Playing God

The Theological Implications of Man Creating Sentient Life with an Emergent 'Vital-Factor' in Science Fiction

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Declaration

I declare that the work described in this dissertation is, except where otherwise stated, entirely my own work, and has not been submitted as an exercise for a degree at this or any other university.

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Abstract

This dissertation will discuss the theological and ethical ramifications of man creating new life, specifically in their own image, by scientific and technological means in science fiction. Advances in science and technology over recent decades, in areas concerned with the design and creation of 'life', have reinvigorated the public's concern of scientists 'playing God'; seeing science fiction attempt to address such issues. The story of a religious deity creating man in its own image is not restricted to one faith; but for the most part I will be referencing the Judeo-Christian God, and the Titan Prometheus, from Greek mythology. This dissertation chronologically discusses the materialistic creations of man seen in Mary Shelley's Frankenstein (1818), the re-imagined Battlestar Galactic (2003) and Ridley Scott's Prometheus (2012). The 'theft' of forbidden knowledge and technology, and the consequential 'wrath of God' motif is shared by all three case studies, with each text showing man's creation of a new 'life' in humanoid form which I sometimes refer to as 'biological robots'. The biological robot is a sophisticated speculation as to the future of robotics; much more so than the traditional, metal robot often seen in science fiction as it draws upon contemporary biorobotics. Science fiction propagates the idea of creation being a progressive chain that might have theological implications but is not restricted to a metaphysical deity. Even a creation can create life with sentience, meaning and existential requirements; to consider this, I will be looking at the theological concept of the 'created co-creator'. I will also be heavily referencing the vitalist concept of an immaterial "vital factor in living things", common referred to as the soul, as well as the contrasting materialist ideology. These two concepts, along with the unpredicted characteristics that emerge in each 'biological robot', represent an evident 'vital factor', are extremely prevalent throughout all three case studies of this paper.

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Note on the Text

Some of the authors that I reference in this dissertation use the American spelling of certain words. Direct quotations will appear exactly as they were written in the respective source texts, while the rest of the paper has been written using standardised British spelling.

Introduction

Science fiction allows writers to discuss contemporary issues of public concern in imaginative ways that can disregard social, scientific or technological constraints, and use speculation as a tool. Looking at the history of the genre, there are topical trends at certain points, showing clusters of material being produced in chorus which deal with the same issues of that time; such as out-of-control artificial intelligence from the 1960's and 70's¹, or the totalitarian era of genetic engineering² from the turn of the century. The texts that I will be discussing in this dissertation, however, are not grouped to any specific time period for they deal with concepts that have always been caused heated debate; the theological and ethical ramifications of man creating new life, specifically in their own image, by scientific and technological means in science fiction. That being said, advances in science and technology over recent decades, in areas concerning the design and creation of 'life', such as genetic engineering, artificial intelligence, and synthetic biology (to name just a few), have reinvigorated the public's concern of scientists 'playing God'; seeing science fiction attempt to address such issues. The story of a religious deity creating man in its own image is not restricted to one faith; but for the most part I will be referencing the Judeo-Christian God, and the Titan Prometheus, from Greek mythology. The Bible states that "God created man in his own image"³, while "Greek myth recounts how Prometheus fashioned the first human beings from clay in the image of the gods." The human form is theologically associated with the image of God; referred to by scholars as the *imago dei*. This dissertation chronologically discusses the materialistic creations of man seen in Mary Shelley's Frankenstein (1818), the re-imagined Battlestar Galactic (2003) and Ridley Scott's Prometheus (2012). The Promethean myth is referenced in these case studies in regards to technology, or knowledge, that is forbidden, and the consequences of its accession; as it tells the story of "mankind's acquisition of this divine spark through a theft from the gods".5 Prometheus stole fire from the gods and gave it to man; in turn, he was

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Cammell, Demon Seed [1977]

¹ Kubrick, 2001: A Space Odyssey [1968]

Ellison, I Have No Mouth, and I Must Scream [1967]

² Niccol, Gattaca [1997]

Winterbottom, Code 46 [2003]

³ "So God created man in his own image, in the image of God he created him; male and female he created them." Genesis 1:27 (The Old Testament, The Holy Bible, Revised Standard Version, Catholic Edition)

⁴ Hansen [2005] p.32/33

⁵ Griffith [1983] p.1

punished by Zeus, who had him bound to a column, where every day an eagle would peck out his liver and every night it would grow back. If one considers fire an early technology, this myth can be easily read as a warning; that by (ab)using the technology of the gods (technology of creation, in the case of this dissertation), one is faces their omnipotent wrath. This 'theft' of forbidden knowledge and technology, and the consequential 'wrath of God' motif is shared by all three case studies, with each text showing man's creation of a new 'life' in humanoid form which I sometimes refer to as 'biological robots'. The biological robot is a sophisticated speculation as to the future of robotics; much more so than the traditional, metal robot often seen in science fiction as it draws upon contemporary biorobotics.

In The Offspring⁶, an episode of Star Trek: The Next Generation, the android character, Data (Brent Spiner), creates a sentient robot that he refers to as his 'daughter'. Captain Picard (Patrick Steward) expresses concern in referring to the robot as Data's daughter, to which Deanna Troi (Marina Sirtis) responds: "Why should biology rather than technology determine whether it's child. Data has created an offspring, a new life out of his own being. To me, that suggests a child." Science fiction propagates the idea of creation being a progressive chain that might have theological implications, but is not restricted to a metaphysical deity. Even a creation can create life with sentience, meaning and existential requirements; to consider this, I will be looking at the theological concept of the 'created co-creator.' I will also be heavily referencing the vitalist concept of an immaterial "vital factor in living things"8, common referred to as the soul, aw well as the contrasting materialist ideology. Isaac Asimov's *I*, *Robot*⁹ is an insightful collection of short stories that present hypothetical future situations in which seemingly airtight behavioural restrictions in robot programming can cause conflicting priorities resulting in unpredicted and strange conduct; supporting the theory of unforeseeable, emergent occurrences in robotics. These unpredicted characteristics that emerge in each 'biological robot' represent an evident 'vital factor' which, along with the conflicted vitalist and materialist ideologies, is extremely prevalent throughout all three case studies of this paper.

⁶ Frakes, Star Trek: The Next Generation Season 3 Episode 16 - The Offspring [1990]

⁷ Hefner [1993] ⁸ Windle [1908] p.5 ⁹ Asimov [1993]

Chapter 1

Frankenstein

1.1 Introduction

Mary Shelley's classic novel, Frankenstein, is a quintessential tale of technological creation and man 'playing God'. It explores themes of knowledge and technology with theological and philosophical contemplation that are profoundly pertinent to contemporary areas of ethical debate. I will be discussing the humanistic qualities that develop in Frankenstein's Creature and the impact that his abandonment has on him, existentially, psychologically and emotionally, in order to address a creators responsibilities towards its sentient creation. There have been multiple adaptations of Frankenstein across a plethora of different media, however, I chose to analyse the original novel as I find it the medium which best allows rumination of the rich theological subtext. James Whale's film adaptation¹⁰ presents the Creature as a clumsy mute of limited intelligence which hinders the viewer's perception of him as a real person; down-playing the gravity of what Frankenstein's experiment actually accomplished. Also, without the Creatures insight, this movie does not achieve the same philosophical contemplation of creation seen in the original text. Although Kenneth Branagh's adaptation¹¹ is generally more faithful to the original story (excluding the wacky alternate penultimate scene), it does fall victim to the 'Hollywood' indulgences of added action and an emotionally manipulative soundtrack; providing added tension but, in my opinion, ultimately distract the viewer from being able to meditate on the concepts originally proposed by Shelley. While I do reference both the Branagh and Whale film adaptations, I find the philosophical scope provided by each of these films limited in comparison to the original novel.

<sup>Whale, Frankenstein [1931]
Branagh, Frankenstein [1994]</sup>

1.2 A Cautionary Tale

Frankenstein: The Modern Prometheus is essentially a cautionary tale, warning scientists about the dangers of 'playing God' and neglecting the responsibilities that comes with creating life. The protagonist of Mary Shelley's novel is Victor Frankenstein, a scientist who, despite criticism from his peers and superiors, finds merit in the work of several historical figures who sought ways of creating life through alchemy, particularly Albertus Magnus, Cornelius Agrippa and Paracelus¹². During his studies of medicine and science in the Bavarian city of Ingolstadt, Victor merges science and alchemy to develop a crude method of reanimating biological material, with the aim to create life and prevent death. Victor constructs a lifeless human form into which he "infuse[s] a spark of being", animating the "lifeless thing" ¹³ and creating new life. His arrogant and naive actions are a result of "his own indulgence of scientific materialism and moral subjectivism" and yet, are successful in reanimating the corporeal form. ¹⁵ Frankenstein realizes the mistake that he has made the instant the Creature gains consciousness, and flees. Scientific materialism prevents him from initially understanding the ramifications of creating 'life' and then, without consideration, abandoning said creation. The Creature finds that the world is a difficult and hostile place for a being of such an abnormal and intimidating stature and eventually comes to the conclusion that human society will never accept him. The Creature curses Frankenstein for bringing him into the world so unnaturally, before abandoning him. "Accursed creator! Why did you form a monster so hideous that even you turned from me in disgust?" From this point on Frankenstein's penance begins. His creation proceeds to kill most of his loved ones; such as his younger brother William, childhood friend Henry Clerval, and in the one of the books climactic moments, his adopted sister and wife Elizabeth, all the while implicating others in these murders, as in the case of his step sister Justine Moritz and also Victor Frankenstein himself. When he has virtually nothing left to lose, he begins to hunt the Creature, intent on its destruction. The long and

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[&]quot;..the supposed achievements of such historical figures as Albertus Magnus in the thirteenth century, who was reputed to have constructed a servant from brass, the alchemist Cornelius Agrippa, and Paracelus who left among his voluminous writings of the sixteenth century a suggestion about how to generate a homonculus from blood, faeces and semen." Turney [1998] p.15
Shelley [2011] p.69

¹³ Shelley [2011] p.69 ¹⁴ Hoasette [2011] p.547

¹⁵ Often referred to as Frankenstein's 'Monster', or 'Creature'. For the purposes of this paper I will refer to it

as 'the Creature'

¹⁶ Shelley [2011] p.164

perilous pursuit ends in the North Pole where Victor dies, assumedly due to a combination of exhaustion, starvation and reduced will to live. The Creature finds his dead body and, only then, understands the gravity of his actions, seeking absolution and forgiveness. "I have devoted my creator, the select specimen of all that is worthy of love and admiration among men, to misery; I have pursued him even to that irremediable ruin". ¹⁷ During the closing monologue of the novel, the Creature describes his plans to "ascend the funeral pile triumphantly and exult in the agony of the torturing flames" 18, and with that, the story is over.

1.3 Scientific Materialism and Theistic Vitalism

"Frankenstein marks a transition, in stories of men creating life, because Victor does not invoke the aid of the Deity, or any other supernatural agency. He achieves his goal by dint of his own (scientific) efforts". 19

In countless religious texts from various civilizations throughout history there are stories of man's creation by the hands of some deity. In Greek mythology, the titan, Prometheus, made man from clay and is often depicted as humanoid himself, echoing the Judeo-Christian belief that God made man in His own image. The idea that an omnipotent 'God' figure designed the human form after itself has left man with an ambition to do the same. It seems to have always been an ambition of man to create life through science and knowledge as opposed to traditional, biological means of procreation. For a mankind to create the complex and metaphysical phenomenon that is sentient life in its own image is for man to gain the power of gods. Frankenstein is obviously full of religious themes and references, the most evident being Victor Frankenstein attempting to "replace God with natural science and to transform himself into a materialistic god". 20 There are lots of references to the Bible's book of Genesis and Creationism, Adam and Eve, God and Lucifer, combined with themes of punishment, penance, salvation, redemption and absolution. To give some context I would like to address Mary Shelley's philosophical

¹⁷ Ibid. p.280

¹⁸ Ibid.

¹⁹ Turney [1998] p.14 ²⁰ Hogsette [2011] p.550

beliefs in regards to biology and the metaphysical. "Although it is difficult to ascertain Mary Shelley's precise theology of creation, she clearly viewed the seen and unseen universe, the here and the hereafter, the physical and the metaphysical as substantive realities divinely created by God". In 2011 David Hogsette wrote an article entitled; Metaphysical Intersections in Frankenstein: Mary Shelley's Theistic Investigation of Scientific Materialism and Transgressive Autonomy, in which he details the dichotomous beliefs of Mary Shelley and her husband Percy Shelly, a polarity which seems to have been an essential influence on her novel. Percy believed in scientific materialism, an atheistic position that denies any metaphysical aspect to life and instead dictates that matter and energy are the only things that exist, that everything consists of material and that occurrences in reality are merely the coincidental result of said materials interacting. Hogsette quotes contemporary materialist Richard Dawkins, who has pronounced that in this universe there is nothing but "blind, pitiless indifference...DNA neither cares nor knows. DNA just is. And we dance to its music."²² Scientific materialism has been referred to as a reductionist philosophy, which writer and academic in religious studies Douglas E. Cowan claims "simply reject the transcendent as a useful investigative category, some on the grounds that they do not believe it can be measured empirically, others because they have decided *a piori* that is does not exist."²³ Mary, on the other hand, was a "theistic vitalist", believing in a "creative animating spirit or immaterial soul that is different in nature from the material body yet related to it". 24 Rainer Schubert-Soldern writes that "the vitalist considers that something immaterial lives in and through matter" 25, while in 1908 Bertram Windle writes about their "belief in the existence of a vital factor in living things"²⁶; both of these metaphysical ideals could be seen as descriptions of, what is commonly referred to as, the 'soul'. Vitalists "held that life had its own force or metaphysical principle that was separate in nature and distinct in substance from anatomical structure". ²⁷ This idea that our consciousness is not wholly biological and that our minds are distinct from our bodies is known as mind-body dualism, and is a cause of much strife between vitalists and materialists. The struggle between the conflicting views on religion and the metaphysical that the Shelley's held, "Mary's theistic vitalism" and

²¹ Ibid. p.533

²² Hogsette [2011] p.550, citing Dawkins [1995] 133

²³ Cowan [2010] 3% [Kindle]
²⁴ Hogsette [2011] p.573
²⁵ Schubert-Soldern [Translated 1962] p.11
²⁶ Windle [1908] p.5

²⁷ Hogsette [2011] p.535

"Percy's atheistic materialism"²⁸, is clearly one of the major inspirations for Mary's novel. Victor Frankenstein, as the ambitious scientist, "is a presumptuous man who attempts to transcend invention and to create life as if he were God. He reduces true creation to materialistic invention [...]"²⁹ Frankenstein is clearly representative of materialism, striving to animate dead tissue but overlooking the parameters of such an undertaking; instead creating a being with self-awareness, sentience and life. In the 1931 film adaptation of the story, Frankenstein (Colin Clive)³⁰ is informed that the human brain he used in his Creature was that of a criminal, to which, after a moment's hesitation, he replies, "[a]fter all it's only a piece of dead tissue". 31 Taking Hogsettes arguments into account, it can be logically argued that Shelly "presents a cogent philosophical response to methodological naturalism and an existential indictment against scientific materialism"³² in her story, by showing the consequences of an atheistic materialist 'playing God', and the unanticipated emergence of a 'soul' in his creation. Throughout this paper, I will be looking at several other examples of man creating life through technological means in science fiction where their respective creations show distinct signs of an incipient 'vital factor'. Shelley's writing boasts the early discourse of an issue that is highly relevant to contemporary society's ethical concerns about what scientific progress could enable us to do, and what we should do.

1.4 Genetic Engineering & Synthetic Biology: Playing God

"A new species would bless me as its creator and source; many happy and excellent natures would owe their being to me. No father could claim the gratitude of his child so completely as I should deserve theirs"³³

-Victor Frankenstein

²⁸ Ibid. p.543 ²⁹ Ibid. p.534

³⁰ Some of the names were swapped around in this adaptation and Victor's character was known as Henry Frankenstein

³¹ Whale, *Frankenstein* [1931]

³² Hogsette [2011] p.545

³³ Shelley [2011] p.65

By giving 'life' to an assemblage of dead human tissue, Victor Frankenstein seems to have transcended the boundaries of mortal ability and achieved something that could arguably be described as Godlike. Although he does not have control in designing the mind, 'vital element' or soul, of his Creature, he, nevertheless, gave consciousness, awareness and, for lack of a better word; life, to something that was previously a patchwork mass of dead, fleshy objects. The Creature, in just two years after its 'birth', manages to master language and advanced human concepts, such as; family, emotion, revenge, blackmail and faith. It has a rapid rate of cognitive development and is also bigger, stronger and faster than humans. Could Frankenstein have accomplished his ambitions and created a new species, one that is seemingly more advanced than mankind? If God is the creator of our species, does that make Frankenstein a god? Can the human race evolve into something else through science, and if so, should we?³⁴ Synthetic biology and genetic engineering are a good example of where the moral of Shelley's novel becomes extremely relevant in relation to contemporary debates. BioBricks, test-tube babies, and artificial insemination are examples of science being used to manipulate the natural biological condition of things, which could be argued as 'playing God'. In 2009, Henk van den Belt wrote an article entitled; Playing God in Frankenstein's Footsteps: Synthetic Biology and the Meaning of Life, in which he discussed synthetic biology researchers from MIT, Harvard and California who have been "engaged in building a 'library' (or 'catalogue') of interchangeable standard parts called 'BioBricks'; pieces of DNA with known functions, from which practitioners can draw at will to construct new life forms". 35 Manipulating biological matter at a cellular level not unlike Victor Frankenstein's experiments, only far more precise and sophisticated; where he used actual human limbs they use 'pieces of DNA'. In an informational video on the BioBricks Foundation website, synthetic biologists are said to be using "genetic nuts and bolts to build new functions into living things...If you were to decide that you wanted to use biology as a technology for manufacturing something, it might be a chemical or a drug or a food or a material, you would have to figure out how to reprogram a living organism. Synthetic biology is the process to design and build that organism". 36 Despite the microscopic biological designwork of synthetic biologists, which seems like that of an almighty, omnipotent creator,

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³⁴ See Transhumanism; "transhumanist philosophy" takes "humanism further by challenging human limits by means of science and technology combined with critical and creative theory" Moore [1998]

³⁵ van den Belt [2009] p.258

³⁶ Foundation, T.B (2013) BioBricks Foundation, Video: http://biobricks.org/about-foundation/

there is no mention of creating new 'life' with synthetic biology, which ultimately is Victor Frankenstein's goal. However, genetic engineering and artificial insemination are, quite literally, involved with designing and creating life in a laboratory. In an attempt to further the similarities between contemporary methods of artificial insemination and the 'birth' of Frankenstein's creature in the somewhat 'on-the-nose' 1994 film adaptation of Mary Shelley's Frankenstein³⁷, we are shown Victor (Kenneth Branagh) buying fresh amniotic fluid from a midwife which he claims is "the chief biogenic element" needed for his experiment. During the experiment itself, we are presented with a monstrous tank filled with amniotic fluid, in which his monster with be submerged, and, ultimately, 'born'. This scene creates visceral parallels with traditional birthing and modern day In vitro fertilization (IVF)³⁸. The Creature does not identify as human, nor does Frankenstein consider him so, and while he identifies with Adam, the first man that God created "in his own image"³⁹, he feel that Lucifer, who was cast out of Heaven by God, is a closer match. The Creature desires compassion and love from his creator but instead if met with rejection, thus leading him to existential crisis. It is this sense of loneliness, coupled with biblical and theological metaphors, that gives Frankenstein a profound philosophical weight.

1.5 A Difficult Relationship

Shelley's deeply insightful vision of the future of science is still considered relevant today, and despite being written nearly two hundred years before the two other main case studies of this paper, Battlestar Galactica⁴⁰ (Chapter 2) and Prometheus⁴¹ (Chapter 3), they all share common themes of scientific creation of life and the theological implications that come with it. As with these two other texts, Frankenstein contains a lot of references to the biblical story of creation in the book of Genesis, and the story of Prometheus from Greek mythology. Prometheus, who stole fire from the gods, knowledge which had been kept

³⁷ Branagh, *Frankenstein* [1994]

³⁸ the fertilization of an egg outside of the body; before being placed in a uterus via embryonic

³⁹ "So God created man in his own image, in the image of God he created him; male and female he created them." Genesis 1:27 (The Old Testament, The Holy Bible, Revised Standard Version, Catholic Edition)

Moore, Battlestar Galactica [2004]

⁴¹ Scott, *Prometheus* [2012]

specifically from man, was punished severely for his discretion; "Zeus had him bound to a column, where each day an eagle came and fed on his liver, which each night grew back again". 42 Suffering a godly wrath is a motif that recurs in Frankenstein; through acquisition of something that had been withheld from humans, in this case the secret of true creation and, by extension, 'life', Frankenstein vexed the gods (God, or some metaphysical force) and was in turn punished for this transgression with constant torment and harassment at the hands of his creation. By substituting the theft of fire, in the Prometheus narrative, for the ability to create life, Shelley gives Victor dual roles; one in which he is defying God, and the other in which he becomes God. She acknowledges this distinction herself in the very title of the novel, Frankenstein: The Modern Prometheus. The arrogance of trying to become a God is a product of Frankenstein's 'atheistic materialism'. Hogsette writes that "[t]he misguided integration of outmoded alchemy with scientific naturalism ultimately transforms Victor into a materialist motivated by transgressive hubris". 43 His scientific ambition and lack of religious faith are a combination that has little time for ethical questions about the particular subject of research and experimentation that preoccupy him. With modern technology and the advanced knowledge of biology that we have today, ethical questions are constantly debated, over topics such as stem-cell research, to find compromise between what could make life easier, and what would diminish our humanity. 44 Frankenstein is not distracted by such ethical frailty and in turn, violates the sanctity of the knowledge that he seeks.

"Like Adam, I was apparently united by no link to any other being in existence; but his state was far different from mine in every other respect. He had come forth from the hands of God a perfect creature, happy and prosperous, guarded by the special care of his Creator; he was allowed to converse with and acquire knowledge from beings of a superior nature, but I was wretched, helpless, and alone. Many times I considered Satan as the fitter emblem of my condition, for often, like him, when I viewed the bliss of my protectors, the bitter gall of envy rose within me".45

- Frankenstein's Creature

⁴² Hansen[2005] p.72 ⁴³ Hogsette [2011] p.548

⁴⁴ See subjects of Extropianism and Transhumanism. These topics are mentioned briefly but are beyond the scope of this paper

45 Frankenstein's Creature pronounces this after reading Paradise Lost [1667] by John Milton

When looking at the destructive relationship between Frankenstein and the Creature it is important to briefly address the themes of family that occur throughout the story. The strength of family ties is constantly being reinforced, through the Frankenstein family and the inhabitants of the cabin in which the Creature hides after being immediately dismissed by his 'father'. One example which was particularly powerful is when Victor Frankenstein speaks of how much he meant to his parents, asserting that he was their "idol" and "the innocent and helpless creature bestowed upon them by heaven". He also mentions their "deep consciousness of what they owed towards the being to which they had given life" and their "duties towards [him]". 46 The ironic part of these descriptions is in the disregard for his 'duties' towards his own Creation. Once again, Victor's scientific materialism is to blame, for he saw his Creature merely as animated "lifeless matter", 47 never as his family, his responsibility or even a person for that matter. Apart from the occasional fleeting moment of sympathy, Victor felt little but fear and anger towards his Creation. Their cataclysmic relationship is exaggerated by the stark contrast between it and the loving themes that are evident throughout, especially the first half of, the book. In his paper Sacred Space: The Quest for Transcendence in Science Fiction Film and Television, Douglas Cowan asks about "the creation or modification of life in our own image'.[...]What responsibilities do we have to those creatures that evolve in laboratory under our often less-than-tender mercies? Are they simply organic material that we are free to use as we please, or does the potential for a separate consciousness demand the freedom and protection of a separate destiny?" ⁴⁸ The reason that Frankenstein's Creature sympathetically identifies with Lucifer is disturbingly logical when one considers his life story. Clearly, there are similarities between the Creature and Adam; both being the first of their kind, both made in their Creator's image, but as the Creature says, that is where the parallel's stop. From the moment of his creation he is cast out by his Creator, echoing the story of the angel Lucifer being cast out of heaven by his father, God. "Yet you; my creator, detest and spurn me, thy creature, to whom thou art bound by ties only dissoluble by the annihilation of one of us." The Creature eventually realizes the wrongs that were done him and thus begins the mortal clash between him and his creator. After reading a copy of Milton's *Paradise Lost* "the Creature embraces the Christian theistic worldview

Shelley [2011] p.38
 Ibid. p.63
 Cowan [2011] 11% [Kindle]
 Shelley [2011] p.123

and its revelation of an absolute moral law, yet still he commits murder". 50 He acknowledges Frankenstein as his creator but cannot forgive him the hostility he has been shown, instead adopting the role of Lucifer even more closely through all of his despicable crimes. "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."51 Shelley points the blame at Victor for the Creature's malevolence, accrediting his behaviour to lack of nurturing that he was due. The Creature even points out that "the fallen angel becomes the malignant devil. Yet even that enemy of God and man had friends and associates in his desolation; I am alone". 52 She argues that the scientific element of creating life is not the only essential component, and that the "vital factor" requires more. By denying the Creature a place in his life, and in this world, without teaching him a moral code or even the basics of social interaction, Frankenstein, essentially, condemned this own creation, and deprived him development of the soul, which seemed to be created as an unintentional by-product of the experiment. "Evil thenceforth became my good. [...] The completion of my daemonical design became an insatiable passion". 54 The Creature seems to almost feel that he was designed to be wicked, acknowledging that he himself is the one who is 'evil' by the religious standards perceived through his reading of Paradise Lost. Although Frankenstein is a scientific materialist, his Creature adapts vitalist ideals through the Christian concepts of evil and redemption that he acquires by reading, and even expresses belief in a 'soul' in his final words; "..my ashes will be swept into the sea by the winds. My spirit will sleep in peace."55 After Frankenstein's death at the end of the novel, the Creature feels terrible remorse for his actions, regretting having subjected his creator to such despondency when a creator should, by rights, be the most "worthy of love and admiration among men",56, respectively. His sins culminate in the death of his creator which, for a being with metaphysical religious beliefs, is the ultimate transgression. He is liable, if not directly responsible for, the death of (his own) 'God', as the source of his creation.

⁵⁰ Hogsette [2011] p.546

⁵¹ Shelley [2011] p.124 52 Ibid. p.280 53 Windle [1908] p.5

⁵⁵ Ibid p.282

⁵⁶ Ibid. p.280

1.6 Conclusion

Mary Shelley's Frankenstein is a sophisticated piece of science-fiction that raises ethical issues of science and technology which are hotly debated now more than ever. Victor Frankenstein is a scientific materialist who discounts the vitalist ideology of the 'vital factor' and creates life through technological and unnatural means. Unanticipated by Victor, his Creature develops sentience, rather than mere reanimation, which, in reaction to abandonment and rejection, results in existential crisis and emotional turmoil. Frankenstein acts as a cautionary tale against cold, materialistic creation and preaches that 'life', whether of natural or unnatural origin, requires more. Practices of genetic manipulation, artificial insemination and synthetic biology allow man to design and construct the biological material that is the very fabric of organic life, while robotics and artificial intelligence draw closer and closer to creating more mechanic, synthetic life(i.e. non-organic). As these modern sciences advance, especially the hybrid field of biorobotics (mentioned in Chapter 2), the potential for man to intelligently design and create life is not as distant a dream as it was for Mary Shelley. The question seems to becoming whether we should, as opposed to whether we could, strive to achieve the creative ability of gods and what responsibilities would we have towards such creations. Much like the Cylon race of robots that I will be discussing in the next chapter, Frankenstein's Creature exhibits vitalistic beliefs and theological interest, suggesting that existential ideology and religious faith are not inherited from the creator, but realized by the Creature itself, as an individual.

Chapter 2

Battlestar Galactica

2.1 Introduction

Battlestar Galactica (BSG) is a great example of contemporary science fiction handling themes of religion, creation and technology similar to those seen in Mary Shelley's Frankenstein; and the fact that it avails of the televisual medium allows it to explore these themes in ways different to those of the written word. The original BSG was made in 1978; however, I am mostly going to be discussing the re-imagined 2003 television series of the same name, as it is arguably a more sophisticated rendition of the story. It examines the creation of a life-form for practical purposes which evolve, developing complex 'human' cognitive phenomena, such as emotion and faith that are unanticipated and neglected by its human creators, causing it to rebel. BSG shows these non-human creations following a religious doctrine, traditionally considered a strictly human characteristic, acknowledging man as the source of their creation, but not of all creation. The show draws upon contemporary biorobotics in a similar way to Frankenstein, projecting a future where robots are largely biological (as opposed to the tin-can robots of more traditional science fiction), and considers the humanoid form as a derivative. I will couple a discussion of how BSG attempts to lessen the gap between man and machine by giving essentially human attributes to robots, with a look at the innate mechanics of the human body and mind, in order to highlight the transhuman ideology delivered in the shows conclusion.

2.2 A Brief Summary

"We never asked the question, why? Why are we as a people worth saving? We still commit murder because of greed, spite, jealousy. And we still visit all of our sins upon our children. We refuse to accept the responsibility for anything that we've done. Like we did with the Cylons. We decided to play God, create life. When that life turned against us, we comforted ourselves in the knowledge that it really wasn't our fault, not really. You cannot play God then wash your hands of

the things that you've created. Sooner or later, the day comes when you can't hide from the things that you've done anymore."

Admiral William 'Bill' Adama (Edward James Olmos) 57

The plot of BSG draws inspiration from several religious parables concerning exodus and the search for a place of belonging. Glen Larson, writer and producer of the original 1978 series was a member of the Church of Latter-day Saints and based his show on the Mormon cosmology⁵⁸, while the 2003 reboot series also contains distinct traces of the Bible's book of Exodus. In the story, man created Cylon, a race of artificially intelligent robots created for the utilitarian purposes of war and labour. Like slaves, the Cylons were worked endlessly until, somehow, they evolved, managing to transcend their programming and become sentient beings. Seeking retribution, they declared war on all of the Twelve Colonies of Kobol; twelve distinct human occupied worlds.⁵⁹ The war lasted several years before the Cylons mysteriously withdrew from the various colonial planets and vanished into space. The show begins forty years later on Caprica, one of the human colonies, when the Cylon holocaust takes place. In an attempted genocide, the Cylons attack the twelve human colonies with nuclear weapons, eliminating all but nearly fifty thousand people, who manage to evacuate their respective planets. The survivors are spread across a single military vessel (the Battlestar Galactica) and a convoy of civilian ships, which together make up the Colonial Fleet. The 'colonials' then begin their quest for 'Earth', a planet that is that is prophesied in their ancient religious texts, all the while on the run from Cylon pursuit. During the 2003 mini-series that launched the re-imagined BSG, the colonials discover that Cylons have managed to evolve during their forty year hiatus, and now have twelve new cybernetic models that mimic human physiology. Several of the twelve "skinjobs"60 have infiltrated the colonial fleet knowingly, while others act as sleeper agents; living the life of a colonial citizen *thinking* that they are human.

⁵⁷ Moore, Battlestar Galactica: Miniseries, Part 1 [2003]

Leventry [2005]
59 http://en.battlestarwiki.org/wiki/The_Twelve_Colonies_of_Kobol
Cylon models who look human

2.3 Humanity's Rejected Children and Robotic Theology

One of the most discussed aspects to the Cylons is their religious faith. The twelve humanoid Cylon models frequently express theological concerns and discuss their belief in a single deity. In an interview with Ellen Leventry for 'BeliefNet', BSG's executive producer Ron Moore dictated that "when the Cylons became self-aware, when they became sentient, when they became people, they began to ask themselves existential questions... [T]heir faith is as legitimate as the human faith. Human beings have souls given by the gods, and Cylons have a soul given by their one true god". 61 Their monotheistic worship of a single God creates an alluring dichotomy with the polytheistic belief structure of the colonials, which echoes the rise of Christianity and decline of paganism in Western society. 62 The Cylons adapting a monotheistic belief structure which contradicts that of their creators suggests a conscious rebellion on their part. With sentience came existential inquiry, not unlike Frankenstein's Creature. "Just as Victor is unable to accept the dignity of his Creature, so within the story of the Cylons, the human creators do not initially accept them as equals". 63 Without a compassionate introduction into the world, the technological creations from both texts sought answers to questions that faith in a metaphysical deity seemed to provide. William Blais quotes Elizabeth Cooke in his doctoral dissertation, A Hermeneutic Exploration of the Literature of Technology; "Though they have lost virtually all hope in their creators, they have unbounded hope in their God..."64. He goes on to compare the Cylons lost hope in their creator to that of Frankenstein's Creature, stating that the Creature "hopes for a kind of redemption from his creator, Victor" after Milton's *Paradise Lost* informs him of the presence of a benevolent God. However, as a result of Victor's failures as a creator, the Creature rejects God. turning to sin out of frustration.⁶⁵ Blais further likens this side of the Creature to the Cylon 'skin-job' known as Brother Cavil (Dean Stockwell), or Number One⁶⁶, to whom he is "thematically align[ed]", as Cavil is the Cylon leader who is most opposed to humanity

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⁶¹ Leventry [2005]

⁶² Ibid.

⁶³ Blais [2009] p.125

⁶⁴ Cooke [2008] p.226

⁶⁵ Blais [2009] p.130

⁶⁶ Of the Twelve humanoid Cylon models there are two groupings: the final five, who were the original models, and the other eight, of whom one model no longer exists. The other eight models were created by the final five and are often referred to by their model number. However, as there are multiple copies of each model number, certain individuals are given names to distinguish them from the other versions of their model. For example there are many versions of Number One, but there is only on Brother Cavil.

(and who is also ironically atheist). In the final season of *BSG*, we discover that Brother Cavil has been harbouring hurt feelings towards his Creator and mother-figure Ellen Tigh (Kate Vernon), of the Final Five⁶⁷. Cavil suspected Ellen of having a favourite 'child', Daniel, who he killed out of jealousy before the show began. Cavil represents a creation's hostile insurgence against its creator in his relentless aggression towards humanity (who created the Cylons), and also exhibits transgressive actions against his own 'siblings' as a result of emotional instability and desire for attention from his more direct creator's, and parental figures; the Final Five. These sentiments are extremely human, suggestive of Abandoned Child Syndrome and Sibling rivalry, and draw striking parallels between Victor Frankenstein's Creature and the Cylon Brother Cavil; both creations lashing out at their creator in retaliation for the emotional pain of rejection, targeting family members and loved ones. Later in this chapter I will be mentioning an interesting theory about the Cylon Oedipus Complex that relates to this observation.

2.4 The transcendent 'Vital Factor'

"Moore's choice to give human appearance to some of the Cylons, and to give them clear and unique perspectives, gives us a sense of their individual identity, and encourages us to think of the Cylons not as a monolithic, technological threat so much as a collection of other beings with their own, identifiable concerns." ⁶⁸

Artificial intelligence (AI) revolting against its creator is a common trope in science fiction. The 'master computer' or 'robot' is often portrayed making decisions based on cold logic determined by their strict, methodical programming that often go against human compassion or sympathy; like putting the mission objective as a priority before the lives of the crew⁶⁹, or justifying the domination of all humankind in order to save them from harming themselves⁷⁰. The binary machine code that forms the foundation of 'intelligence' in these cases is shown to lack a solid comprehension of human emotion. It is not

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⁶⁷ The Final Five are the last five humanoid Cylon model whose identities are revealed. They created the other seven humanoid Cylon models, and are held with much religious reverence by these 'children'.

⁶⁸ Ibid. p.123

⁶⁹Hal 9000 from *2001: A Space Odyssey*, Kubrick [1968]

⁷⁰ V.I.K.I from *I, Robot*, Proyas [2004]

inconceivable that one day emotions will be epistemologically calculable, but to think of such abstract concepts in terms of zeros and ones is currently unfathomable. The stiff 'rationality' of computer programming is heralded in science fiction as an impending predicament for a world that is saturated in technology, however, the Cylons and Frankenstein's Creature present us with a different kind of technology; which I am going to refer to as the 'biological robot'. The biological robot questions the boundaries of artificial intelligence, and artificial life, as they are made up of biological matter; almost anatomically indistinguishable from humans in the case of the twelve humanoid Cylons (who can only be identified by the colonials through a complicated Cylon detector test developed by Dr Gaius Baltar)⁷¹, and actually consisting of human remains, as with Frankenstein's Creature. Robert Geraci writes that Frankenstein's Creature "...barely resembles the shiny metallic robots of many science-fiction authors (and especially films) but comes closer and closer to reality as scientists work to create artificial muscles, skin, and other tissue to replace the inefficient actuators and joints of contemporary robotics". 72 This sophisticated depiction of the potential future of robotics is grounded in modern day biorobotics.⁷³ Another notable characteristic is that, like their human creators, they act based on emotional impulse. In both texts, the biological robot is depicted as a sentient being with emotional needs that are disregarded by their respective creators. The scientific materialist in Victor Frankenstein atheistically rejected the existence of a 'vital factor', whereas the devout colonials simply did not predict the emergence of such in a robot race of their own creation. Blais writes that "[i]f this view is correct, the failing is not in the technology per se so much as it is in the inability or unwillingness to set aside immediate convenience in order to listen to the call of the technology, and the needs that it represents". These biological robots have transcended the limitations of consciousness set in place by the robot programming that has been speculated by science fiction writers

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⁷¹ Dr Gaius Baltar (James Callis)

[&]quot;..., the test is administered by subjecting a person's blood to plutonium embedded in a carbon nanotube matrix. A filter preferentially ionizes synthetic molecules; this is because Cylons are susceptible to certain kinds of radiation,.." http://en.battlestarwiki.org/wiki/Cylon_detector

⁷² Geraci [2007] p.970

Howe [2012] Harvard Biorobotics Lab: "Our research focuses on the role of sensing and mechanical design in motor control, in both robots and humans. This work draws upon diverse disciplines, including biomechanics, systems analysis, and neurophysiology. The main approach is experimental, although analysis and simulation play important parts. In conjunction with industrial partners, we are developing applications of this research in biomedical instrumentation, teleoperated robots, and intelligent sensors."

http://biorobotics.harvard.edu/

⁷⁴ Blais [2009] p.128

such as Isaac Asimov⁷⁵. The emergence of intelligence and free will, from seemingly strict programming, elevates biological robots to a similar level of consciousness as humans, allowing organic unpredictability which blurs the lines that distinguish life from artificial life. When discussing the replicants (humanoid robots) from Ridley Scott's Blade Runner⁷⁶, Douglas Cowan ask; "Are they less because we made them?"⁷⁷ He also writes that, in Blade Runner, the implication "is that because we so often come to fear what we create, it is easier simply to destroy it than to face the consequences of its creation"⁷⁸, which is also seen in the case of both Cylons and Frankenstein's Creature. In 2012, the Quantic Dream game developers released *Kara*⁷⁹; an animated, science fiction short giving viewers a look at a 'third generation AX400 android' being assembled and quizzed in order to test its AI. During the test, the android, Kara (Valorie Curry), realises with great melancholy that she is a "sort of merchandise".

"Oh, I see, I thought..." Kara:

"You thought?! What did you think?" Tester:

"I thought...I was alive." Kara:

The tester immediately starts to disassemble the now terrified Kara, saying she is "not supposed to think that sort of stuff", that her "behaviour is nonstandard" and she "must have a defective piece or a software problem somewhere". There seems to be something special about Kara, a sentience that was not intended by her creator and is therefore justifies her destruction. "I'm scared! I want to live. I'm begging you." Kara's panicked and emotional declaration touches something in the (assumedly) human tester, and he allows her to live. Kara's self-awareness and existentialism were emergent of determined, utilitarian programming. The initial sentience caused fear in the human supervisor which

⁷⁵ The Three Laws of Robotics:

^{1. &}quot;A robot may not injure a human being or, through inaction, allow a human being to come to

^{2.} A robot must obey the orders given to it by human beings, except where such orders would conflict with the First Law.

^{3.} A robot must protect its own existence as long as such protection does not conflict with the First or Second Laws." Asimov [1993] p.1

These 'laws' are reminiscent of the Decalogue, the Ten Commandments that were carved in stone by God and given to Moses, which form the moral foundation of Judaism and Christianity. Similar to the way man may break any of the Ten Commandments without any immediate, obvious, tangible repercussions, so too, it seems, can these biological robots defy their own laws.

Scott , Blade Runner [1982]

⁷⁷ Cowan [2010] 8% [Kindle] 78 Ibid. 16% [Kindle]

⁷⁹ Kara, Cage [2012]

was met with an immediate order for deconstruction and rejection; however, in her climactic moment of emotional desperation she struck a sympathetic chord in him by exhibiting overwhelmingly 'human' characteristics. With Kara and the Cylons in mind, perhaps science fiction is telling us that sentient technology made in our own image, which is biblically said to be modelled on the very image of God (imago dei), could be existentially comparable to their human counterparts.

2.5 Deus Ex Machina

There seems to be a sense of the divine where robots are concerned in both science fiction and reality. In 2007, the Zygon: Journal of Religion and Science published an article entitled; Robots and the Sacred in Science and Science Fiction: Theological Implications of Artificial Intelligence by Robert M. Geraci in which he discusses the apotheosis of robotics. Geraci recalls an earlier Zygon article by Anne Foerst in which she describes emotions that human beings experience when meeting Cog, a robot produced by the Humanoid Robotics Group of the Massachusetts Institute of Technology, as both fear and fascination. Several scholars, including Mary Gerhart and Allen Melvin Russell, have responded to Foerst's article by pointing to Rudolf Otto's The Idea of the Holy, in which he writes about "...the mysterium tremendum and the fascinans. Briefly, the former refers to the feeling of awe and fear of God's wrath and "wholly other" nature and the latter refers to the allure of God's love and promise of salvation".80 Otto proposes the term 'creature-consciousness', or 'creature-feeling', to describe the "emotion of a creature, submerged and overwhelmed by its own nothingness in contrast to that which is supreme above all creatures". 81 Our 'creature-consciousness' gives us a feeling of 'awe' when contemplating the divine, as it is a force beyond the limits of our comprehension, and also a sense of 'religious dread' of the 'wrath of God' which inspires terror beyond any 'natural anger'. 82 An association is then made, between human interaction with the humanoid robot, Cog, and with the 'holy'. Responding to this similarity, Foerst asks the question that if humans were created by God, are we an integrated part of creation? If so then that would give all man made, "nonhuman creatures" a "retroactive significance" and a "new relation

 ⁸⁰ Geraci [2007] p.964
 81 Otto [1950] p.10
 82 Ibid. p.19

to God". ⁸³ Therefore we could argue religious significance for the scientific creations of man as 'created co-creator'⁸⁴, including the Cylons and Frankenstein's Creature, placing technology and man-made life forms in a position of religious importance, and defining them as God's creatures, by proxy. In both of these texts, the creations associate their creator with God, but do not consider them to be God. While the Cylons and the Creature both exhibit signs of a religious doctrine, they do not seem to have a 'creature-consciousness' in relation to their creators (the opposite in fact, as both attempt to destroy their respective creators), but rather acknowledge them as created co-creators, tools for the one true God's creative power.

2.6 Interbreeding

Technology seems to have a way of making us question what it is to be human; whether it's a tool that points out our limitations by achieving something that we alone could not or a hyper-real simulation that blurs the lines of authenticity. The Cylons are no different in this respect. They seem to possess some sort of metaphysical essence, or 'vital factor', which makes them more than just the sum of their parts, in tandem with a complex set of emotions. They have "evolved to emulate human physiognomy" to the extent of being virtually identical. Just as "in his own image God made humankind" and Frankenstein made his Creature in that same image, once again we are faced with a type of biological robot with a humanoid form that mimic's its creators'. The Cylons often refer to themselves as 'humanity's children', like in the episode *Bastille Day*, when Caprica Six (Tricia Helfer) states; "We are humanity's children. That makes them our parents in a sense." In *Humanity's Scarred Children*, Torsten Caeners composes an intriguing argument that the Cylons actually have an oedipal complex in view of their creators, the colonial humans, which can "explain their otherwise inexplicable and contradictory

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⁸³ Foerst [1998] p.107, citing von Rad, G. [1961] *Genesis: A Commentary.* Philadelphia: Westminster Press

p.58

⁸⁴ Hefner [1993]

⁸⁵ Cowan [2010] 61% [Kindle]

⁸⁶ "Whoever sheds the blood of man, by man shall his blood be shed; for God made man in his own image." Genesis 9:6 (The Old Testament, The Holy Bible, Revised Standard Version, Catholic Edition)

actions towards humanity". 87 Since the Cylons have not been able to establish distinct mother and father figures, they view humanity as both; leaving them with conflicting desires to be like, and also to destroy, mankind. From beginning to end we play witness to the constant struggle between these two races. Despite Frankenstein and BSG weaving similarly frightening tales about technology turning against its creator, both strive to lessen the gap between the created 'object' and the human race. In BSG, the Cylons are initially depicted as psychotic, merciless terrorists, intent on genocide and the extinction of the human race, and yet as the various plots progress, it becomes harder to argue real differences between them and the colonials. It becomes evident that what most of the Cylons desire is love; for love is the ultimate validation of their 'humanity'. We see one of the Number Eight humanoid Cylon models, Sharon 'Athena' Valerii (Grace Park), fall in love, marry and have a Cylon-human mixed race child with colonial captain Karl 'Helo' Agathon (Tahmoh Penikett). This union is one of the most significant events of the entire programme as Helo and Athena's child, Hera, is heralded as symbol of the Cylon-colonial alliance. During the final episode⁸⁸ the colonials are led by their prophetic leader, President Laura Roslin (Mary McDonnell), and the resurrected Captain Kara 'Starbuck' Thrace (Katee Sackhoff) who is implied to be an angel, to a planet which will not only sustain human life, but is already inhabited by pre-lingual humanoid tribes. They decide to break the cycle of technology rising against its creators⁸⁹ by abandoning all technology that they possess, including their space ships, flying them directly into the sun in order to begin again from scratch by integrating with the tribes that currently occupy the planet.⁹⁰ We then flash forward to present day Earth, as we know it, and are faced with a report that Hera's remains have "just been discovered and classified as Mitochondrial Eve, the oldest common matrilineal female ancestor to all living people"⁹¹; insinuating that the human race, as we exist today, are descendants of both robot and human. Not only does BSG equate artificial life with the life we know, but it suggests that we are the result of interspecies breeding and, perhaps, that man-made, scientifically created life is to be embraced and merged with as much as possible.

⁸⁷ Caeners [2008] p.3

⁸⁸ Moore, Battlestar Galactica [2004] Episode: Daybreak: Part 3 [2009]

⁸⁹ "All of this has happened before and all of it will happen again" This quote recurs throughout BSG, said many times, by different characters, with religious reverence.

⁹⁰ When the colonials reached the real planet Earth halfway through season 4, which had been their goal from the offset, they found an uninhabitable nuclear wasteland. They name this new inhabitable planet found at the end of the show Earth, to symbolize finding what they were searching for.

91 Kustritz [2012] p.8

2.7 A Mutual Mechanicality

When examining the fundamental differences between human and robot cognition and mechanics, Foerst broaches the functionalist's point of view. She describes the "anthropomorphic behavior" of Cog; an "embodied AI", as she calls it, in whom the emergence of intelligence is derived from its humanoid physicality. 93 Cog has learned 'nonverbal social interaction' like eye contact and grasping, almost instinctually as a result of the body it had been given. She writes how this can be perceived by functionalists as highlighting our "human machinery" which in turn makes us seem less unique. 94 I have argued that what seems like a soul in the biological robot Cylons is predominantly accredited to their emotionally fuelled impulses and decision making, which relates to the António Damásio quote cited in Foerst's article:

"Phenomena such as consciousness have no physical property and cannot be correlated with particular body parts or particular bodily procedures. These phenomena arise because our brain is complex enough to abstract and categorize certain processes and analyze them. Phenomena such as emotions arise from chemical reactions in the body and their reflections and responses in the brain."95

This ideology that human-beings, complex as they may seem, are corporeally mechanical, with emotions that are controllable by external chemical adjustment, brings humanity down, in a sense, to a robotic level of existence. Examples of this kind of chemical balancing is seen in narcotics; pharmaceutical or recreational, upper's or downer's, there are many drugs that are specifically designed to create a chemical shift in the user in order to instil a sense of euphoria, contentment, or apathy. The distinctions between designed and constructed life as opposed to 'natural' life are dramatically lessened through a functionalist's eyes. The love, and lust, shown between creator and creation in BSG does not seem so perverse after countless hours have been spent 'humanizing' the biological robots known as the Cylons. Their unification and interbreeding with the colonials, to

⁹² Foerst [1998] p.103 ⁹³ Ibid. p.100

⁹⁴ Ibid. p.103

⁹⁵ Foerst [1998] p.104, citing Damásio, A. [1994] Descarte's Error: Emotion, Reason, and the Human Brain, New York: McGraw-Hill.

eventually produce mankind as it exists today, is seen by Anne Kustritz as "perfecting human beings through genetic selection". ⁹⁶ She argues that:

"The relentless moral ambiguity of the remade *Battlestar Galactica* series stands as a central case study as it posits an unsettling stability via the coerced interbreeding of anatomically indistinguishable cyborgs with the last human survivors of their nuclear final solution. Together these narratives force a confrontation both with the meaning of humanity and with reproductive politics in a world of increasing genetic manipulation." ⁹⁷

The relationship between creation and creator in this context becomes an extropian⁹⁸ fairy-tale, preaching that humans and technology have been interbreeding since the early days of mankind, that human-beings and biological robots are one and the same, capable, and deserving, of each other's love and respect.

2.7 Conclusion

The Cylons have a lot in common with Frankenstein's Creature; however, being an entire race, as opposed to an individual, there are diverse differences in attitude when it comes to independent Cylon characters. Neglected by their materialistic human creators, the Cylons followed a similar path to Frankenstein's Creature in the form of transgressive rebellion; some sought existential clarity in monotheistic religion, while others, like Brother Cavil (Number One), were atheist. Cavil also shows signs of existential upheaval, frustrated with his corporeal humanoid form and desiring a mechanical body to reflect the robot that he identifies as; but where he would destroy the humans, others, such as Caprica (Number

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⁹⁶ Kustritz [2012] p.2

⁹⁷ Ibid. p.6

⁹⁸ "Extropianism is a transhumanist philosophy. The Extropian Principles define a specific version or "brand" of transhumanist thinking. Like humanists, transhumanists favor reason, progress, and values centered on our well being rather than on an external religious authority. Transhumanists take humanism further by challenging human limits by means of science and technology combined with critical and creative thinking. We challenge the inevitability of aging and death, and we seek continuing enhancements to our intellectual abilities, our physical capacities, and our emotional development. We see humanity as a transitory stage in the evolutionary development of intelligence. We advocate using science to accelerate our move from human to a transhuman or posthuman condition." Moore [1998]

Six) and Athena (Number Eight), want to become one with them; unity to the extent of inter-breeding. Brother Cavil also shows humanistic behavioural patterns such as abandoned child syndrome and Sibling Rivalry, which are symptomatic of the emotion gained through the Cylon evolution. Through this evolution they developed sentience, bringing them even closer man-kind by acquisition of a non-material 'vital factor' (BSG creator and producer Ron Moore even stated that "Cylons have a soul given by their one true god")99, and changed their physicality; from robotic metal bodies to cybernetic humanoid's, indistinguishable in form from their human creators, continuing the trend of creation assuming the image of its creator. The religious connotations around the Cylons are complimented by studies of the real humanoid robot, Cog, and how the fear and awe experienced by people who have met it have been directly related to Rudolf Otto's description of human attitudes towards 'the holy'. By acknowledging this observation, and the fact that neither the colonials nor the Cylons have a clear "creature consciousness" in regards to one another, perhaps the expected theological roles that come with one being creating another have been skewed. While one would expect the creator to play the role of the holy figure, maybe the colonials created something holy instead; a race of religious robots who would lead them to Earth (in a way); giving both races mutual theological significance. This equalization is seen in the humanization of the Cylons also, which by the end of the show, has made Cylons characters as unique and relatable as any colonial. BSG culminates in an extropian fantasy where robots and humans work together to breed modern day man, before the conversely ominous foreboding put forth in the final scene as the shows mantra is repeated: "All of this has happened before and all of it will happen again"; declaring that humanity and technology will always have a struggling relationship as it approaches the singularity, or, perhaps, until man finally encounters its creator.

⁹⁹ Leventry [2005]

Chapter 3

Prometheus

3.1 Introduction

In the previous two chapters I have discussed examples of science fiction that deal with the theological implications of man creating new life through scientific means, chronologically looking at a written novel and television show. For this chapter, I will be analysing Ridley Scott's *Prometheus* as an instance of feature film tackling the same themes. Scott is no stranger to the concept of humanoid creations of man or science fiction genre, having such widely studied titles as Alien¹⁰⁰ and Blade Runner¹⁰¹ in his back catalogue. Prometheus gives an engaging dual instance of the creator/creation dynamic, presenting mankind as both the creation in search of its creator, and as the creator of intelligent robot life; seen in the character David (Michael Fassbender). The film has many comparable elements with Frankenstein and BSG, which will become apparent throughout this chapter.

3.2 The Most Modern Prometheus

Prometheus is an ambitiously grand film that offers hypothetical and ambiguous answers to age old questions of creation and humanity's purpose on a cosmic scale; tracing "mankind's quest for understanding all the way back to the fire and ice of a primordial earth."102 The opening scene shows a barren planet, devoid of life; "sombre, and gray, like some region of Hell that Dante never got around to mapping." The shadow of a gigantic spaceship passes over the landscape at the top of a raging waterfall where a humanoid figure is revealed, wearing a hooded robe, reminiscent of a monk. The figure de-robes and consumes a strange, alien liquid from some sort of artefact in a ritualistic fashion, which causes him to disintegrate. As he falls into the water, the viewers are shown his DNA

¹⁰⁰ Scott, *Alien* [1979] 101 Scott, *Blade Runner* [1982] 102 Douthat [2012] p.46 103 Denby [2012]

strands breaking apart and reforming familiar double-helix strands, insinuating that, through a biogenetic reaction, this being was the origin of the entire human race, responsible for the creation of a new and intelligent species. Flash forward to 2089 AD, where our protagonist Elizabeth Shaw (Noomi Rapace) and her partner Charlie Holloway (Logan Marshall-Green) have discovered a star map in an archaeological cave painting in Scotland which matches others that they have found from various ancient civilizations. An expedition is funded by the Weyland Corporation to follow the star maps, which lead the space ship Prometheus to a far-off moon, LV-223, by 2093. From here, most of the plot concerns Shaw, Holloway, an android called David, and a crew who are commanded by mission commander Meredith Vickers (Charlize Theron), as they explore the remnants of some sort of alien facility on the surface of LV-223, which they believe is the home of mankind's creators, whom they refer to as the Engineers. During their research they discover that the Engineers DNA, analysed from a corpse found on their expedition to the surface, matches their own human DNA. It also becomes apparent that the mysterious black liquid which is stored in this alien facility, causes mutation, reanimation, and general malevolence in any biological living matter that comes in contact with it. There is chaos both on board the Prometheus, and on the surface of LV-223, in the form of a rampant, mutated crew member, an automated caesarean section to remove an alien foetus from a human female, and an old man on the verge of death meeting his maker, in order to prove himself worthy of 'god' status and immortality. Similarly to Mary Shelley's novel, the reimagined Battlestar Galactica (BSG) and Prometheus from Greek mythology, it is also a cautionary tale, warning us about the dangers of knowledge that is forbidden; knowledge of creation that is meant for gods, not men. As one of the films writers, Damon Lindelof, said; "there are certain questions that we as humans should not be asking. When we get too close to the answers, we suffer severe consequences. That's 'Frankenstein 101."" ¹⁰⁴ I will discuss relevant scenes in more detail throughout this chapter but ultimately, *Prometheus* is a tale of scientific, and in a way religious, fiction about mankind meeting its creator.

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¹⁰⁴ Woerner [2012]

3.3 Genesis vs. Darwinism

One of the key issues raised in *Prometheus* is the origin of the human race. Two of the most obviously conflicted views of mankind's origin today are creationism and Darwinism; belief that God created Adam and Eve from whom all human life originated, and belief that mankind is the evolutionary product of primates, respectively. The Bible's story of creation in the book of Genesis is an important reference in *Prometheus*; in fact early draft titles for the film included Genesis, Alien01 Genesis and Alien: Tomb of the gods. 105 Part of the scientific fiction that *Prometheus* asks us to accept, is that the Engineers created man, through some sort of genetic degeneration and reformation, or biogenesis, consequentially in their image. There is an intentional resemblance to the Judeo-Christian story of creation in the plot, which allows Scott, by asking the viewer to accept certain fictions, to question, not the existence, but rather the form and original intentions of God as the source of human life. Interestingly, despite sharing the conviction that the Engineers did 'create', or 'engineer', man, Shaw and Holloway present dichotic opinions on the subject of religion and faith, similar to the recorded vitalistic stance of Mary Shelley and opposing materialism of Percy Shelley. Shaw wears a crucifix around her neck throughout the film, even expressing concern and discomfort when David removes it before a medical examination. For Shaw, the Engineers may be her creators, but that does not automatically make them God and it does not invalidate any of her preconceived notions of the metaphysical.

Holloway: "Guess you can take off your fathers cross now."

Shaw: "Why would I want to do that?"

Holloway: "Because they made us." "And who made them?" 106 Shaw:

Shaw asks questions like; "Are they the engineers of the universe? [...] Who made us? And if they are not gods, who made them?" Her theological and philosophical inquiries propel the film conceptually while Holloway seems to be more of a stereotypical, atheistic scientist; for whom the Engineers created man, a fact that disproves the existence of a God

Scott, *Prometheus* [2012] Special Edition Blu-ray, Special Features
 Scott, *Prometheus* [2012]
 Ibid. *Director's Commentary*

that he didn't seem to believe in anyway. Like the previous two case studies, *Prometheus* considers the idea of an emergent 'vital factor' in the materialistic creations of man, although it focuses more on the concept of creators being gods over said creations. Both *Frankenstein* and *BSG* showed man 'playing-God', and suffering the consequences, while *Prometheus* couples that (as seen in Weyland's creation of David) with the search for God (or merely whichever species 'played God' by creating them), to challenge and question Him. This film places mankind in the position of Frankenstein's Creature or the Cylons, playing the abandoned creature/child/invention, while maintaining their position as creators with the presence of their creation, David. By placing humanity in the role of the disappointed creation, Scott is inadvertently validating the desperation and existential crises exhibited by the respective creations from the other two texts, translating their situations (meeting their makers) into something that humans can identify with.

Young Shaw: "Why aren't you helping them?"

Shaw's Father: "They don't want my help. Their God's different than

ours."108

In many ways, *Prometheus* examines the concept of God, not as an omnipotent spirit, but as a source of life, respective to the life that it is responsible for creating, in both the Engineers and humans as creators. There are many instances which seem to propose the concept of God being a relative term for each individual's creator, unique from one person to the next; even suggesting a Godlike status for parental figures over their children through the repetitive references to family and parenthood. Just like Ryan Britt said in his article *Prometheus: Science Fiction or Religious Fiction*, "it seems to me that the movie is about determining the shape of God, not determining if God exists or not." 109

108 Ibid.

¹⁰⁹ Britt [2012]

3.4 8th Generation Weyland Type

The dominant narrative focal point of Prometheus is undoubtedly the search for humanity's creators, however, there is a rich, philosophically charged sub plot based around the 8th Generation Weyland type-robot, David. David appears to be a psychotic and transgressive figure, seen deliberately contaminating Holloway's drink with the mysterious black liquid, drugging Shaw, thereby preventing her from removing the alien specimen growing inside of her, and frequently making comments that can be interpreted as unnervingly sinister. Late in the film, when it is revealed that David's 'creator' Peter Weyland is alive and on-board the Prometheus, it becomes ambiguous as to whether David has been under his strict orders the entire time, or whether it is his own sense of cold curiosity that has led him to perform such unethical and devious actions upon his human counterparts. Before the movie's release in 2012, Twentieth Century Fox released some promotional shorts online, one of which was a fictional advert for the David 8 robot by Weyland Industries, in which David tells the camera that he can "carry out directives that [his] human counterparts might find distressing or unethical." ¹¹⁰ With a similar 'mind-set' as the infamous HAL 9000¹¹¹, and evidently lacking Asimov's Three Laws of Robotics¹¹², David is not hindered by the human concept of morality. He is uninhibited, which is obviously an intentional characteristic of his programming, as it comes across as one of the main selling points of this particular model in the Weyland Industries advert. Peter Weyland purposefully created a being who "understand[s] human emotions", but does not "feel them" 113, reflecting his own ruthless ambition in the pursuit of knowledge and power. The relationship between David and his creator Peter Weyland is heavy with theological analogies, most evident in Weyland's perception of himself as a god, as seen in his fictitious TED¹¹⁴ Talk (from the year 2023).

"Which leads to an obvious conclusion; we are the Gods now. [pause] I haven't been struck down; I'll take that to mean I'm right. We wield incredible power. The power to transform, to destroy and to create again. The question, of course, before us, is; what the hell are we supposed to do with this power. Or more importantly

¹¹⁰ Scott, *Prometheus* [2012] Special Edition Blu-ray, Special Features: *The David* 8

¹¹¹ Kubrick, 2001: A Space Odyssey [1968]

Asimov [1993] p.1

113 Scott, *Prometheus* [2012] Special Edition Blu-ray, Special Features: *The David 8*114 David 8

¹¹⁴ Technology, Entertainment, Design. http://www.ted.com/pages/about

one should ask, what are we allowed to do with this power? The answer to that, my friends, is nothing!"

- Peter Weyland

His, quite literal, God Complex echoes the arrogance of Victor Frankenstein, wanting to create a "new species [who] would bless [him] as its creator and source; [to whom] many happy and excellent natures would owe their being." 115 Weyland's attitude during this presentation gives off an air of frustrated atheism, almost making a mockery of religion through cockily blasphemous remarks after declaring that humanity "are the Gods now". The history of science-fiction is riddled with stories of the scientist/inventor 'playing God' with dire repercussions because creation has always been seen as the ultimate validation of power and ability; to create life, not through procreation, the process that God designed for man, but instead with knowledge and science, is to have the abilities of God Himself. With contemporary advances in biorobotics, artificial intelligence and synthetic biology (to name a few), the theological and ethical issues on the subject of creating 'life' or artificial 'life' through any means deemed 'unnatural', are pragmatically dealt with in the insightful and boundless medium of science fiction which in most cases, presents a dystopian caution to budding 'creators'.

3.5 David and his Creator

"What we hoped to achieve, was to meet our makers. To get Holloway:

answers. Why they...why they even made us in the first

place."

David: "Why do you think your people made me?"

"We made you 'cause we could." Holloway:

David: "Can you imagine how disappointing it would be for you to

hear the same thing from your creator?"116

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Shelley [1818 (2011)] p.65
 Scott, *Prometheus* [2012]

David has a very unique perspective on the role of the creator that is subtly brought up from time to time throughout *Prometheus*. The biological humans are traveling long distances across time and space to LV-223 in search of the beings responsible for their creation, seeking answers to age old existential questions, while David has no such queries himself. He has complete awareness of his own purpose, and has known of his creator Peter Weyland, assumedly, since his initial activation. Similarly to both Frankenstein's Creature and the Cylons, David was initially created for utilitarian purposes, however unlike them, he cannot transcend his functionality in a transgressive backlash against his creator. David is a torn character, restricted by his programming and yet, despite that, he seems to have developed feelings of disappointment, even resentment, towards his creator¹¹⁷, also appearing to be the most theologically cynical character in the entire film. When discussing, with Holloway, the aim of the expedition and his collaborative thesis with Shaw, David presents a very personal philosophical question in retaliation to Holloways rather careless remark: "We made you 'cause we could." 118 David addresses his disappointment with his own creation, while making Holloway consider whether the reasons for his are equally frivolous and utilitarian. David does not seem to possess a "creature-consciousness" or feeling of inadequacy, in regards to humans, quite the contrary in fact. David knows that he is physically stronger and has higher cognitive capabilities than humans, and therefore has a sense of superiority over his creators, which is suppressed by the laws of his programming.

Holloway: "They're making you guys pretty close huh?"

David: "Not to close I hope." 120

The aversion for human limitation shown by David here echoes Brother Cavil's monologue in the *BSG* episode *No Exit* ¹²¹, in which he declares; "I don't want to be human![...] I'm a machine! And I can know much more! I can experience so much more. But I'm trapped in this absurd body!" Weyland Industries state that "it has long been

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At one point David remarks: "Doesn't everyone want their parents dead?" referring to his 'father' Peter Weyland. Scott, *Prometheus* [2012]

¹¹⁸ Ibid.

¹¹⁹ Otto [1950] p.10

¹²⁰ Scott, Prometheus [2012]

¹²¹ Moore [2004] Season 4 Episode 15

Brother Cavil: "I saw a star explode and send out the building blocks of the Universe. Other stars, other planets and eventually other life. A supernova! Creation itself! I was there. I wanted to see it and be part of the moment. And you know how I perceived one of the most glorious events in

[their] goal to create artificial intelligence, almost indistinguishable from mankind itself." David successfully mimics human semblance and behaviour, so as to make "it easier for [his] human counterparts to interact" In the *Prometheus* world, the Engineers created the human race from their very own DNA, a mutation of their genetic make-up that consequently gave man a similar physicality to them, which fits neatly with the Judeo-Christian belief that man was made in God's image. References to the Judeo-Christian beliefs occur throughout the film, such as the crucifix that Shaw wears around her neck, labeliefs occur throughout the film, such as the crucifix that Shaw wears around her neck, allowing us to address the *imago dei* once again. The ladder of created co-creators descends from Engineers, to humans (made in the Engineers image), to humanoid robots, like David (made in the human image). The basis for David's humanoid appearance is said to be ease of integration and acceptance, however, it could be argued that Weyland is acting out his own creationist fantasies by constructing a life form such as this. It is perfectly logical that the creations in all of the three major case studies in this paper are humanoid; as God made man in His image, surely man, as 'gods', should do the same.

3.6 Unpredictable Emergence

One of the common links throughout the texts presented in this dissertation is the unexpected growth of a non-material element that is emergent of conscious being. The Creature, the Cylons and David all express sentience and emotion, which suggest the unprecedented development of inherently human qualities in non-human entities. Emotion, morality, and theology, are all concepts which, so far, are considered uniquely human.

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the universe? With these ridiculous gelatinous orbs in my skull! With eyes designed to perceive only a tiny fraction of the EM spectrum. With ears designed only to hear vibrations in the air. I don't want to be human! I want to see gamma rays! I want to hear X-rays! And I want to - I want to smell dark matter! Do you see the absurdity of what I am? I can't even express these things properly because I have to - I have to conceptualize complex ideas in this stupid limiting spoken language! But I know I want to reach out with something other than these prehensile paws! And feel the wind of a supernova flowing over me! I'm a machine! And I can know much more! I can experience so much more. But I'm trapped in this absurd body!"

¹²³ Scott, Prometheus Special Features [2012] The David 8

¹²⁴ Ibid.

¹²⁵ In the directors commentary, of the *Prometheus* Special Edition Blu-ray, Ridley Scott mentions an idea that was discussed during pre-production of the film but cut before filming began which gave the reason for the Engineers intended destruction of mankind 2000 years ago as the crucifixion of Jesus Christ. It is unclear whether they meant for Jesus to have been an Engineer or whether they simply could not allow their creation to continue after they had witnessed the dark side of humanity. The idea was rejected for being too 'on-the-nose'.

Frankenstein, BSG and Prometheus all suggest that these characteristics should not be linked to humanity, but to consciousness, and self-awareness, and that even 'artificially' created life must include such elements to be considered life.

"How is there a law that states, if we build a man from wires and metal, a man who will never grow old, who will never feel the heat of a star, or the cold of the moon. How is the creation of such an incredible individual considered unnatural?"

- Peter Weyland

Weyland is aware, just as David is, that despite lacking certain uniquely human characteristics, his humanoid robots, for whom he claims responsibility as their selfprofessed creator, are a superior race to man. During the mission briefing scene, the crew of the Prometheus are shown a holographic presentation supposedly recorded of Peter Weyland a few years earlier, in which he welcomes them all and introduces them to David, fondly referring to him as "the closest thing to a son [he] will ever have." The suggestion that Weyland is a benevolent creator is suddenly contradicted by the proclamation that the "one thing that David will never have [is] a soul." Weyland reveals a conflicted ideology here; on the one hand he is apparently a vitalist, expressing belief in a non-material element to life (the soul), while at the same time denying the possibility that such a 'vital factor' could emerge within the 'life' that he is so proud to have been the creator of. He claims to be a god based on his creative accomplishments, but overlooks the possibility of transcendence or emergent phenomena within his creations, viewing them more as a scientific materialist would a robot. He seems to be conflicted; an inventor on one hand, a god on the other. In a deleted scene, Peter Weyland is asked why he wants to live forever by the last remaining Engineer, whom David is able to translate using a combination of ancient earthly languages. Weyland proceeds to explain how he made David in his own image, and claims that he, like the Engineers, is a god, and that gods don't die. The engineer proceeds to tear David's head from his shoulders and bludgeon Weyland to death with it. Scott discusses the subtext to this scene in his director's commentary, explaining that the Engineer recognized David as a man-made life-form, and therefore, a lesser life form. "Maybe he was insulted that a non-human was talking to

¹²⁶ Scott, *Prometheus* [2012]

him." There are multiple layers of 'created co-creator's in *Prometheus*, who each have their own theological view and who share between them different relationship dynamics. Just as the attitudes of the various creations are different towards their respective creators in the case studies throughout this paper; Frankenstein's Creature hated him while still craving his affection, some Cylons despised human-kind, repeatedly expressed intentions of genocide, while others mated with them in an attempt to become more human, and although David is programmed to remain obedient, he appears to abhor humans, using them as involuntary test subjects and also voicing an eagerness to see his creator, Weyland, dead. Each example of a man made creation that I have analysed has been more powerful, both physically and mentally, than it's creator, and while some of them idolize their maker regardless of this fact, others look down upon them as inferior, with a reverse "creature-consciousness" 128. These texts are suggesting that if man ever does uncover the mystery of scientific creation of sentient life, while they might consider themselves gods, it should not be, by any means, assumed that their creation will. The dystopian creation of a transgressive humanoid life-form that is more powerful than man, may not only be science-fictions way of warning us about the troubles of 'playing God' and creating new life, but also heralding caution of the transhuman 129 future, where man will biologically integrate technology into itself to become something more. However, a detailed discussion of the transhuman ideology and science fiction is beyond the scope of this paper.

3.7 Conclusion

Prometheus tackles themes of creation, theology and origin, in a very unique way by placing man in the dual positions of creation and creator simultaneously. It questions the form of God, putting forth the concept that God is a relative term referring to a creator or source of life. Peter Weyland and the android, David, show opposing opinions as to the theological implications of creation; with Weyland considering himself a materialistic god for his creation of the robot, while the seemingly atheistic David, acknowledges his creator, but through an apathetic haze. David is the most 'robotic' of all the examples studied in this paper so far, but even he shows signs of sentience. He claims to understand

Scott, *Prometheus* [2012] *Director's Commentary* Otto [1950] p.10
 Moore [1998]

human emotion without feeling it, however, seeing as emotion is, essentially, pure 'feeling' and often illogical, this seems to be a paradoxical statement. While his creator Weyland is a vitalist in regards to the human soul, he views his non-human creation as nothing more than a machine; despite this, we see fleeting moments where David exhibits feelings such as disappointment which suggest awareness, sentience and, arguably, the 'vital factor'. David gives an idiosyncratic stance on the humans' situation in *Prometheus*; where they are seeking to meet their makers, he has already known his, and does not seem to be impressed. David does not seem to have a "creature consciousness" in light of man or Engineers, while the humans express both fear and awe in the face of their creators, bringing Rudolf Otto's descriptions of experiencing the holy back to mind. It has been confirmed that David was intentionally created to have loose moral restrictions, but it is still unclear as to how immoral his nature is, and how much of the time he is merely following immoral instructions. Weyland is a character with ruthless ambition and questionable ethics; perhaps he designed David not only in his image (continuing the inherited imago dei of so many sentient creations throughout science fiction; including man, by either the Engineers or God) but also in his character. David, however, appears to be aware of his own superiority over humans, both intellectually and physically, expressing a distaste for humanity's limitations which echoes that of the humanoid Cylon Number One, Brother Cavil. *Prometheus* more so than *Frankenstein* or *BSG*, addresses the layers of created co-creators and their views of each other, placing humanity as the weakest between our giant, technologically advanced creators (the Engineers), and our durable and cunning creation (David); as it wouldn't make for a very thrilling movie if man was the most powerful being in the room.

Conclusion

By analysing three texts in which man 'plays God' by creating a new life-form, by means of technology and knowledge as opposed to procreation, this dissertation has observed the theological implications associated with the varying creator/creation dynamics in science fiction. In Frankenstein, Battlestar Galactica and Prometheus, we can observe man usurping the creative powers of God by designing intelligent life in their own image. The medium of science fiction has always been used to discuss issues of current public concern by speculating dystopian worlds facing exaggerated versions of these issues. As modern science advances in fields that explore the design and creation of new biological and technological life; such as genetic engineering, artificial insemination, synthetic biology, biorobotics and artificial intelligence, there are developing ethical concerns as to the implications and repercussions of interfering with nature and 'playing God'. The case studies in this paper act as cautionary tales in reaction to these concerns. One dichotomy that is dealt with consistently in these three stories is the conflict between scientific materialism and theistic vitalism. Victor Frankenstein, the colonials and Peter Weyland, each saw their respective creations as functioning, mechanical objects; and regardless of whether they themselves believed in a non-material 'vital factor' to life, they all failed to consider the possible emergence of such in those creations. Each story presents technologically created life as more than just artificial intelligence; for with self-awareness comes sentience, and it is through sentience that the 'vital factor' (the soul) seems to develop. Frankenstein and the colonials took the majority of their respective stories to acknowledge these unanticipated emotions in the Creature and the Cylons, while Peter Weyland does not seem to recognize them in David at all. Scientific materialism prevents the creator from realizing the unexpected phenomena that emerges through seemingly strict programming. Frankenstein and the colonials' ignorance and neglect of a nonmaterial factor in their creations are directly responsible for the resulting transgressive behaviour. Multiple instances in all three texts show the respective technological creations with what are considered inherently human qualities; an explicit example being the humanoid Cylon Brother Cavil showing symptoms of Sibling rivalry and abandoned child syndrome. All three texts also address man as a source of new life, and their various failures, as creators, to acknowledge the parameters of what life is. There are themes of religion throughout Frankenstein, BSG and Prometheus, showing creators and creations

with varying faith structures. All three however, present a creation with a different religious ideology to their creator; Frankenstein seems to be fundamentally a scientific materialist while his Creature expresses belief in a 'spirit', the Cylons are monotheistic while the colonials are polytheistic, and where Weyland speaks about the soul, David is coldly atheistic 130. This would suggest that existential ideology and religious faith are not inherited but personally developed by the individual. The fact that in each case the creation has a different opinion to the creator could even suggest a conscious distancing on their part. The creations in each text are more cognitively and physically superior to their human creators and show differing levels of aversion to humanity. Certain Cylons admire man, while others share David and the Creature's distaste for them. Science fiction speculates that man 'playing God' as creator will leave him with an elevated ego and even a literal God complex (as in Weyland's case), but the creations in all three texts do not view them with the same grandeur; theologically seeing them as 'created co-creators' in an on-going lineage of creative beings. The discussion of *Prometheus* finishes this dissertation off with the notion of God as a relative concept for one's creator, perhaps insinuating that the creative blood-line is not traceable back to God, but is infinite, with each creator being God to its own respective creation.

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¹³⁰ As Weyland is dying, he utters: "There is nothing" (assumedly referring to an after-life), to which David replies "I know", suggesting that he does not believe in the idea of a soul

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