangers and implications of the genetic procedures employed grow, as well.

**Frankenstein**

1. ***The Scientist’s Perspective***

In *Frankenstein*, Shelley begins her tale from the point-of-view of Robert Walton, an ambitious young man looking for adventure and anxious to discover the secrets of the North Pole. Walton desires to “tread a land never before imprinted by the foot of man” and to “discover the wondrous power which attracts the needle” (Shelley 7). Thus, Shelley actually introduces a main theme of her novel through Walton’s character. Interestingly, then, Frankenstein almost enters the novel in order to teach Walton and subsequently readers the lesson which he learns the hard way. In the beginning of the novel, Walton’s narration consists of short letters to his sister, but when he does tell the story of Victor Frankenstein, he tells it directly as Frankenstein speaks it in the form of a lengthy letter. Essentially, from then onward, the first person narration of the story belongs to Frankenstein himself. Readers almost forget that Walton is narrating all of this to his sister. Then, at the very end of the novel, Walton takes over the narration again, so that Frankenstein can reiterate a final warning to him and to readers.

Shelley allows Frankenstein the main narration of the novel, because he is not completely heartless, like Moreau. He gives an honest account of himself and while he may prove disagreeable at first, he realizes the overstepping nature of his work and offers advice to Walton. Even if readers find Frankenstein morally reprehensible for first creating the monster and then abandoning it, they recognize his fright and his regret that he may have created a thing of horror. Furthermore, Frankenstein suffers greatly after creating his monster, almost unceasingly, until his early death. Thus, at the same time as Frankenstein repulses readers, they nevertheless realize the suffering he undergoes, albeit self-inflicted, until the end of the novel.

1. ***The Coward***

From the beginning of the novel, Frankenstein proves interested in science and especially in sciences with transformative power. For instance, even at just thirteen years of age, the young Frankenstein attempts to replicate the grandiose experiments of the “quack” scientists. Besides seeking the “philosopher’s stone” and the “elixir of life,” he finds himself endeavoring after the “raising of ghosts or devils” (22). When Frankenstein approaches his studies, he does so with unparalleled eagerness, referring to himself as a “disciple” of the former philosophers. Shelley uses the word “disciple” to emphasize the elevated nature of Frankenstein’s ambition. He finds himself enthralled by the power which certain altering sciences are capable of achieving.

However, soon Frankenstein learns that he cannot achieve the kind of power he hankers after through mere imitation. He turns away from the far-removed sciences of Agrippa, Paracelsus, and Magnus in favor of the more substantial and this-worldly study of electricity and nature. While still young, Frankenstein seems to acknowledge a natural sublime; when he witnesses the complete destruction of a tree from lightning, he wonders at the inherent power of nature: “The catastrophe of this tree excited my extreme astonishment” (Shelley 23). In this instance, Frankenstein’s “astonishment” emerges as a result of his reverence for the power of nature. Soon, however, nature does not prove enough to fulfill Frankenstein’s curiosity and he feels the need to transform nature in significant ways.

Indeed, Frankenstein feels the need to create life. He does, even in the beginning, acknowledge the overreaching nature of his aspiration when voicing his derision for the limited modern sciences. He is reminiscent of the old science which sought “immortality and power” (27). An unsatisfied Frankenstein contends, “I was required to exchange chimeras of boundless grandeur for realities of little worth” (27). As Shelley illustrates, the “realities” of the natural world do not match up to the grandeur of his dreams. The natural world proves underwhelming for Frankenstein. As he states, his interest in science is “chiefly founded” on “immortality and power.” Of course, the only science which can even somewhat accommodate such desires is the field of genetics.

Significantly, instead of choosing to return home following his two years at Ingolstadt, Frankenstein decides to remain to study what will become the pinnacle of his elevated research. Indeed, Frankenstein becomes engrossed in creation, in life and the “principle of life” (30). Even if he does not understand the structure and nature of DNA, Frankenstein finds himself attracted to the genetic code, the language and essence of material existence, the actual “principle of life.” However, even though he delves into a grand field of science, the grandness takes on a dark and grotesque spin as Frankenstein studies dead bodies in an attempt to understand life:

My attention was fixed upon every object the most insupportable to the delicacy of the human feelings. I saw how the fine form of man was degraded and wasted; I beheld the corruption of death succeed to the blooming cheek of life; I saw how the worm inherited the wonders of the eye and brain. (30)

Shelley’s language conveys the unhealthy rapture with which Frankenstein engages with death. He admits that anyone with “human feelings” could not have carried out this sickening background research necessary for his impending genetic experiment. His lack of human feelings almost turns him into Dr. Moreau; however, Frankenstein actually stops himself before becoming entirely remorseless and indifferent to emotions. At this stage, however, Frankenstein finds beauty in the grotesque; he is actually “fixed” and engrossed by the grotesque. He additionally isolates himself from his family and his friends, which emphasizes the all-consuming nature of his work.

Once he begins the actual work of creation, Frankenstein becomes even more engrossed in his work. Indeed, Shelley stresses the dark nature of Frankenstein’s work and his subsequent corruption. She narrates Frankenstein’s rummaging through charnel houses to collect human bones and tissues. Actually, the creature’s grotesque appearance emerges from its human hybrid quality. In Istvan Csicsery-Ronay’s words, the grotesque involves a “sense of wonder” and is “a quality usually attributed to objects, the strange conflation of disparate elements not found in nature.”[[3]](#footnote-3) Even though Frankenstein uses actual human body parts, the parts are dead tissues and he combines them unnaturally. Frankenstein himself recognizes the grotesque nature of the project. Highlighting the “solitary chamber” in which Frankenstein works, Shelley conjures the image of a perverted scientist whose “eyeballs were starting from their sockets” (32). Here, Shelley emphasizes his “sense of wonder” in his work.

Yet Frankenstein shrinks from the grotesque nature of his work from the start: “often did my human nature turn with loathing from my occupation, whilst, still urged on by an eagerness which perpetually increased, I brought my work near to a conclusion” (32). Thus, Frankenstein himself recognizes the grotesque nature of his work, yet he cannot turn away from it. As depicted, his obsession with the grotesque emerges in his physical features while at work; his eyes grow wide with the horror of his research. He finds himself repulsed and intrigued at the same time. Again, Shelley highlights the “eagerness” with which Frankenstein pursues his project. While he acknowledges the unnatural aspects of his research, he nevertheless remains transfixed. Frankenstein “disturbs” what he should not disturb and finds himself mentally disturbed from his work.

Interestingly, Frankenstein completely leaves out the role of God in creation. Instead of asking God for help in the creation of his being, Frankenstein depends only on himself and on his science for the work of creation. For this reason, Jon Turney suggests that *Frankenstein* represents a transitional novel because Frankenstein does not call on God for help in his project. Instead, he relies purely on his own scientific means.[[4]](#footnote-4) Importantly, then, Frankenstein fails to channel or even recognize the traditional God’s role in creating. His genetic research seems to reject God and natural means of creation. The fact that he visits graveyards and “dabbled among the unhallowed damps of the grave” reiterates the godlessness of his project. Throughout the novel, Frankenstein remains keenly aware of his creator status and so does his creature.

In fact, from the beginning, Frankenstein feels a sense of empowerment. His science, specifically genetic science, lends him the power to create life. Interestingly, like Moreau and Hammond, Frankenstein does not predict disaster or consider the implications of his experimentation. Instead, he busies himself with the details of his experiment and revels in his life-giving power. He maintains, “When I found so astonishing a power placed within my hands, I hesitated a long time concerning the manner in which I should employ it” (31). Frankenstein emphasizes at several points in the novel the enormous power he held in being able to create a human being. Here, he narrates how he hesitates in order to plan his creature carefully. In the initial stages of the experiment, he seems quite confident in his abilities. He admits his initial doubt regarding whether or not to create a man. However, he quickly shuffles away the fear, feeling empowered by his earlier success in “discovering the cause of generation and life” (30). Early on, then, Frankenstein proves ambitious and very self-assured. However, his confidence falters entirely after the actual creation of his creature.

Indeed, even though Frankenstein is very conscious of his creative power, his “capacity of bestowing animation” (31), he nevertheless flees from that creative power after his creature awakens. Readers become frustrated with Frankenstein, because he finds his creature beautiful up until the moment when the creature stirs. Then, filled with “horror and disgust” (34), Frankenstein avoids his creature. Frankenstein seems terrified of his creature because of its grotesque ugliness. Readers wonder that Frankenstein did not find the creature ugly as he was creating it; however, it seems his dream of creating life blocked all sense of reality for awhile. Once his creature is alive, Frankenstein is plagued by nightmares and suffers intense anxiety. He actually seems to suffer from panic attacks several times in the novel. For instance, during the first night after the creature awakens, Frankenstein cannot sleep. He narrates, “I passed the night wretchedly. Sometimes my pulse beat so quickly and hardly, that I felt the palpitation of every artery; at others, I nearly sank to the ground through languor and extreme weakness” (35). Frankenstein is physically and mentally affected by his creature, even though he has not verbally interacted with it yet. He spends the rest of the novel terrified and in flight from his creature. Unlike Moreau and Hammond, who attempt to exert control over their creatures by carefully manipulating them, Frankenstein flees from his creature and essentially becomes the slave of his creature.

At the same time as he is repulsed by his creature, Frankenstein becomes repulsed by the whole genetic project itself. He realizes the extent to which his isolated and frantic manner of working prevented him from perceiving the danger his work posed to his physical and mental health, as well as to others. He describes, “I had desired it with an ardour that far exceeded moderation; but now that I had finished, the beauty of the dream vanished […]” (34). Instead of accurately perceiving reality, Frankenstein’s work keeps him trapped in a dreamlike state. Importantly, Moreau and Hammond are also dreamers in their own ways. Moreau dreams he will create a human form by combining different animals. Meanwhile, Hammond dreams that his dinosaur park will experience success in today’s world. Even though Frankenstein seems reminiscent of his scientific power at the end of the novel, he nevertheless is awakened enough to reality to stop himself from creating further. Importantly, Moreau and Hammond never awake from their dreams. They do not find their projects wrong in any sense, because they do not view themselves as powerful creators, like Frankenstein does.

In the end, Frankenstein emerges as an initially ambitious and dreamy young man who comes to fear his creative power and the fruit of that power. Unlike Moreau and Hammond, who attempt to carry out an original plan for their respective creations, Frankenstein cannot carry out his plan of creating an entire new race of man at all. His fear takes hold of him and keeps him the slave of his creature. At the end of the novel, near death, Frankenstein states, “From my infancy I was imbued with high hopes and a lofty ambition; but how am I sunk!” (147). Here, Shelley emphasizes the danger of genetic science and its life-giving power. In Frankenstein, she creates a character with the ambition and power inherent in the field of genetics, but the inability to take responsibility for his creation. Frankenstein is “sunk” because of his cowardice, his inability to hold himself accountable. Still, readers sympathize with Frankenstein, because he at least recognizes that he took on too much for himself. Ultimately, Frankenstein warns both Walton and readers to use power in a responsible way.

1. ***Frankenstein’s Superhuman***

After sufficiently collecting materials for his project, Frankenstein, armed with his knowledge of anatomy and physiology, merges the body parts of many different human corpses to create one being. Such a task is quite the genetic project, as in order to function physically and mentally, the creature must have a complete and undamaged genetic code. Of course, Frankenstein does not create DNA; instead, he uses parts he has scrounged from graveyards. Even if he does not create “the principle of life,” his experiments are trans-naturing. Essentially, he animates dead material in a novel fashion; he forces together body parts in new ways and with new connections. Even though his work is difficult and impressive, Frankenstein’s complete fixity and obsession with his project represents his downfall.

Unlike in *The Island of Doctor Moreau* and in *Jurassic Park*, in which the scientist’s ambition grows ever stronger, Frankenstein creates only one creature. However, his creature proves rather miraculous, exhibiting a natural intelligence and a knack for rhetorical thinking and speaking. In the end, the creature’s intelligence is what frightens Frankenstein. The creature is both eloquent and persuasive and thus, finds it easy to manipulate his creator and keep him in a constant state of fear. Moreau and Hammond do quite the opposite, by instilling fear of humans in the first case and by imprisoning the creatures in the second. Frankenstein learns too late that he does not actually want to create a life in this manner and for the rest of his short life, his creature haunts him.

For all of its intelligence and persuasive argument, the creature is nevertheless quite ugly. Like Moreau’s creatures, he is a circus freak, attracting attention because he is so grotesque, so out of the ordinary. After all, he is essentially a conglomerate of dead human body parts. Even though Frankenstein takes “infinite pains and care” to carefully select body parts in proportion and to find the most “beautiful” parts, his creature is certainly not beautiful. Frankenstein explains that directly after the creature awakens, he thinks to himself:

Great God! His yellow skin scarcely covered the work of muscles and arteries beneath; his hair was of a lustrous black, and flowing; his teeth of a pearly whiteness; but these luxuriances only formed a more horrid contrast with his watery eyes, that seemed almost of the same colour as the dun white sockets in which they were set, his shriveled complexion, and straight black lips. (34)

After two years of working on his creature, Frankenstein never seems to realize that his creature is so ugly. He misses the critical moment when he could have decided not to bring the creature to life; however, he is blinded by his work. Again, the gruesome, consuming nature of his work prevents him from perceiving reality. Thus, Shelley emphasizes that the geneticist’s work may seem beautiful to the geneticist even when his methods or his creation itself is grotesque. She hints at the dangerousness of such blindness. Of course, with Moreau and Hammond, the blindness of the scientist becomes amplified, as the projects become grander in nature and as the consequences grow in scale.

Physically, too, Frankenstein’s creature is quite intimidating. Frankenstein admits that he makes his creature enormous in stature on purpose, because it is far easier to connect the body parts that way: “As the minuteness of the parts formed a great hindrance to my speed, I resolved, contrary to my first intention, to make the being of gigantic stature; that is to say, about eight feet in height, and proportionably large” (31-32). Thus, Frankenstein’s employs a rational logic in creating his creature large in stature. Later, however, he will begin to regret such a decision, as he becomes frightened by his creature’s physical strength and intellectual prowess.

Even though everyone in the novel flees in horror from the creature, readers sympathize with him. When the creature first approaches Frankenstein, readers are shocked by his ease in conversation. He persuades Frankenstein to listen to his story by employing several different arguments. First, he argues by appealing to Frankenstein’s emotions with the rhetorical question, “Have I not suffered enough, that you seek to increase my misery?” (66). In this question, the creature attempts to instill a feeling of guilt in Frankenstein. After all, he seems to beg, Frankenstein gives him life and then essentially leaves him for dead. From the creature’s point-of-view, Frankenstein must feel some sympathy for him. Then, the creature threatens Frankenstein to an extent with a truthful statement: “Remember, thou hast made me more powerful than thyself; my height is superior to thine; my joints more supple” (66). In this instance, the creature reminds Frankenstein that he is actually much stronger than Frankenstein. Of course, the more subtle reminder is that the creature could easily kill Frankenstein if necessary.

Yet, in an intelligent maneuver, the creature actually states that he will not harm Frankenstein, for “I am thy creature, and I will be even mild and docile to my natural lord and king, if thou wilt also perform thy part” (66). Essentially, the creature offers to ingratiate himself in Frankenstein’s service if he does him one favor. Calling Frankenstein his “natural lord and king” is particularly intelligent, because Frankenstein is attracted to the notion of power and dominance. This third argument, then, is an intelligent bribe. Finally, the creature reminds Frankenstein of his duties to his creature: “Remember, that I am thy creature: I ought to be thy Adam; but I am rather the fallen angel, whom thou drivest from joy for no misdeed” (66). Here, the creature uses an intelligent analogy to drive in his point that Frankenstein does owe him in at least some way, since he is responsible for his existence.

After conversing for quite awhile, the creature succeeds in persuading Frankenstein to listen to his story. Through the creature’s story, readers gather that the creature is innately very intelligent. The creature describes living outside of the De Lacey Family cottage where he learns to speak English, to read, and to learn about social values. Indeed, the creature actually learns conversational English within two months and faster than the Arabian girl, Safie. He maintains that while Safie struggles to learn English, he “comprehended and could imitate almost every word that was spoken” (79). Besides learning English quickly, the creature delves into reading difficult and renowned texts in English, such as John Milton’s *Paradise Lost*. His own language is therefore quite sophisticated and moving.

In addition to his intelligence, readers have a sense of the creature’s inclination towards goodness. At the very beginning of the novel, when he first awakens, Frankenstein describes how “a grin wrinkled his cheeks” (35). Thus, the creature seems innately good from the moment of his awakening. Then, readers discover that the creature learns about social values from the De Lacey Family. He describes, “I learned, from the views of social life which it developed, to admire their [the De Lacey’s] virtues, and to deprecate the vices of mankind […] benevolence and generosity were ever before me” (85). Of course, the creature then explains his further rejection by the De Lacey Family and later injury by a frightened gunman. Such treatment embittered the creature: “The feelings of kindness and gentleness, which I had entertained but a few moments before, gave place to a hellish rage and gnashing of teeth. Inflamed by pain, I vowed eternal hatred and vengeance to all mankind […]” (96). The creature’s initial reaction to the world around him and to people is one of benevolent curiosity. However, his first rejection by his creator and subsequent rejections by others confirms him in his dislike of humanity.

Even as he condemns the rest of humanity, the creature nevertheless recognizes that his grotesque ugliness is the driving factor for his being ostracized. In fact, in his conversation with Frankenstein, he reveals that he found a journal containing Frankenstein’s detailed notes of the four months prior to the creation experiment. The creature himself finds Frankenstein’s research repulsive. He says that he “sickened as I read” and refers to the project as “disgusting” (87). Thus, even the creature has the intelligence to recognize the grotesque in himself. Later, he asks Frankenstein directly, “Why did you form a monster so hideous that even you turned from me in disgust?” (88). Again, the creature not only finds the whole genetic procedure grotesque, but he finds himself grotesque, as well. He refers to himself “a monster” and wonders that Frankenstein created a being that he would immediately abandon. Actually, Frankenstein’s creature is the only creature in the three novels to gain the chance to converse with his creator, to tell the story from his point-of-view, and to ask intelligent questions regarding his creation.

Of course, as Shelley depicts, a smart creature is a problem for the genetic scientist who has rejected his creature. Indeed, an intelligent creature can hunt well and manipulate its creator. For instance, with his power of rhetoric, the creature eventually convinces Frankenstein to create a female companion for him. Again, he employs several different arguments in order to persuade Frankenstein. He promises Frankenstein that he and his companion will disappear from the known world and live alone together in the forests of South America. He also promises that they will not be violent, but rather peaceful: “for that one creature’s sake, I would make peace with the whole kind!” (98). Thus, despite all of his sufferings at the hands of mankind, the creature is willing to leave humans alone and isolate himself with his companion. Yet, the creature’s strongest argument emerges after Frankenstein’s concern that two creatures will enact greater damage than one.

The creature finds Frankenstein’s statement preposterous and even readers become frustrated by Frankenstein’s extreme fright and stubborn misunderstanding of his creature. The creature replies that his “vices are the children of a forced solitude that I abhor; and my virtues will necessarily arise when I live in communion with an equal” (100). The creature’s words are indeed moving. He voices the fact that any misbehavior on his part is as a result of how he has been treated by other people. However, if he can live happily with a companion, his goodness will return and no one need fear him. As persuasive as the creature’s arguments may be, Frankenstein hesitates due to the creature’s physical appearance. Throughout the novel, Frankenstein ties the creature’s ugliness with his ability to enact evil. He narrates, “[…] When I saw the filthy mass that moved and talked, my heart sickened, and my feelings were altered to those of horror and hatred” (99). Others, too, experience the immediate horror and hatred that Frankenstein feels, and their cumulative feelings all bear witness to the creature’s unnatural ugliness.

Due to Frankenstein’s reticence in committing to the next genetic project, the creature follows Frankenstein closely to ensure that he abides by his promise to create a female companion for him. Even though Frankenstein has the creature’s promise that he and his female companion will not breed an entirely new race of their own, he finds himself unable to complete his second project and destroys the female right in front of his creature. Not only does Frankenstein seem cruel in this instant, but he seems very lacking in intelligence. It seems he has forgotten the creature’s promise to take revenge on Frankenstein, his “arch-enemy” (98), in the event that Frankenstein does not create a female companion for him.

Interestingly, Shelley actually fashions Frankenstein’s creature into a more intelligent being than Frankenstein himself. The creature is at least a better rhetorician and a more rational decision-maker. In the novel, he is not a vicious animal who acts purely on instinct, like the reverted creatures on Moreau’s island or the dinosaurs of Jurassic Park or even the passion-driven Frankenstein himself. By contrast, he is a deep-thinking creature, conscious of right and wrong, but sadly spurred into evil action as a result of mistreatment by his creator and by other characters in the novel.

Perhaps future genetic engineers “learned” from Frankenstein’s mistake of creating a creature more intelligent than himself. As later shown, Moreau actually rewires the brains of his creature so that they obey the Law that he enacts on the island. Of course, Hammond merely needs to physically contain his dinosaurs and ensure their entire dependence on him for food to control his creatures. Frankenstein’s creature is, of the three genetic novels, the only creature with a truly intelligent voice. After him, later geneticists ensure that they can manipulate their creatures in important ways to make them puppets in their own grand plan. Unfortunately, none of the scientists ever truly understand their creatures or their creature’s needs and abilities. All three fail to truly interact with their creatures; they either reject them outright, like Frankenstein and Moreau, or merely use them as tourist attractions for profit.

1. ***The Dreamer***

In her novel, Shelley connects genetic science with empire in notable ways. For instance, Frankenstein offers a defense for imperialistic ventures early on in his discussion with Walton. He tells Walton that he should attempt to always maintain a tranquil state of mind and if the pursuit of knowledge interferes with his ability to interact with others, then he should certainly discontinue its study. However, “if this rule were always observed; if no man allowed any pursuit whatsoever to interfere with the tranquility of his domestic affections, Greece had not been enslaved; Caesar would have spared his country; America would have been discovered more gradually; and the empires of Mexico and Peru had not been destroyed” (33). In this passage, Frankenstein defends the destruction of a colonized people and actually seems to admire the imperialistic success of the Ancient Roman Empire and the more recent success of Great Britain.

While Frankenstein may admire such colonial success, his creature, as well as the Turkish girl, Safie, both recognize the brutal nature of empire. The creature explains: “I heard of the slothful Asiatics; of the stupendous genius and mental activity of the Grecians; of the wars and wonderful virtue of the early Romans – of their subsequent degeneration – of the decline of that mighty empire […] I heard of the discovery of the American hemisphere, and wept with Safie over the hapless fate of its original inhabitants” (80). Again, Ancient Greece is proposed as the pinnacle of civilization and the “slothful Asiatics,” the Eastern “other” is discounted entirely. Of course, Safie is Turkish, and therefore understands the feeling of being the “other.” The creature and Safie subsequently cry in unison, separated by the wall of the De Lacey’s house, over the sad plight of the American Indians, another example of a racial other conquered by a ruthless empire. To add to the imperialist theme, the creature reads Plutarch’s *Lives*, which narrates the history of the ancient republics, in addition to Volney’s *Ruins of Empires*. Gayatri Spivak suggests that the creature’s education is one of an “enlightened universal secular.”[[5]](#footnote-5) Again, the shift is away from a religious understanding of creation and to a secular, scientific notion of creation and evolution. Thus, the creature never looks beyond *Frankenstein* for an explanation of his being; he never seems religiously inclined, even if he does learn about ethics from the De lacey Family.

In addition, Shelley does not merely create a scientist who admires imperial ambition, but she gives him an imperial mindset, as well. For instance, even before beginning the work of his creation, Frankenstein dreams of functioning as a ruler or an emperor himself: “A new species would bless me as its creator and source; many happy and excellent natures would owe their being to me” (32). Here, Frankenstein imagines being a “god” and in fact, historical emperors were often treated as gods themselves. Moreover, the process of colonizing a racial “other” actually involves creating or rebuilding the “other” in a sense. Indeed, the emperor, by forcing the “other” to conform to his ways and his laws, eradicates difference and destroys culture. As a composite of several human bodies, the creature represents an “other” and an “other” of mixed identities at that. In creating the creature, Frankenstein is responsible for the creature’s identity and actions to an extent.

Interestingly, Frankenstein does not even attempt to teach his creature his ways or force him to serve him. Instead, Frankenstein creates his creature only to immediately abandon it: “Unable to endure the aspect of the being I had created, I rushed out of the room” (34). Confronted by the fruit of his hard labors, by the fruit of his own kind of “empire-building,” Frankenstein’s first instinct is to run. Such a reaction proves surprising especially considering traditional methods of conquering and enslaving a racial other. An emperor would enslave the racial other and convert the “other” to his own culture; however, he would not immediately abandon that culture. Instead, he would use and enslave that “other” for his own benefit and success. Yet a careful consideration of Frankenstein’s abandonment shows that Frankenstein’s immediate abandonment is even worse. His creature never even had an original sense of culture. Frankenstein does indeed physically build the creature in the way that he wants. However, he provides the creature with no knowledge of how to live or how to function in the society into which he is forced.

Importantly, even if Frankenstein’s creation is an “other,” it is still recognizable as a human other. The creature boasts an uncommon intelligence and a brilliant command of language; it merely becomes a question of looks. Elizabeth Bohls suggests that the creature is judged entirely based on aesthetics, and in particular, on the aesthetic standard of Frankenstein’s home community. Of course, Shelley remains conscious of the notion of white superiority throughout her novel. The ranking of the races was well-known to her, and of course, Europeans claimed the top ranking for themselves. Furthermore, European communities upheld the ideas of taste and race proposed by Edmund Burke and David Hume, both of which concluded that beauty is not relative based on different cultures, but absolute. Therefore, what is beautiful to one person is beautiful to all, and vice versa. Shelley seems aware of the notions of beauty posited by Burke and Hume, as she depicts the creature’s exclusion from everyone.[[6]](#footnote-6)

In the end, the creature is left utterly devoid of human culture or a human community to call his own. Even though he is human, in the sense that he is a hybrid of several humans, and capable of speaking and conveying feelings, he is an “other” without a home or family. In a moving scene between creator and creation, the creature questions, “But where were my friends and relations? No father had watched my infant days, no mother had blessed me with smiles and caresses” (81). Here, the creature expresses a sense of utter loneliness which results from his singular creation. Notably, the creatures of *The Island of Doctor Moreau* and *Jurassic Park* do not experience such solitude. They are created alongside other creations.

Thus, the creature’s decided ugliness forces it into a solitary “otherness.” In this way, Shelley perhaps unknowingly links the results of genetic ambition with the grotesque. The grotesque by its very nature inspires a certain fascination by holding a person’s attention. Indeed, the creature is so horrible to behold that everyone must behold him. Everyone is somehow drawn to stare. In fact, when a person comes into contact with a grotesque thing, their ability to reason is halted; the grotesque surpasses the ability to reason. The horror which the perceiver feels “comes from experiencing combinations of elements that cannot occur or should not occur.”[[7]](#footnote-7) Sadly, even while the creature is in an undeniably human form, he is rejected by everyone who sees him. People cannot understand the cause of his grotesque ugliness. The only person who accepts him (briefly) is the blind father of Safie and Felix.

However, once Safie and Felix return to their home and find their father conversing with the creature, an instinctual response to the monster’s ugliness ensures. The creature describes, “Who can describe their horror and consternation on beholding me? Agatha fainted; and Safie, unable to attend to her friend, rushed out of the cottage. Felix darted forward, and with supernatural force tore me from his father, to whose knees I clung: in a transport of fury, he dashed me to the ground, and struck me violently with a stick” (91). Frankenstein’s creature is not inherently violent, yet his physical body inspires violence being show to him. Wells and Crichton both imagine increasingly violent “others” in their respective novels. Wells’ “beast folk” are partially humanized and therefore half-civilized entities who can hold their own in battle against Moreau. By *Jurassic Park*, however, the completely animal other is naturally violent and almost unbeatable.

**The Island of Doctor Moreau**

1. ***An Observer’s Perspective***

In *The Island of Doctor Moreau*, Charles Edward Prendick tells the story of his encounters with the unfeeling vivisector, Dr. Moreau, and his disfigured, eerily human-like creations. Wells sets up the story so that Prendick’s nephew discovers the account of Prendick’s adventures among the papers his uncle left behind after his death. In this way, the novel represents a shift in narration. While *Frankenstein* is told from the scientist’s perspective, Frankenstein telling his own story to Walton, *The Island of Doctor Moreau* is told from the point-of-view of a third person observer. Prendick’s history actually aligns him with Walton or even the young Frankenstein. He tells Montgomery how he turns to “natural history as a relief from the dulness of my comfortable independence” (11). Thus, he sets out for adventure with a scientific curiosity. Wells fashions Montgomery into a similar kind of character. Montgomery boasts a university-level education in biology, although at the time of his saving Prendick, he seems regretful that he abandoned his home for Moreau’s island and for the sake of horrific experiments.

Interestingly, Wells hardly even allows the actual scientist a voice until near the end of the novel, when Moreau defends his research and professes his loyalty to the advancement of science. By not giving Moreau a voice until much later on, Wells develops an air of mystery around Moreau. The reader feels as distanced from Moreau as Prendick does. Moreover, by mystifying the reader about Moreau, Wells additionally casts a sense of mystery around Moreau’s work. Later, even when Wells reveals Moreau’s position as a vivisectionist, readers never actually “see” Moreau perform his experiments in the same way that readers see all aspects of the dinosaurs’ creation in *Jurassic Park*. Rather, in Wells’ novel, readers experience the painful nature of Moreau’s experiments through Prendick’s own experience of hearing the cries of the puma. By leaving the narration to Prendick, Wells can leave the details of Moreau’s surgeries to the imagination. By leaving the vivisections to the reader’s imagination, Wells amplifies the repulsive nature of them. Indeed, hearing the pain of the puma through Prendick’s ears and viewing the end result through Prendick’s eyes proves enough to convince the reader of the grotesque nature of Moreau’s kind of genetics. Interestingly, the details of how the experiments are completed are absent in both *Frankenstein* and *Island of Doctor Moreau*, mostly because Shelley and Wells could not have known how such experiments would be carried out at the genetic level. **However, even if Wells does not provide a detailed account of the vivisection experiments, he nevertheless remained well aware of the possibilities of vivisection. Actually, in the first edition of his novel, Wells said…**

In order for readers to become engaged in his novel, Wells required a character with whom readers could relate. Shelley could easily provide a first-person narration from Frankenstein’s perspective, because readers can sympathize with Frankenstein. They recognize him as a character with flaws. He oversteps his boundaries, learns from his mistakes, and suffers the consequences of those mistakes. Readers can relate to him, even if they feel repulsed at times by his treatment of his creature. They see Frankenstein’s intense suffering and even if his creature suffers more, they can still pity the creator. Moreau, on the other hand, never experiences sympathy. He only displays an odd compulsion to perform his vivisection experiments. Upon arriving to the island, he tells Montgomery, “‘I’m itching to get to work again – with this new stuff,’” (31). In this instance, Wells reveals Moreau’s unhealthy obsession. While Frankenstein quits after one monster, Moreau cannot quit, even after a hundred or so creations. Genetics becomes the essence of his solitary life. Wells cannot make such an unfeeling character the first person narrator of his story, because readers simply cannot relate to Moreau. They can, however, relate to a man, namely Prendick, who initially exhibits a healthy curiosity regarding science and who feels morally repulsed by Moreau’s experiments. In fact, Prendick may exist as a “good scientist” foil for Moreau in the novel.[[8]](#footnote-8) Only about sixty years separate Well’s novel from Shelley’s; however, the representation of the geneticist is already far more gruesome than before.

1. ***The Sociopath***

Beyond the narration of the story, the particular features of the scientist mark him as morally reprehensible, far more monstrous than his unfortunate creatures. For unlike Victor Frankenstein, who ultimately denounces the over-stepping nature of genetic science, Moreau staunchly supports scientific inquiry to the end even if it means inflicting great suffering. Moreau never realizes or admits any wrongness in his work. Shelley therefore presents her readers with a redeemable scientist, but Wells’ scientist remains unfeeling and as a result, readers cannot sympathize with him. In Moreau’s discussion about pain with Prendick later on, readers learn that Moreau completely disregards pain, treating it as a vestigial organ, and even goes so far as to predict that pain will ultimately be naturally selected out of biological life. Even if Moreau can ignore pain, however, Prendick and readers alike wonder how Moreau can disregard the terrible screams of the animals he operates on, which bear witness to the extremely painful nature of his experiments. In the end, Moreau’s perspective on pain and his near sociopathic tendencies remove the possibility of reader sympathy for him. Later on, in *Jurassic Park*, readers confront the extremes of genetic science, as Hammond uses others to create his dinosaurs, exploits native peoples in the process, and intends to turn his science into profit. If Hammond feels, he only feels for himself, as he proves more than willing to risk his grandchildren’s lives in a test run of his island.

In both *Frankenstein* and *The Island of Doctor Moreau*, the scientists prove very much engaged in their experiments. They essentially rely on only themselves during the creation process. In post-modern science fiction, scientists rely far more on technology and the aid of several other experts to complete their genetic projects. Moreau and Frankenstein, however, work alone and with their own two hands. When Moreau rationalizes his work to Prendick, he maintains that scientific curiosity alone propels him. In fact, he expresses surprise that no one before him actually carried out similar experiments for the sake of science. He denounces those who experimented “for their own immediate ends” (Wells 72). As opposed to Hammond, who devised the genetics behind the founding of Jurassic Park, Moreau, like Frankenstein before him, experiments for the sake of furthering science and not for profit. He tells Prendick, “I was the first man to take up this question armed with antiseptic surgery, and with a really scientific knowledge of the laws of growth” (72). Thus, Moreau seems to separate experimenting for profit from experimenting for science.

Still, Moreau’s version of “antiseptic surgery” also involves surgery without anesthetics. Moreau never administers anesthetic medications to the animals he operates on, and his excuse only further establishes his truly unfeeling, sociopathic personality. Late in the novel, when Wells finally affords Moreau a voice, Moreau reveals his frightening views on pain perception and the uselessness of experiencing pain. In their conversations, Moreau first castigates Prendick for sympathizing with the animals he operates on in his experiments. He maintains that Prendick’s sympathizing with the animals and relating to them through his own sensory perception, only makes Prendick more animal-like. He argues that “this store men and women set on pleasure and pain, Prendick, is the mark of the beast upon them” (74). Here, Moreau argues that human experiences of pleasure and pain only debase them to the level of animals. He later posits that future humans, or super humans, will not rely on their sense of pain for survival. They will somehow transcend the necessity for pain. He argues that “the more intelligent they [humans] become the more intelligently they will see after their own welfare, and the less they will need the goad to keep them out of danger” (74). In this instance, Moreau argues for the growing uselessness of pain perception for sentient beings. On his island, Moreau attempts to make superhuman entities. In fact, he continues to create, because he has not yet achieved the “perfect” form. Moreau seeks perfection; his ideas on pain and his predictions for humanity suggest that he is attempting to create a human who does not rely on his senses. In other words, Moreau endeavors to beat evolution at its own game.

Indeed, Moreau feels that evolution should and will eventually remove pain perception through natural selection. On his island and through his experiments, Moreau means to hasten the process. In fact, he tells Prendick that he already believes that “it’s possible that such animals as the starfish and crayfish do not feel pain” (74). Of course, even if Moreau believes pain needless and even if he believes that “lower animals” (74) cannot feel pain, he cannot ignore the cries and howls of the animals he operates on in what his creatures deem the “House of Pain” (93). However, Moreau attributes their experience of pain as a mark of their inferiority. He calls them “fear-haunted pain-driven things, without a spark of pugnacious energy to face torment” (75). His tone seems condescending; he scoffs at their inability to confront pain without fear. Moreau’s views and his attitude portray his inability to sympathize with fellow creatures. He holds that such pain-feeling animals “are no good for man-making” and coldly pronounces, “sympathetic pain – all I know of it I remember as a thing I used to suffer from years ago” (75). Since then, Moreau has seemingly lost his ability to feel for other beings. His voracity for cruel experimentation only emerges from his strange obsession with science, and genetics, in particular. Once again, Moreau iterates his keen interest in “the extreme limit of plasticity in a living shape” (75). His scientific questions all relate to genetics; the field of genetics contains the power which Moreau requires to change, evolve, and create beings.

Overall, Moreau’s perspective on pain and his sociopathic nature very much separate him from the Victor Frankenstein at the end of Shelley’s novel. In the beginning of Shelley’s novel, Frankenstein performs vivisections on animals as part of his research and entirely neglects his family. He additionally dreams of creating a whole race of superhuman beings and envisions them worshipping him, as Moreau’s creatures worship him.In these ways, Frankenstein resembles the “Moreau” kind of a scientist. However, to his credit, while Frankenstein feels extreme remorse and guilt after creating his monster, Moreau never experiences such feelings. In fact, he never describes feeling anything. Moreover, while Frankenstein can still find solace in nature and recognize beauty in nature, Moreau loses all sense of beauty or appreciation for nature. By contrast, he tells Prendick that “the study of Nature makes a man as remorseless as Nature” (75). Moreau deems Nature unfeeling and seems to believe that the natural states of the world and living beings are likewise unfeeling.

However, even before Prendick learns much of Moreau’s private beliefs, he experiences a sharp sense of foreboding while on the ship headed for the island. At the beginning of the novel, Moreau is reticent and distant in his dealings with Prendick, sending Montgomery in his stead as his messenger. Wells increases the sense of foreboding regarding Moreau in this way; he seems cold and unknowable. In the early chapters, he is referred to namelessly as “Montgomery’s companion” (24). By not making Moreau the center of attention yet, Wells increases the reader’s curiosity, as well as Prendick’s own curiosity. Even when Moreau and Montgomery decide to let Prendick accompany them to the island, Moreau remains eerily elusive. Moreau stares at Prendick “fixedly,” and yet averts his gaze from Prendick’s own to avoid any conversation. Upon arrival to the island, Moreau inquires about Prendick’s background in biology. However, even after he discovers Prendick’s educational background in biology, he refuses to explain the nature of his “biological station” (29). Instead, he frightens Prendick by conferring with Montgomery as to the fate of their “uninvited guest” (31). Prendick’s sense of uneasiness only increases as he ponders the familiarity of the name “Moreau.” Eventually, the story of Moreau’s dark past emerges in Prendick’s mind.

Prendick actually remembers Moreau’s career as a physiologist after noticing the pointed ears of the “black-faced man” who accompanies the travelers on the ship. Unsurprisingly, even Moreau’s past research proves grotesque in nature; Prendick recalls Moreau performing “valuable work on morbid growths” (34). Not too long after, it seems Moreau’s career in England was ruined after he dabbled in vivisection. For his work in vivisection proved far more grotesque than even his earlier work. Prendick remembers how “the doctor was simply howled out of the country” when “a wretched dog, flayed and otherwise mutilated, escaped from Moreau’s house” (34). While his vivisection experiments in London proved “wantonly cruel” (34), the pinnacle of Moreau’s scientific career and coincidentally the most grotesque occurs on his island when he merges the fields of vivisection and genetics. Prendick begins to suspect that the creatures on the island are animal/human genetic hybrids after reconsidering the animal-like characteristics of the black-faced man. He wonders to himself, “What could it mean? A locked enclosure on a lonely island, a notorious vivisector, and these crippled and distorted men?” (35). While Prendick seems to sympathize with Moreau as long as his experiments do not involve humans, he appears entirely repulsed by the notion of animal/human hybrids. On Moreau’s banishment, he contends “It may be he deserved to be, but I still think the tepid support of his fellow investigators and his desertion by the great body of scientific workers, was a shameful thing” (34). As long as the experiments do not involve humans as the object of genetic experimentation, Prendick can excuse Moreau to a certain extent; he does not outwardly denounce Moreau’s former vivisection experiments. However, after considering Moreau’s genetic merging of human and animals, he feels a sense of increased revulsion, perhaps out of concern for his own safety. Later in the novel, when Prendick learns that Moreau uses only animals in his experiments, in attempts to rapidly evolve them into humans, he feels less inclined to absolutely condemn Moreau.

1. ***Moreau’s Human Travesties***

Still, as Wells depicts in his novel, Moreau’s method of experimentation is very radical. Not only does he fashion human-like creatures from animals, but he populates his own island empire with them. Moreau’s island project certainly exceeds Frankenstein’s in its sheer magnitude and scope. For not only does Moreau create over a hundred more creatures and over a much longer time period, but his projects are far more genetically involved. In interesting ways, however, Moreau and Frankenstein have similar agendas in mind. They both intend to create humans and both isolate themselves entirely in obsessive pursuit of their goals. Moreau describes his obsession with his projects: “for twenty years altogether – counting nine years in England – I have been going on, and there is still something in everything I do that defeats me, makes me dissatisfied, challenges me to further effort” (77-78). As Wells depicts, Moreau finds himself constantly discontented with the quality of his work. While he admits he can now easily achieve a human form, he explains that he confronts a problem when attempting to mold the minds of the animals. He declares, “The intelligence is often oddly low, with unaccountable blank ends, unexpected gaps” (78). Moreau fails to understand the natural, quite significant differences in brain physiology between species. He additionally cannot understand why he cannot fully transform the animal brain into a human brain as far as emotions are concerned. He ponders their “cravings, instincts, desires that harm humanity, a strange hidden reservoir to burst suddenly and inundate the whole being of the creature with anger, hate, or fear” (78). Once again, Moreau portrays his inability to understand emotions. He neither comprehends nor seems to care about the ways in which emotions can aid creatures in survival. Instead, he reveals his frightening agenda: “Each time I dip a living creature into the bath of burning pain, I say: this time I will burn out all the animal, this time I will make a rational creature of my own” (78). Here, Moreau acknowledges that his experiments are painful, but he still fails to relate to feeling pain; instead, he wonders why living beings experience pain at all.[[9]](#footnote-9) Moreau additionally substantiates the true aim of his island experiments: to create a fully rational human being devoid of feeling and emotion.

Wells imagines a terrifying scientist in the character of Moreau. Frankenstein never indulges or attempts to carry out sociopathic ideals in his work. In the beginning, he wants a new race of humans, larger in stature and stronger, perhaps, but not incapable of feeling pain. Moreover, even as grotesque as Moreau’s creations may be, they are never as grotesque as the scientist and the methods he employs to create. Even prior to surgery, Moreau does not treat the animals kindly. While still traveling to the island, Prendick observes the poor treatment of the animals, as well as the filthy nature of the ship’s environment. The deck is “littered with scraps of carrots, shreds of green stuff, and indescribable filth;” staghounds are “fastened by chains to the mainmast;” and a puma is “cramped in a little iron cage, far too small even to give it turning-room” (14). This initial poor treatment of the animals causes Prendick to wonder about their eventual fate.

However, Prendick is even more affected by the “black-faced man,” with whom Montgomery constantly interacts. Wells describes him as a “misshapen man” with “thick coarse black hair” and the appearance of a muzzle rather than a human mouth (13). Prendick seems unable to determine what exactly feels so wrong about the “black-faced man,” but he nevertheless recognizes the creature’s “grotesque ugliness” (14). Even though the creature is ugly, Prendick finds himself drawn to it in some strange way. For instance, he refers to the creature’s simultaneously “repulsive and extraordinary face” (14). In this instance, Prendick is not merely drawn to the creature because of its ugliness, but because of its extraordinary characteristics. Before he comments on the creature’s face, Prendick mentions the creature’s incredible “animal swiftness” (13). The creature’s combined animal and human features amaze Prendick. However, Prendick’s amazement seems to stem from an internal sense of repulsion and horror. Just as Frankenstein begins to refer to his creature as a “monster” and as a “demon,” Prendick calls the black-faced man “diabolical” (37). Interestingly, Shelley and Wells both link genetic experiments and the fruits of genetics with the infernal and the grotesque. The experience of the grotesque even physically manifests itself for Prendick, who notices “a nasty little sensation, a tightening of my muscles, when he [the black-faced man] comes near me” (37). The reference to the black-faced man appearing diabolical suggests that Moreau’s entire genetic project is diabolical in nature.

For indeed, while Moreau’s intentions may be noble as far as science goes, his means are particularly cruel and his underlying power hungry nature somewhat undermines his aim of furthering the scientific frontier. For instance, Moreau’s surgeries on the puma prove unbearably cruel. When Moreau operates on the puma, Prendick cannot help but be emotionally affected by the animal’s screams. He describes how the cries “were painful at first, but their constant resurgence at last altogether upset my balance” (38). Finally, Prendick can no longer stand being around the pain: “It was as if all the pain in the world found a voice” (38). Wells does not delve into the details of the vivisection, because he can effectively instill a deep sense of horror in the reader by forcing the reader into Prendick’s shoes to vicariously hear the cries of the puma. Of course, while Prendick cannot remain in the presence of such fierce pain, Moreau remains unphased by it. In this way, Moreau is like Frankenstein in his ability to continue with his project even while it is so grotesque. The experiments of both scientists are connected to pain and death. Frankenstein collects dead human tissues to complete his project, while Moreau actually causes the death of many creatures in his “House of Pain.”[[10]](#footnote-10)

Even after causing so many animals pain, Moreau keeps at his work. Perhaps the more vivisections he performs, the more inured he becomes to the brutal nature of his science. Towards the end of the novel, Prendick interacts with some of Moreau’s Beast People. He refers to them as “grotesque caricatures of humanity” (60). Like men, they are capable of some level of speech, although Prendick refers to it as “chattering” (56). In addition, the creatures live in homes together, even if the homes are more like primitive dens. As far as physical characteristics, the Beast People seem to generally look human. Still, many features strike Moreau as particularly strange. Several times in the novel, Prendick remarks on the disproportion between the legs of the creatures and the length of their bodies. He later adds that their spines appear inhuman in curvature, their shoulders hunch more, and their forearms are especially short. Regarding the more human-defining characteristics, such as faces, voices, and hands, Prendick states:

The next most obvious deformity was in their faces, almost all of which were prognathous, malformed about the ears, with large and protuberant noses, very furry or very bristly hair, and often strangely coloured or strangely placed eyes. None could smile, though the Ape Man had a mirthless grin. Beyond these general characters their heads had little in common; each preserved the quality of its particular species: the human mark distorted but did not hide the leopard, the ox, or the sow, or other animals or animals from which the creature had been moulded. The voices too, varied exceedingly. The hands were always malformed; and although some surprised me by their unexpected humanity, almost all were deficient in the number of digits, clumsy about the fingernails, and lacking any tactile sensibility” (82).

Interestingly, Prendick emphasizes how the creatures retain their individuality, even though Moreau attempts to “humanize” them. In fact, in this passage, readers view the creatures from Prendick’s perspective rather than from the scientist’s perspective. Moreau notices all the imperfections of his creatures; he describes how “the beast begins to creep back, begins to assert itself again” (78) not long after his operating on them. Prendick, however, views the situation from the opposite perspective; he observes how the “human mark distorted” the individual animal faces.

If the creatures do appear grotesque, Wells stresses that the scientist has made them so with his grotesque science. Actually, many of Moreau’s experiments seem to go awry. For example, Moreau tells Prendick about a “Footless Thing” (81) that killed one of the Kanaka men he brought with him to the island, as well as several of the other creatures. Moreau tries to excuse himself, saying, “It only got loose by accident – I never meant it to get away. It wasn’t finished. It was purely an experiment. It was a limbless thing with a horrible face that writhed along the ground in a serpentine fashion” (77). In this instance, Moreau seems to describe the result of vivisecting a snake. Alternatively, Moreau might have removed the legs of an animal, intending to replace them with different legs. Either way, the limbless creature seems to lash out because of its “infuriating pain” (77). With his diction, Wells suggests that the pain of the vivisection drives the creature to violent acts and to its unfortunate violent death.

The limbless creature, however, is not the only creature that Moreau or Montgomery kill. In the very beginning of his genetic experiments, Moreau accidentally kills a sheep “by a slip of the scalpel” (75). The next sheep Moreau operates on is “a thing of pain and fear” and Moreau cannot stand the fact that the animal is terrified of him. He maintains, “The more I looked at it the clumsier it seemed, until at last I put the monster out of its misery” (75). Moreau, like Frankenstein, refers to his creature as a “monster,” but his repulsion is inspired by the creature’s overwhelming fear of him. Moreau cannot respect such a pain-driven creature. Besides these skewed experiments, Moreau also fails at another critical point. While Montgomery tells Prendick that the creatures can reproduce, the offspring rarely live. Moreover, the human traits of the parent generation do not pass along to the next generation. If the offspring survive, Moreau operates on them to make them more human, but the offspring remain proof that Moreau has not adequately changed their DNA into a transmittable form. The fact that the creatures can hardly reproduce underscores the unnaturalness, the grotesque and perverted nature of Moreau’s genetic experiments.

Prendick’s response to the creatures is the same as the reader’s response. Both attempt to make sense of the Beast People. In the beginning of the novel, readers, like Prendick, believe that Moreau is vivisecting both humans and animals. The confusion about the origin of the creatures highlights the inability of the mind to make sense of Moreau’s grotesque creatures. Csicery-Ronay maintains that the scientific grotesque can emerge from the inability of humans to rationalize or explain an anomalous being or event. He goes on to describe how the romantics and the moderns considered deviations from the norm utterly monstrous. Moreover, while some grotesque objects eventually lessen in their grotesque nature or even become sublime upon further observation and subsequent understanding of the object, the “residual grotesque remains a horror.”[[11]](#footnote-11) In other words, because Prendick and readers alike cannot quite understand how Moreau created human-like creatures using vivisection techniques, his human travesties remain grotesque.

Indeed, Moreau’s creatures prove far more grotesque than Frankenstein’s monster. They are not quite human and not quite animal; rather, they are some creature in between. While Moreau aims to build a superhuman, he cannot even seem to create a human. Frustrated by his lack of success, he forces them into “otherness,” by essentially disowning them and subsequently enforcing his island Law. Significantly, while Frankenstein is a human “other,” Moreau’s is an animal “other” which only resembles humanity. In *Jurassic* Park, of course, the creatures are completely animalistic. The trajectory from human to almost human to animal reflects the genetic engineer’s increasing desire to manipulate his creations. Frankenstein’s creature turns out highly intellectual and therefore, often frightens Frankenstein more than Frankenstein frightens him. The creature’s added height and superior strength additionally make him harder to control. However, Moreau’s creatures prove easier to manipulate, at least for awhile, because Moreau expresses his power through causing pain and instilling fear in his creatures. Even if they emerged as fully rational beings unable to experience pain, as Moreau intends, he would still wire their brains so that he could emerge their ruler. Of course, Hammond chooses dinosaurs, because he feels he can fully maintain dominion over them by caging them, imprisoning them with electric fences, and making them dependent on his scientists for their dietary supplement of lysine. All three scientists, then, initially underestimate the intelligence of their creatures, intending to rule over them without any major problems.

1. ***The Island Ruler***

The overall lack of success in creating a permanently human form causes Moreau to ruthlessly reject all of his creatures. He views them as dispensable beings, practice dummies for his forthcoming superhuman entity. Prendick informs the reader that Moreau has made over a hundred and twenty creatures, but many of them die, as in *Jurassic Park*. By the time of Prendick’s arrival, Moreau’s island population includes about sixty humanized animals and many other creatures of nonhuman form. On his island, Moreau finds it initially easy to rule by instilling fear in his creatures. In fact, Moreau constructs the island dynamics as sort of a kingdom and casts himself as sole monarch. Therefore, like Hammond in *Jurassic Park*, Moreau maintains an island empire of his own. However, unlike Hammond, Moreau’s empire is meant purely for scientific experimentation and not for profit. Even if his empire is devoted to science, however, Moreau still treats his creatures as he would a colonized people and raises himself up as a cruel and abusive emperor.

For example, he forces the creatures to conform to “the Law” (58). The Law reinforces the fact that Moreau is the quintessential creator figure who can inflict great pain on a whim. It additionally lays out the guidelines for the creatures’ civilized living on the island. The creatures do not actually reside in human houses. Rather, they construct den-like habitations, which Moreau refers to as “a kind of travesty of humanity” (78). While staying in such dens with the creatures, Prendick finds himself forced to recite the Law along with the other creatures. Part of it commands “Not to chase other men, that is the Law. *Are we not men?* Not to eat Flesh or Fish; that is the Law. *Are we not men?*” (61). In establishing such rules, Moreau attempts to prevent the animals from eating meat; he worries about the creatures returning to their violent, carnivorous ways and turning against him. Unlike Hammond in *Jurassic Park*, Moreau does not take measures to defend himself or keep the creatures physically imprisoned. Rather, he mentally imprisons them by terrorizing them. Indeed, the creatures dread the “House of Pain” and chant repeatedly, “none escape,” fully aware that “punishment is sharp and sure” (61). Thus, even without physically restraining the creatures in cages or fences, as Hammond does in *Jurassic Park*, Moreau is able to maintain order for some period of time with his Law.

Montgomery confirms the invisible imprisonment of the creatures. Prendick tells the reader that “He [Montgomery] explained to me that the comparative safety of Moreau and himself was due to the limited mental scope of these monsters” (80). Ironically, even though Moreau attempts to create fully rational and intelligent humans, he is able to rule over them because of their subpar intelligence. The Beast People are not quite human, but they are at least “hopeful monsters,” in the words of Csicsery-Ronay. He argues that they represent “alternative populations, civilizations, and competitors for the human niche”[[12]](#footnote-12) and therefore, quite accurately represent racial others held under the power of a white ruler.

In fact, Moreau even pretends to be God as long as he is on his island. During the chanting of the Law, the creatures recite, “*His* is the lightning-flash […] *His* is the deep salt sea […] *His* are the stars in the sky” (59). After hearing the creatures recite such telling statements, Prendick comes to the conclusion that Moreau instills in the creatures “a kind of deification of himself” (59).[[13]](#footnote-13) Towards the end of the novel, Prendick learns that Moreau is completely manipulative in his handling of his creatures:

[…] they had certain Fixed Ideas implanted by Moreau in their minds which absolutely bounded their imaginations. They were really hypnotized, had been told certain things were impossible, and certain things were not to be done, and these prohibitions were woven into the texture of their minds beyond any possibility of disobedience or dispute. (80-81)

Here, Wells suggests that Moreau wires the animals’ brains so that they cannot disobey him or imagine a different life. Of course, in the end, the animals’ brains revert to their original formation; nevertheless, Moreau attempts to carefully manipulate their thoughts by hypnotizing them with his Law and possibly even physically rewiring their brains to limit their understanding. Wells employs the word “implanted” which conjures the image of Moreau surgically inserting the “Fixed Ideas” in the minds of his creatures. The imagery Wells employs is grotesque, and Moreau’s method of ruling proves just as grotesque as his genetic experiments. Interestingly, by the end of the novel, even Montgomery views Moreau as a god figure. Prendick describes how “he had been strangely under the influence of Moreau’s personality. I do not think it ever occurred to him that Moreau could die” (106). Just as Prendick has difficulty perceiving reality at the very end of the novel upon his return to England, Montgomery also loses hold of the reality of Moreau’s mortal nature.

Prendick stumbles across further proof that Moreau messes with the minds of his creatures. Moreau tells Prendick that after unsuccessfully attempting to create humans from sheep, he successfully created a human from a gorilla. Moreau says, “All the week, night and day, I moulded him. With him it was chiefly the brain that needed moulding; much had to be added, much changed. I thought him a fair specimen of the negroid type when I had done with him […] He began with a clean sheet, mentally; had no memories left in his mind of what he had been” (76). Moreau acknowledges that he added and changed much of the animal’s brain and additionally removed all pre-surgery memories from the gorilla. In this way, Moreau exerts direct mind control over the creature. Genetics lends Moreau the power to manipulate how creatures think, act, and look. Furthermore, as the passage suggests, Moreau does not merely dominate over his creatures by instilling fear in them, but by rewiring their brains and hypnotizing them with the Law.

Keeping his creatures in the dark proves essential to maintaining harmony on the island. For example, Moreau and Montgomery conscientiously try to prevent the creatures from tasting blood. They fear that the taste of blood will remind them of their animal pasts. Essentially, Moreau has fears of the empire striking back at its ruler. Montgomery becomes nearly frantic when he discovers that one of the creatures killed a rabbit. He wonders what it means if a creature has tasted blood, for “they are supposed to have a fixed idea against eating anything that runs on land” (88). Montgomery realizes that the animals are reverting and fears for a revolution. When Moreau finds out, he interrogates the creatures and seems to suspect the Leopard-Man from the start. The creatures become frantic and barbaric after the Leopard-Man attacks Moreau out of fear; a huge hunt begins and Prendick begins to sympathize with the Leopard-Man. When he sees its “imperfectly human face distorted with terror” and “realized once again the fact of its humanity,” he shoots the creature in the head before Moreau can capture and take the creature back to the “House of Pain” for torturing.

The hunt for the Leopard-Man reinforces the cruelty of Moreau’s experiments for Prendick and the reader. Prendick realizes that the suffering of the creatures does not end after their vivisections. Indeed, the creatures are Moreau’s prisoners. Prendick narrates:

Before they had been beasts, their instincts fitly adapted to their surroundings, and happy as living things may be. Now they stumbled in the shackles of humanity, lived in a fear that never died, fretted by a law they could not understand; their mock-human existence began in an agony, was one long internal struggle, and on long dread of Moreau – and for what? (95)

Here, Prendick owns that in their natural states, the animals were fully adapted to their environments. Now, however, as chimeras of different animals’ body parts, they are off-balance and clumsy, ill suited for life on an island which is not even their natural habitat. Essentially, Moreau removes the animals from their natural habitats and makes them into travesties of humanity on an unfamiliar island. In a similar manner, Hammond anachronistically resurrects dinosaurs and breeds them so that they cannot survive beyond the island, due to their lysine dependency. While Moreau does not purposefully inhibit the animals’ survival, he indirectly causes them to be ill suited for existence.

In addition, Moreau rules on his island through a kind of white power. Throughout the novel, Moreau is described as “white-haired” (26) and is placed in stark contrast to “the black-faced creature” (14). The Beast People are additionally very subservient to the white men on the island; in fact, when they see men, they fall to the ground and throw white dust onto their faces. Moreau’s island can therefore be taken as an example of white dominion. However, if so, then Wells clearly predicts the failure of empire, since Moreau’s island crumbles and Prendick is forced to fend for himself in a state of utter frenzy. In fact, at the end of the novel, Prendick feels that “the degradation of the Islanders will be played over again on a larger scale” (130). Thus, Prendick even uses Moreau’s island as an analogy for the larger dominion of Great Britain over other peoples. Throughout the novel, Wells employs the language of empire to reinforce his theme. The ship which Prendick travels on is called the *Lady Vain* and Moreau’s island is called Noble’s Isle. Even Prendick, who suffers so much on the island, becomes caught up in the notion of empire and laments towards the end of the novel that he cannot take the “vacant sceptre” (117) of Moreau and rule over the Beast People.[[14]](#footnote-14)

Actually, though, Prendick’s imperialist notions may induce no surprise considering his native country and its goals. Paul Cantor argues that what Prendick really objects to is the notion of turning humans into animals. In other words, when he believes that Moreau is operating on humans and making them more animal-like, he feels morally repulsed. Later, once he finds out Moreau is humanizing animals, he feels much better. Cantor maintains that Prendick objects to converting humans into animals, because such an action is very anti-Imperialistic. From the British Imperialist mindset, turning animals into humans is a way of civilizing the natives; the opposite would not make sense. The fact that the Beast People eventually revert bears witness to Great Britain’s fears that the British would be unable to civilize what they deemed to be more primitive people.[[15]](#footnote-15)

Yet, what Moreau and Prendick fail to realize is that Imperialism does turn humans into animals; Moreau loses his ability to feel, performs cruel experiments on animals, and becomes less human as a result. Moreover, by the end of the novel, Prendick reverts to animal-like behaviors while defending himself from the Beast People. In fact, he begins to see the Beast People as more human, and ultimately, he is unable to recognize actual humans as humans when he returns home to England. Thus, Cantor acknowledges two competing forms of imperialism in operation in *The Island of Doctor Moreau*: one, as a form of enslavement of a racial other, as when Moreau brings animals to the island in slave ships, and the other as an attempt to end slavery and raise humans from a fallen position, as when Moreau tries to humanize the animals.[[16]](#footnote-16)

If Moreau’s vivisections represent the civilizing of a racial other, the process of civilization certainly emerges as a painful process in Wells’ novel. In fact, not only is the process of vivisection (and by analogy, civilizing) a horrific, grotesque process, but it ultimately fails, or at least, Wells predicts its failure. For in Wells’ time, “Darwinism becomes a theory of Victorianism; […] empire is evolution,” in Cantor’s words. As in Shelley’s time, the English believed that all races evolved to become white Englishmen. To the British, then, empire became the process by which they could civilize other races, and as Cantor holds, “Science is the engine of empire.”[[17]](#footnote-17) In his novel, Wells predicts the failure of empire and ultimately predicts the failure of the kind of science which strives to function for the goals of empire.

Overall, genetics equates to empowerment for Moreau. He can physically and mentally manipulate living beings and exert control over them through his science. In the end, his grotesque creatures, his “monsters manufactured” (71), revert to their original, natural states and strike back at their ruthless ruler. Interestingly, Wells’ diction, his linking the word “manufactured” with “monsters” eerily predicts Michael Crichton’s *Jurassic Park*, which revolves around truly terrifying monsters, and genetics as profiteering. The dinosaurs of the park are manufactured in a factory-like setting and Hammond owns them as he would any other merchandise. Monstrosity takes a new turn once again in *Jurassic Park*, as the field of genetics merges with big business.

**Jurassic Park**

1. ***Multiple Perspectives***

In contrast to both *Frankenstein* and *The Island of Doctor Moreau*, Michael Crichton experiments with an entirely different narrative style. He writes from the perspectives of many different characters and while he does introduce the character of the main scientist somewhat early in the novel, the scientist proves almost unrecognizable. No longer interested in genetic science or furthering the scientific frontier, John Hammond emerges as an entertainer and a profiteer. The genetic engineer no longer endeavors to create a superhuman or to further science for the sake of science. Rather, through Hammond’s character, Crichton portrays the future of genetic science as devoted completely to money and entertainment. In an interesting way, Crichton’s narrative style helps relay the notion that genetic science and experimentation no longer involves one scientist, as in *Frankenstein*, or one scientist and his assistant, as in *The Island of Doctor Moreau*. Instead, genetic engineering, especially on Hammond’s scale, requires the work of many different specialized experts. For his genetic project, Hammond requires dinosaur experts, genetic engineers, computer experts, mechanical engineers, civil engineers, doctors, lawyers, etc. By failing to give Hammond the narrative voice of the novel, Crichton underscores the many-sided nature of modern genetics.

Not only does Crichton prevent Hammond from securing the main narrative voice of the novel, but he creates a rival genetic engineer, Lewis Dodgson, who enters the narration multiple times as he attempts to steal the secrets of engineering the dinosaurs. In this way, Crichton presents a thorough look at the state of modern genetics. Actually, just like Wells did not allow Moreau to act as a first person narrator, Crichton chooses not to allow Hammond to act as a first person narrator, probably for many reasons. Firstly, Hammond, as later shown, is a dreamer who cannot perceive reality accurately. Readers would not be able to trust Hammond as a narrator for long. Moreover, like Moreau, Hammond is not a very likeable character; readers would easily tire of his selfish attitude, his rigorous pursuance of money and personal gain.

Significantly, with his narration style, Crichton is able to reveal all the details of the island experiment quite thoroughly and in a smooth, believable manner. However, Crichton does not merely reveal all because he can; he reveals all to remain in line with Hammond’s showman personality. Thus, at the same time as the island’s visitors learn how Hammond and his scientists gather the DNA and create the dinosaurs of Jurassic Park, readers learn all of the minute details, as well. Indeed, by a grand tour, Hammond does not merely refer to a tour of the island, but a tour of the genetic component of his project. Hammond calls the research facility the “visitor center” (Crichton 94). Making the research facility doubly function as a visitor center proves that Hammond is first and foremost a showman interested in impressing the public with his genetic procedures.

1. ***The Entertainer***

In Hammond, Crichton depicts a modern genetic scientist unlike either Frankenstein and Moreau in personality, but very much like the two previous scientists in their creation experiments and imperialistic ideals. In fact, Jon Turney argues that Frankenstein and Hammond’s projects are essentially the same, except that Hammond’s experiments occur on a larger scale. Both, however, are interested in the reanimation of the dead. Moreover, just as Frankenstein reanimates the dead in order to test his ability to give life again: “Reanimating dinosaurs became another of those ideas which was offered as a symbolic test of the prowess of experimental biology.”[[18]](#footnote-18) Thus, over 150 years after Shelley’s novel about experimenting with resurrecting the dead comes another story about resurrecting another kind of dead and a far more ancient one: dinosaurs.

Before readers associate Hammond with science, they perceive him as a showman and a swindler. Crichton describes him as “flamboyant, a born showman” (59). Then, Crichton fills in Hammond’s background information. He explains how “in 1983 he had had an elephant that he carried around with him in a little cage” (59). The elephant, readers learn, is meant to represent what Hammond maintains will develop into the field of “consumer biologicals” (59). Like the true showman Crichton pegs him as, “at the drastic moment, Hammond would whip away the blanket to reveal the elephant. And he would ask for money” (59). Here, Crichton does not merely emphasize Hammond’s showman characteristics, but he depicts Hammond’s interest in money.

Only after establishing these aspects of Hammond’s personality does Crichton mention that Hammond plans to start a genetics company. Of course, Hammond tricks the people attending his fund-raising meetings to a large extent. He tells the crowd about the elephant but “left a great deal unsaid” (59). In fact, he only shows the elephant off in order to impress the crowd about Norman Atherton, a genetic engineer from Stanford and Hammond’s partner in the creation of Jurassic Park. Hammond wants the park to be a huge success and so he attempts to create excitement about “the untold wonders to come from the laboratory of Norman Atherton” (59). Unsurprisingly, then, Hammond fails to relay to the crowd that the creation of the elephant required no genetics whatsoever. In reality, Atherton only hormonally modifies an already dwarfed elephant. So far, then, Hammond has actually not proved that he has found capable genetic engineers for his forthcoming business.

Hammond additionally conceals the facts that Atherton’s tiny elephant behaves more like a rodent than like a miniature elephant, that it contracts illnesses easily, that Atherton has been unable to create another tiny elephant, and that Atherton is dying of terminal cancer. In regards to money, Hammond tells his prospective investors that he predicts annual revenues of seven billion dollars by 1993. Despite his lack of sound evidence, Hammond’s potential investors are adequately hoodwinked and with his lawyer’s help, Hammond gains the confidence of his investors and their money: “Hammond and his ‘Pachyderm Portfolio’ raised $870 million in venture capital to finance his proposed corporation, International Genetic Technologies, Inc” (60). Here, Crichton frighteningly depicts the convergence of theatrics, big money, and genetics in Hammond and his capitalist venture. Early on, however, other characters in the novel predict problems with Hammond’s company, because he is so secretive and because he offers no return on capital for at least five years. Ultimately, Hammond must rely on Japanese investors, because “the Japanese were the only investors who had the patience” (60). From the beginning of the novel, Crichton’s tone predicts catastrophe.

Actually, while other characters, such as the mathematician, Ian Malcolm, can predict the impending disaster of the island, Hammond alone remains in complete denial even until his death. While Frankenstein recognizes that he has overstepped his boundaries, Hammond does not even remotely perceive a dangerous situation. Till the end, he believes he can control the dinosaurs and prevent the utter ruin of his island. Interestingly, Hammond does not even view himself as a Frankenstein-like creator. He never views himself as a God-like figure; he views himself as an entertainer and an entrepreneur. Even Moreau realizes the grandiose nature of his science; however, he indulges himself despite his overreaching science, because of his genuine interest in the science. By contrast, Hammond only cares about the science to the extent that it attracts a large audience:

The concept of the most advanced amusement park in the world, combining the latest electronic and biological technologies. I’m not talking about rides. Everybody has rides. Coney Island has rides. And these days everybody has animatronic environments. The haunted house, the pirate den, the wild west, the earthquake – everyone has those things. So we set out to make biological attractions. *Living* attractions. Attractions so astonishing they would capture the imagination of the entire world. (61-62)

In this passage, Crichton exposes Hammond’s true aims behind the building of Jurassic Park. Essentially, if Hammond wanted a park, he needed a park unlike any other. He ends up with a park that functions more like a zoo for dinosaurs. His rides are really just tour trucks which take the viewer to different parts of the island and which have automated systems with information describing the different kinds of dinosaurs. Of course, while Hammond maintains that the island is meant to “capture the imagination of the entire world,” he later holds that “the ultimate object of the project in Costa Rica – to make money […] Lots and lots of money” (62). Again, the ultimate aim of the park is to stun the world with the extraordinary nature of the genetic project and to collect money from those stunned visitors.

Hammond’s denial of his scientist status, however, does not excuse his irrational mindset and behavior. In the end, Hammond’s superficial nature cannot conceal his truly uncaring personality. Throughout the novel, he is dishonest, profit-minded, and callous acting towards his park visitors, two of which are his own grandchildren. Hammond does not care about individuals; he cares about the masses, the masses of money-laden people which he imagines will visit his park. At the beginning of his park construction, he treats indifferently the deaths of three workers. He additionally fails to feel concern for the natives of Costa Rica who are bitten by the dinosaurs who have already escaped from the island. In fact, he denies at all the possibility of a percentage of his dinosaurs having escaped. If Hammond’s personality is indifferent, his artificial means of creation has an even greater sense of cold indifference.

Indeed, Crichton’s version of the medical grotesque emerges in the tour of Hammond’s visitor center. Crichton’s emphasizes the manner in which total reliance on technology is grotesque to both the tourists and to the readers. Even Hammond’s young grandson, Tim, recognizes grotesque aspects of the creation process. Tim passes a sign labeled “Caution / Teratogenic substances / Pregnant women avoid exposure / to this area” (97). Of course, Tim, who exhibits a natural curiosity towards dinosaurs and science in general, thinks to himself, “Teratogenic substances! Things that make monsters!” (97). When Tim refers to “monsters,” he imagines the mutants which can result from exposure to these dangerous chemical substances during development. Nevertheless, Crichton hints at Hammond’s literal creation of “monsters” in the form of dinosaurs.

The tour continues into the “extractions” room in the center. Dr. Alan Grant, Dr. Ian Malcolm, Dr. Ellie Sattler, and the others meet the chief genetic engineer of the project, Dr. Henry Wu. While Wu certainly proves both capable and knowledgeable in the field of genetics, he himself emphasizes the almost complete human dependence on technology throughout the creative process. Human hands are rendered almost entirely obsolete in the process. Even important decisions regarding the completion of the fragmented dinosaur genome are left to computers. The speed and accuracy at which the supercomputers operate completely surpasses human capacity. Since the dinosaur DNA, preserved in and recovered from amber, represents fragments of a once complete genome, “the first thing we have to do is repair it – or rather, the computer has to” (101). Later, Wu continues that in determining repair enzymes, “we let the computers decide which to use” (101). Even in these early stages of the creation process, humans seem far removed from the actual genetics. Unlike in *Frankenstein* and *The Island of Dr. Moreau* where the scientist engages himself entirely in the grotesque vivisection experiments and creation of his beings, in *Jurassic Park*, readers observe the emergence of the technological grotesque, the total human dependency on computers for the completion of this genetic project. All three texts portray genetic experimentation as a grotesque process, but the process evolves from a hands-on grotesque to a removed, technological grotesque.

Meanwhile, in the “fertilization” room, the tourists learn that the laboratory uses extremely potent and noxious chemicals to interrupt the process of cellular mitosis at a particular instant. “‘Helotoxins, colchicinoids, beta-alkaloids,’” he [Wu] said, pointing to a series of syringes left out under the UV light. “‘Kill any living animal within a second or two’” (105). Using poisons to halt an otherwise natural process sheds a dark light on the project thus far. The hatchery, however, stands as the penultimate example of the medical grotesque in *Jurassic Park*. While the process of hatching is supposed to involve extreme care and nurturing on behalf of parents, Crichton portrays a deeply unnatural and unsettling method of hatching the dinosaurs. Indeed, the room is “bathed in deep infrared light” (106). Unnatural light supplants natural sunlight. In addition, the Jurassic atmosphere is mimicked with careful climate controls to induce a high temperature, high humidity, and high oxygen content in the room. The actual eggs “lay on long tables, their pale outlines obscured by the hissing low mist that covered the tables” (106). Even Crichton’s usage in this instance of the word “hissing” creates a dark atmosphere. Wu goes on to describe the rather distant method of hatching the dinosaurs in detail:

Dr. Wu explained that each table contained 150 eggs, and represented a new batch of DNA extractions. The batches were identified by numbers at each table: STEG-458/2 or TRIC-390/4. Waist-deep in the mist, the workers in the nursery moved from one egg to the next, plunging their hands into the mist, turning the eggs every hour, and checking the temperatures with thermal sensors. The room was monitored by overhead TV cameras and motion sensors. An overhead thermal sensor moved from one egg to the next, touching each with a flexible wand, beeping, then going on. (106)

Each dinosaur is labeled with a number and handled by human hands just once an hour. However, human hands are not the only ones directly involved in the process of handling the eggs. The technological “hands” or sensors additionally handle the eggs to determine their temperature. Indeed, the technology’s role is in fact more important than the human’s role, because the technology can measure and detect discrepancies or dangers in the temperature of the eggs. This substitution of the machine for the human in genetic creation is Crichton’s version of the medical grotesque.

1. ***Hammond’s Circus Animals***

Unlike in *Frankenstein* and *The Island of Doctor Moreau*, Hammond’s dinosaurs are not grotesque in and of themselves. In *Frankenstein*, the monster is a monster, because he cannot truly be considered human. Much larger in stature and more frightening in appearance, the monster is a grotesque hybrid of dead human tissues. Without a doubt, too, Moreau’s human travesties are grotesque and unnatural in appearance; Prendick remarks on their unnaturalness from the beginning of the novel onwards. However, in *Jurassic Park*, the dinosaurs are natural animals. The grotesque in *Jurassic Park* does not rely on the fact that some of the dinosaurs are vicious and ugly-looking dinosaurs; it relies on the fact that they are caged like zoo animals and essentially display items. Moreover, the fact that Hammond resurrects the dinosaurs and places them in an unfamiliar time and world proves grotesque. Even though the creation of the dinosaurs themselves is rationally explicable, Hammond breaks physical laws of nature in reanimating the dead. While Csicsery-Ronay owns that a rationally explicable event is not grotesque, he acknowledges that many scientists find the notion of breaking the laws of nature to be grotesque: “Time-travel is considered by most physicists to be a grotesque violation of common-sense […].”[[19]](#footnote-19) Thus, while the dinosaurs themselves are not grotesque, their anachronistic reanimation, their own kind of “time travel” qualifies as grotesque.

Early, when Grant and Sattler try to figure out just what it is Hammond has built, they imagine it appears like a resort. Studying a topographical map of the island, they discover an entire visitor area with buildings designated as “Visitor Arrivals,” “Visitor Center / Administration,” “Power / Desalinization / Support,” “Hammond Res.,” and “Safari Lodge” (53). Already, the terms which Hammond has used in his map of the island suggests that it is some kind of resort. Grant also finds “the outline of a swimming pool, the rectangles of tennis courts, and the round squiggles that represented planting and shrubbery” (53). Hammond obviously plans for his island to be somewhat of an island paradise. While many characters perceive that dinosaurs and an island paradise will not mix well, Hammond does not seem concerned. He feels that dinosaurs will be an added attraction for his resort. However, his notion of a resort full of dinosaurs is actually grotesque. Moreau had an island, as well, however, he never plans on bringing the public to his island in order to show off his work. Rather, his ultimate plan is to advance the field of science using genetics as his means. Essentially, he wants to show that hyper-evolution of an animal into a human form is possible. However, as illustrated, Moreau’s “showing” for science’s sake and Hammond’s “showing” for profit’s sake diverge significantly.

Later, Grant and Sattler decide that the “electrified fences and moats” (54) make the island seem more like a zoo. However, they remain confused, because mixing a zoo that contains potentially dangerous animals with a resort for people to stay at while vacationing does not seem like an intelligent idea. Besides keeping the dinosaurs “for show,” as circus animals, Hammond’s strict control of every aspect of the dinosaurs’ lives adds to the notion of the technological grotesque. Indeed, the scientists carefully manipulate the gender of the dinosaurs to ensure that reproduction is impossible. Thus, all the dinosaurs on the island are females. Manipulating the gender to prevent reproduction is very reminiscent of Victor Frankenstein, when he kills the female monster to prevent further reproduction. However, Frankenstein removes the possibility of reproduction, because he feels that his creative endeavor was far too ambitious. Hammond removes the possibility of reproduction for the dinosaurs, because he needs them to remain on his island as tourist attractions. If they escape and rival scientists capture, them, his monopoly is at stake. Thus, he must rigorously control them.

The sense that the dinosaurs have been thrust anachronistically into a world very unlike the original earth they lived on is heightened by Crichton’s description of the infant dinosaurs’ response to the doctors. Ed Regis, a publicist for InGen, explains to Grant, “these animals are delicate in infancy. We have lost several from a postnatal stress syndrome, which we believe is adrenocortically mediated. Sometimes they die within five minutes” (110). To readers, it is no shock that these animals do not respond well to human touch, since they have been deprived of a true mother-infant relationship. The animals’ response is again reminiscent of Frankenstein’s creature, who only wants a father figure and some nurturing. Thus, while the dinosaurs themselves are not unnatural, their upbringing is indeed unnatural and grotesque. Gayatri Spivak suggests that Frankenstein’s monster, his “bodied ‘corpse,’” is unnatural because of his lack of a true childhood.[[20]](#footnote-20) The same can be said of Hammond’s dinosaurs.

Besides manipulation of dinosaur reproduction, the engineers additionally attempt to control their diet and life span to an extent. Wu attempts to explain away any misgivings concerning dinosaur survival outside of the bounds of the island. He explains that he inserted a gene that leads to the dinosaur’s inability to create the protein lysine. Since they cannot manufacture this critical protein themselves, the dinosaurs must harvest lysine from dietary sources. Wu maintains that if they do not receive a certain amount of lysine, “they’ll go into a coma within twelve hours and expire” (113). Unlike in *Frankenstein* and *The Island of Dr. Moreau*, the scientist in *Jurassic Park* creates beings entirely dependent on them for their existence. The dinosaurs receive lysine tablets in their food every day.

Such a dependence on the creator mirrors the functioning of an empire. Wu sums up the island to the visitors in a telling manner: “These animals are genetically engineered to be unable to survive in the real world. They can only live here in Jurassic Park. They are not free at all. They are essentially our prisoners” (113). Essentially, the dinosaurs are prisoners on show. Hammond does rule an empire in his own way, but his empire is different from Moreau’s empire. Moreau rejects his creatures and does not care about them except to make sure that they do not turn on him. However, Hammond has a very specific reason for keeping the dinosaurs as prisoners. He must ensure their well-being, so that they can remain tourist attractions and he must ensure that no other scientist has a means of collecting one of his dinosaurs.

In addition to the unnatural upbringing and resurrection of the dead in *Jurassic Park*, the fluid-like ability of the dinosaurs to change sexes proves grotesque. Csicsery-Ronay reminds readers that the origin of the word grotesque relates to “dark and moist interior spaces, and the metamorphic energy is easily associated with the momentous, uncontrollable, and juicy changes that occur in the female body […] in menstruation, pregnancy, childbirth, lactation, menopause.”[[21]](#footnote-21) Thus, the female dinosaurs’ ability to change sexes, to metamorphose when necessary, proves grotesque. Originally, and naturally, the dinosaurs did not have frog DNA and thus, could not change genders; however, the unnatural creation of the dinosaurs with hybrid DNA results in female dinosaurs capable of transformation. Shelley additionally seems preoccupied with the feminine grotesque in *Frankenstein*, in so much as she is aware of the grotesque creature, the “hideous progeny” of her imagination, her very own novel.[[22]](#footnote-22)

1. ***The Business Tycoon***

In modern times, Crichton emphasizes that the scientist cannot be considered separate from his business. Actually, Hammond’s business, InGen (again, short for International Genetic Technologies, Inc.) may as well be called “Engine,” as it essentially functions as an engine of scientific empire and business empire. Actually, early in the novel, a rival scientist named Lewis Dodgson, predicts the future of genetic science as completely profit-minded. For Crichton, Dodgson’s character is a chance to depict the ruthless competition in the field of genetics. Indeed, Dodgson ultimately resorts to bribing Jurassic Park’s computer engineer with millions of dollars to steal dinosaur embryos with the aim of creating his own park. Even if his plan is foiled in the end, Dodgson represents another genetic scientist, corrupted by his longing for money, and subsequently spiraling dangerously out of control.

In fact, Crichton even describes him as “the most aggressive geneticist of his generation, or the most reckless” (65) depending on who you asked. Neither the words “aggressive” or “reckless,” sits easy with readers, because the field of genetics should require thoughtfulness and careful decision-making. However, Dodgson is neither thoughtful nor caring, and thus, frighteningly depicts the attitudes and personalities of current and future genetic engineers. For Dodgson’s own job is to head a department that focuses on and practices a sort of “industrial espionage,” (65) a stealing of competitor’s products and changing them in small ways in order to claim them as their own. Already, readers perceive Dodgson as a corrupt scientist. However, like Hammond, Dodgson is more of a businessman, more interested in profit than actual scientific advancement.

Early on, he plans to steal Hammond’s secrets for his company, BioSyn, in order to secure as much monetary success as he believes Hammond will secure. Crichton even states upfront: “These companies [BioSyn and InGen] weren’t interested in pharmaceuticals or health; they were interested in entertainment, sports, leisure activities, cosmetics, and pets” (65). In other words, the companies, like the men who run them, support the “show” more than the actual science. In fact, as Dodgson reveals to readers, by the twenty first century, genetics has become a means to the end goal of consumer entertainment, whether it be leisure activities or pets, which Hammond refers to as “consumer biologicals” (65). Hammond and Dodgson still care about the actual science behind their businesses, but only to the extent that it provides them with high enough returns. As Crichton points out, they are not interested in health or science for science’s sake; they cater to the consumer. In this way, they differ from earlier scientists like Frankenstein or Moreau. Frankenstein and Moreau employed genetics as a means to god-like power; they were interested in the science and interested in the gift of creation which genetics provided for them. Hammond and Dodgson do not view themselves as god-like creators; they view themselves as the entrepreneurs with crafty ideas for making money. Of course, genetics proves to be the ideal field for reaching winning big money.

In a meeting with his company, Dodgson persuades his colleagues to back him in his decision to steal from InGen by depicting Hammond’s grand money-making scheme. He informs his coworkers that Hammond has built a zoo of great proportions on the island of Isla Nublar and has cloned dinosaurs for exhibition there. Then, he expounds upon the implications of Hammond’s island:

What they have done […] is build the greatest single tourist attraction in the history of the world. As you know, zoos are extremely popular. Last year, more Americans visited zoos than all professional baseball and football games combined. And the Japanese love zoos – there are fifty zoos in Japan, and more being built. And for this zoo, InGen can charge whatever they want. Two thousand dollars a day, ten thousand dollars a day…And then there is the *merchandising.* The picture books, T-shirts, video games, caps, stuffed toys, comic books, and pets.” (67)

Here, Dodgson captures the ingenuity of Hammond’s business venture. He recognizes that the engineering of the dinosaurs, the genetic component, is only the first step in his grand project. With no competitors, Hammond’s company will hold a monopoly and therefore, can make its entrance fee any amount, no matter how high. Moreover, as aforementioned, Hammond has built visitor lodging on the island, which means that he intends for visitors to stay for awhile as a kind of vacation. Once he has them inside the park, Hammond can “razzle dazzle” them with park paraphernalia, in addition to the dinosaurs.

However, Dodgson predicts even further. He warns them that InGen may “make pygmy dinosaurs as household pets” and will of course “engineer them so that these pet dinosaurs can only eat InGen pet food” (67). In other words, InGen will patent the animals, claiming sole ownership and distributing them. Then, InGen will trap consumers just as it attempts to trap the dinosaurs on Jurassic Park. It will ensure that the pets can only eat InGen’s food brand. Dodgson predicts correctly InGen’s plans, or at least, he seems on track. For InGen has already engineered the dinosaurs so that they are lysine dependent in an attempt to prevent them from surviving outside the confines of the park. Essentially, then, Dodgson wants to steal the embryos before InGen officially patents the dinosaurs, thereby preventing anyone else from creating dinosaurs for years. As a monopolist, John Hammond would become a multi-billionaire. Moreover, since he wants to create multiple islands, placed all over the world, he would grow richer by owning a chain.

However, ultimately, because Hammond’s business depends on the conformity of the dinosaurs, his empire crumbles. Hammond does make a strong attempt to manipulate the dinosaurs to his own end. However, unlike Frankenstein or Moreau, Hammond does not care so much about the fact that only he can create the dinosaurs from a “god” point-of-view. Rather, he alone wants to create the dinosaurs so that mutations do not arrive down the genetic line that could potentially allow the dinosaurs of the park to overcome their lysine dependence and escape from the park where other scientists could easily take them. In other words, Hammond’s careful manipulation, imprisonment, and exhibition of the dinosaurs may be grotesque; yet, he must carefully control the dinosaurs if he wants his business to thrive. Remember, Hammond’s ultimate goal, even over entertainment is “lots and lots of money” (62). In controlling the dinosaurs, Hammond only looks after his business venture. While he may be selfish, he is not interested in being a “god” to the dinosaurs, like Moreau or like Frankenstein. Actually, even if he wanted to, Hammond could never completely reign over the dinosaurs. Even with all of his careful manipulation of their genomes, genders, eating habits, etc., Hammond is reliant on the technology of the park. Once the main computer in the control room fails, total chaos ensues as the dinosaurs learn that the electric fences no longer harm them. The end of *Jurassic Park* thus closely mirrors *The Island of Doctor Moreau* in its ending. In the former case, the animals learn to break free from their cages; in the second, they learn that humans are mortal, too.

In interesting ways, *Jurassic Park* reflects themes of *The Island of Doctor Moreau* in its overwhelming imperial undertones. If Hammond’s island represents a business empire, it is true to the definition of empire. Like in *The Island of Doctor Moreau*, the notion of white dominion emerges as Hammond rules over creatures breeding in the non-white, fictional island of Isla Nublar. Beyond this, the dinosaurs themselves can be considered metaphors for non-white peoples, specifically non-white females who reproduce even when they should not. Of course, Crichton may have been interested in emphasizing fears of third-world over-population and the continuous breeding of more children even in the absence of enough food and the prevalence of disease. [[23]](#footnote-23) Hammond’s attempts to control the dinosaurs’ reproduction reflects Frankenstein’s fears in an interesting way. Victor Frankenstein seems to entertain a fear of the female monster being far more dangerous than the male monster: “she might become ten thousand times more malignant than her mate, and delight, for its own sake, in murder and wretchedness” (114). Gayatri Spivak proposes a reversal of masculine and feminine roles in *Frankenstein*.[[24]](#footnote-24) In *Jurassic Park*, too, there seems to be an awareness of feminine power, a dangerous power that can transcend male constraints.

Till the end of *Jurassic Park*, in alignment with his personality, Hammond remains disillusioned with reality. While Frankenstein realizes his disastrous mistake from the moment of his creature’s awakening, Hammond can neither face nor predict the disaster of his island. He disregards the words of the intelligent mathematician, Malcolm, who forecasts a tragic end for visitors and for the park as a whole. Malcolm emphasizes just how disillusioned Hammond is at the end of the novel when Malcolm himself is very close to death as a result of a dangerous encounter with a Tyrannosaurus Rex. Malcolm warns, “You can’t see to the other side until you are there” (314). Here, Malcolm refers to the frequent inability of a person involved in a certain situation to perceive danger even when it appears obvious to an objective observer. In *Jurassic Park*, Malcolm functions almost as a Prendick-kind of character. He foresees danger and is an uncommonly intelligent observer who is ultimately quite shaken up by his horrific and near-death experience on the island.

Still, even while Malcolm remains a quite rational and steadfast voice throughout the novel, Hammond discounts his advice. After Malcolm warns Hammond that he is not accurately perceiving reality, Hammond replies, “The poor man,” effectively attributing Malcolm’s statement to the last words of a dying man. Actually, Malcolm perceives reality more clearly than anyone else in the novel, whether he is close to death or not. Just before he gives his warning, Malcolm makes an important prediction concerning the future of genetic science. Notably, Malcolm is a scientist speaking to another scientist; however, Malcolm, as a mathematician actually cares about park visitors and people in general. He reflects the concern that Crichton suggests is missing among current genetic scientists. He tells Malcolm:

A bare decade after the bomb, we began to have genetic power. And genetic power if far more potent than atomic power. And it will be in everyone’s hands. It will be in kits for backyard gardeners. Experiments for schoolchildren. Cheap labs for terrorists and dictators. And that will force everyone to ask the same question – What should I do with my power? – which is the very question science says it cannot answer. (313)

Malcolm predicts a dismal future for genetic science. He suggests that genetics will become more widespread and far more corrupt. If Hammond can create a business using genetics as its foundation, Malcolm wonders what terrorists will create with genetics. Perhaps he envisions a world in which genetic mutants or monstrosities are used in a kind of warfare. After all, there already exist frightening forms of biological warfare. In Hammond, Crichton creates a scientist who doubles as a businessman, but he obviously wonders what genetics will evolve into post its big business phase. Right now, he points out that the dangerous merging of genetics with business and entertainment results in a consumer-minded genetic science community, and a reckless one at that. In fact, when the film version of *Jurassic Park* came out, Crichton said that his aim was “to provide a serious warning about the dangers of commercializing molecular biology,” a problem he felt was “the most stunning ethical event in the history of science.”[[25]](#footnote-25) It comes as no surprise that a man as steeped in the modern medical field as Crichton voiced such concerns.

Indeed, from this community emerge careless, profit-minded individuals like his own characters, Hammond and Dodgson. Neither Hammond nor Dodgson cares about individuals; they care only about the mass population who can provide them with fame and money. Yet Crichton predicts further evolution in the realm of genetics as it evolves with technology. He shows the ways in which genetics itself is a mutating field, constantly changing, but in dangerous ways. Even more frightening, he suggests that while scientists like Frankenstein may have realized their mistakes and stopped their behaviors, scientists like Hammond and Dodgson cannot “see to the other side” (314) and this leads to utter ruin on a scale much larger than their original projects.

**Conclusion**

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1. Jon Turney, *Frankenstein’s Footsteps* (New Haven: Yale University Press, 1998) 16. [↑](#footnote-ref-1)
2. Turney 3. [↑](#footnote-ref-2)
3. Istvan Csicsery-Ronay, “On the Grotesque in Science Fiction,” *Science Fiction Studies* March 2002: 71. [↑](#footnote-ref-3)
4. Turney 14. [↑](#footnote-ref-4)
5. Spivak, in *Frankenstein*, 266. [↑](#footnote-ref-5)
6. Elizabeth A. Bohls, “Standards of Taste, Discourses of ‘Race,’ and the Aesthetic Education of a Monster: Critique of Empire in *Frankenstein*,” *Eighteenth Century Life* Nov. 1994: 31-32. [↑](#footnote-ref-6)
7. Csicsery-Ronay, Jr. 79. [↑](#footnote-ref-7)
8. Roslynn Haynes, “The Unholy Alliance of Science in *The Island of Doctor Moreau*,” *The Wellsian: Selected Essays on H.G. Wells* 2003: 57. [↑](#footnote-ref-8)
9. Haynes 59. [↑](#footnote-ref-9)
10. Haynes 66. [↑](#footnote-ref-10)
11. Csicsery-Ronay, Jr. 80. See pages 71-81 for a fuller description of the differences between the grotesque and the sublime, as well as for understanding’s readers’ responses to the grotesque. [↑](#footnote-ref-11)
12. Csicsery-Ronay, Jr. 73. [↑](#footnote-ref-12)
13. John Hammond, “*The Island of Doctor Moreau*: A Swiftian Parable,” *The Wellsian: Selected Essays on H.G. Wells* 2003: 47. [↑](#footnote-ref-13)
14. See Hammond, especially pages 46-49, for an explanation of England’s imperial ambition during Wells’ time of writing the novel. [↑](#footnote-ref-14)
15. Paul Cantor, Class lecture. 25 October, 2010. [↑](#footnote-ref-15)
16. Paul Cantor, Class lecture. 25 October, 2010. [↑](#footnote-ref-16)
17. Paul Cantor, Class Lecture, 25 October, 2010. [↑](#footnote-ref-17)
18. Turney 205. [↑](#footnote-ref-18)
19. Csicsery-Ronay, Jr. 81. See pages 81-85 for current science fiction examples of the grotesque achieved by breaking physical laws. [↑](#footnote-ref-19)
20. Gayatri Spivak, “*Frankenstein* and a Critique of Imperialism,” in *Frankenstein* (New York: W.W. Norton & Company, Inc., 1996) 263. [↑](#footnote-ref-20)
21. Csicsery-Ronay, Jr. 86. [↑](#footnote-ref-21)
22. From *Frankenstein* (New York, W.W. Norton & Company, Inc., 1996) 173. [↑](#footnote-ref-22)
23. Laura Briggs and Jodi Kelber-Kaye, “‘There is No Unauthorized Breeding in Jurassic Park’: Gender and the Uses of Genetics,” *Feminist Formations* 2000: 95-96. [↑](#footnote-ref-23)
24. Spivak, in *Frankenstein*, 264. [↑](#footnote-ref-24)
25. Quoted in Turney, 1998, p. 204. [↑](#footnote-ref-25)