Beholding the Uncanny: Replicants, Cyborgs and Clones in Science Fiction

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Abstract
The portrayal of artificially produced organisms in the works of science fiction dates back to the origins of the genre. These works have envisioned societies confronting the ‘other’ in the form of organisms that are ‘not of woman born.’ Whether in the form of cyborgs or clones, these characters often upset the balance of their societies, causing havoc and inviting scorn and misunderstanding. Ostensibly these works can be read as cautionary tales about the excesses of technological hubris in the face of modernity. However, the real focus of these works is not on the replicants and cyborgs, but on the fictional societies that spawn these creations, and by extension, the factual societies in which the authors were writing their stories. These works disconcert and inform their audiences, forcing the audience’s revaluation of its own prejudices against those they see as separate from themselves.

Key Words: Science Fiction, Clone, Android, Alternative Reproduction.

1. Introduction
Science fiction operates as a form of modern myth in our technological culture. An examination of books on artificial reproduction reveals the underlying concerns of the authors and directors. Individuals who invoke the names of works such as Frankenstein and Brave New World reference the myths, not the actual stories. Although these works comment on the power of science and technology in a society, this does not represent the primary critique offered by either author. For both authors, the idea of technology without regulation and without regard for human dignity outweighed concerns about just technology per se.

An examination of films finds that their critique of science impugns the morals of the scientists and industrialists who develop genetic engineering and cloning for selfish purposes, not the offspring of modern biotechnology. Rather than be alarmed by the creation, these films direct the audience to fear the creators of these non-traditional offspring. In holding a mirror up to our own society, these films say we should not use this
alternative forms of reproduction; not because of the destructive nature of the new offspring, but because of our potentially destructive nature.

2. **Frankenstein: Tension between Science and the Natural Order**

*Frankenstein* stands at a crossroads, bridging the gap between the two literary genres of romanticism (especially the gothic) and science fiction. While romanticism dealt with nature and conditions of natural society, writers conceived science fiction as a response to the rapid developments in science and technology brought about by the Industrial Revolution in late eighteenth-century Europe. This bridging function becomes evident in the way the novel deals with the subject of the reanimation of the dead set against the role of family. This tension between familial duty and scientific inquiry represents the primary theme of the novel.

The Industrial Revolution served as the most significant change affecting society when Shelley wrote *Frankenstein*.¹ Beginning in Britain and still in its infancy in 1818, the Industrial Revolution rapidly transformed manufacturing processes and the production of material goods. Machinery starting producing traditionally handcrafted items as the early stages of semi-automation began. A subsequent dependence of workers on the scientific processes and technological products became an integral part of society.

Shelley’s novel serves as a critique of man’s changing interaction with nature through scientific methods not as an indictment of science itself:

The myth of Frankenstein registers the anxieties of the period inaugurated in the twin social and industrial revolutions in France and Britain. […] The myth which [sic] develops out of it turns repeatedly upon these new problems of an age in which humanity seize responsibility for re-creating the world, for violently reshaping its natural environment and its inherited social and political forms, for remaking itself.²

*Frankenstein* portrays the tension between the old and the new—the early modern and the modern—and has become the rallying cry for those who believe technologies impinge upon society’s stability. Instead of just re-creating the world, science stands on the brink of re-creating the human.

At first glance, the novel does indeed seem to be solely about the foibles of scientific research that pushes the boundaries of knowledge. At an early age, the protagonist Victor Frankenstein becomes enamoured of the works of physicians and scientists of the Middle Ages. However, after witnessing the effects of a lightning strike on a tree, Victor stops examining the works of the past and enrolls in the University of Ingolstadt to study. This
transition from the old to the modern as the focus of Victor’s studies proves pivotal, as it sets him on his way to explore the possibility of reanimating dead flesh by applying the scientific method to his studies.

While ultimately successful in his quest to reanimate life, Victor expresses moral repulsion for the Creature’s physical hideousness. Victor runs away from his laboratory, hoping to distance himself from the hideous creature. In abandoning his offspring, Victor sets the events of the novel in motion: the work demonstrates the necessity of parental responsibility and familial relations, not the destructive power of science.

Victor’s rejection of his ‘son’ forces the Creature to leave and experience the world alone. Because he inspires almost universal repulsion, the Creature hides from others, teaching himself how to speak through the reading of books, including *Plutarch’s Lives* and *Paradise Lost*. Milton’s work, in a fashion similar to *Frankenstein*, tells the story about a new type of offspring (Adam) and his relationship with his father, God. However, while God punishes Adam for his transgressions and casts him out from the Garden of Eden, Victor casts the Creature out for simply existing.

*Frankenstein*’s subtitle *The Modern Prometheus* alludes to the myth of Prometheus and his punishment for the theft of fire and the creation of the human race. Unlike Prometheus, punished for his transgressions by the gods, Victor receives retribution from his offspring, not for his act itself but for his subsequent behaviour. Through this portrayal, Shelley offers a critique of science without responsibility and without governance. Victor’s reluctance in acknowledging his paternal responsibilities to the Creature infuriates the Creature and starts him on his homicidal spree.

3. **Brave New World: The Imperative of Societal Control**

If *Frankenstein* serves as a tale that warns of science without supervision or boundaries, then *Brave New World* demonstrates what happens when society regulates everything. Written in 1932, the novel depicts a future society of the 26th century in which the state manufactures everything (including people), thus embracing the ideals of mass production in Huxley’s own time (the industrialist Henry Ford functions as the deity for the populace of the World State). With the Bokanovsky’s Process, a procedure through which fertilized embryos divide multiple times, humans create babies in identical batches. Humans developing in large batches leads to uniformity, eliminating differences which could result in prejudice or hatred, all impediments to the society’s foremost goal: stability.

With the creation of humans in the laboratory, the traditional family no longer exists. Children grow up in public crèches, separated according to their class and function. The World State now considers words such as ‘mother’ and ‘love’ offensive, and forbids any sort of long-term human relationships. The State entertains its citizens through its own form of bread
and circuses, including feelies, mildly pornographic films that stimulate all the senses, and *soma*, a drug dispensed freely to the populace to keep them happy. Art and literature no longer exist because their contents made people uneasy and unhappy, and even science produces only applied technologies.

The protagonist of the book, John the Savage, lives with his mother on a New Mexico reservation, the result of an ‘unnatural’ conception and birth. Like the Creature, the Savage has educated himself through the works of Shakespeare (the title of Huxley’s work comes from a passage in the *Tempest*). Brought back to the World State, the Savage displays naivety when it comes to the norms and values of his new society. Initially fascinated with what he sees, the Savage eventually becomes disillusioned and despondent. Although the population remains happy through use of conditioning and drugs, the Savage, aware of life outside the World State, cannot accept the rigid order placed on life.

Near the end of the novel, the Savage talks with the World Controller Mustapha Mond about the reasons for society’s current state. Mond explains to him that after last war, the survivors decided that such an event could never take place again. Thus, the state must take it upon itself to provide order for its inhabitants. A well ordered society precluded future conflicts by eliminating anything unnecessary, including art. “But that’s the price we have to pay for stability,” Mond tells the Savage. “You’ve got to choose between happiness and what people used to call high art. We’ve sacrificed the high art.”

Thus, this artificial dichotomy depicts the core of Huxley’s critique:

Through their [the Savage and Mond] conversation, Huxley focuses on the central problem that *Brave New World* is set up to explore: the extent to which happiness must necessarily exclude freedom and to which freedom must include unhappiness. The new world civilization is predicated on the conviction that happiness and freedom are mutually exclusive and that happiness is the greater good.

Like Shelley before him, Huxley examines society’s use of science and technology but does not condemn them outright. Rather, Huxley depicts a society embracing technology while casting aside other social endeavours, especially the drive for creativity. While order may be necessary to a certain extent in society, personal expression, be it through art, literature, or even the love of another person through social bonds, make us uniquely human and become necessary for us to retain our humanity. Science is not bad; but a society that only focuses on science to the exclusion of all other accomplishments becomes wretched.
4. **Blade Runner: Defining the Human**

Ridley Scott’s 1982 film *Blade Runner*—based on Philip K. Dick’s 1968 novel *Do Androids Dream of Electric Sheep?*—offers the audience a nuanced examination of the theme of how society defines humanity. In the future the Earth has become highly polluted, almost all natural animals have died, and most of Earth’s population has left for space colonies. Replicants, artificial humans constructed by corporations, live only on the off-world colonies performing tasks too menial for humans. While physically similar to humans (but with increased strength), the replicants display limited emotions. Only the results of a Voight-Kampff test, which measures emotional and physical responses, can differentiate between humans and replicants.

This inability to differentiate humans from more evolved replicants symbolizes the failure of humans to maintain control over technology. Just as humans in *Blade Runner*’s alternate future have laid waste to their cities with nuclear weapons, humans now lose their ability to identify the replicants they built to serve them. The replicants’ revolt also demonstrates this fear: losing control of a creation and having it run amok, similar to what the Creature does in *Frankenstein*.

The story focuses on Rick Deckard, a police officer sanctioned to ‘retire’ replicants who have returned to Earth. In his pursuit of a group of five replicants, Deckard starts to examine his own motivations and questions the biological and cultural divide between humans and replicants. Part of his inquisitiveness results from his meeting with the replicant Rachel, the niece of the owner of the Tyrell Corporation, one of the largest manufacturers of replicants. She ‘fails’ the Voight-Kampff test, but only after Deckard administers more than twice the standard number of questions.

Rachel confronts Deckard, offering a photo of herself as proof of her human heritage. Deckard reveals his knowledge of events she has told no one previously, proving her artificial back-story. The news devastates them: if technology can construct memories, then it can construct objects that serve as memory devices, such as photos. Blurring the clean division between natural and artificial life forces the characters, and the audience, to re-examine their own definitions of what it means to be human, and focus on similarities rather than differences.

This blurring of the human/non-human, natural/artificial boundaries established by reproductive technology raises another fear. If we cannot trust our memories or photos we have of ourselves, than how can we know who or what we truly are? However, this portrays the very point of Tyrell’s work. As Tyrell says, his business creates replicants ‘more human than human.’

The final distinction between the two groups, humans and replicants, dissolves at the climax of the film when Batty saves Deckard from falling off a building, preserving his life. The gesture becomes especially poignant because it occurs moments before Batty dies because of his pre-programmed
lifespan. Batty has exhibited empathy towards another living creature, becoming more human than those who pursued him do.

Like the Creature from *Frankenstein*, Batty has sought his maker, and in doing so, has come to realize the value of life. However, unlike Shelley’s creation, Batty has this realization before he dies, saving the life of the man bent on his destruction:

> Because the film focuses so intensely on Batty’s figurative reaching out for life, his literal and inexplicable reaching out to save Deckard becomes highly symbolized gesture that transforms this monster into the truly tragic romantic figure that Shelley’s Monster never becomes.8

*Blade Runner* questions our notions of humanity by making the replicants of the film appear lifelike, while at the same time bringing into question the real nature of life. Once replicants gain the ability to empathize then they deserve equal treatment: not as slaves, but as individuals. The society that manufacturers and enslaves these naïve creatures becomes guilty of heinous crimes, more problematic than the crimes committed by replicants trying to escape their forced captivity.

5. **GATTACA: Genetic Essentialism and Undue Expectations**

Instead of depicting a world with replicants, a world where manipulation of humans has become the norm provides the scenario for Andrew Niccol’s 1997 film *GATTACA*.9 In the not so distant future, humans have nearly perfected genetic engineering, allowing couples to select desirable traits for their offspring, rather than leaving the process to chance. This process creates ‘natural’ children, the old process of reproduction now labelled unnatural. Society has labelled these individuals conceived without the benefit of genetic engineering ‘faith births’ or de-gene-erants. Though officially illegal, genoism—discrimination against individuals based on their genetic make-up—exists, in both hiring practices and daily life.

In the society of *GATTACA*, genes predicate the life of all children regardless of their method of birth. Genetic tests indicate mental, physical, and emotional deficiencies, often limiting the choices afforded to children as they grow. The analysis of DNA charts everything about a person including their probable cause of death. Invariably, this knowledge ‘seems to dampen human initiative, while living up to one’s technologically determined potential can also be daunting.’10 The society in *GATTACA* embraces genetic determinism and eugenics taken to an extreme.

Updating the eugenics movement, the world of *GATTACA* relies on advanced technology rather than selective breeding to create better offspring.
The film, however, depicts those created through this alternative technology the ones society rewards and values rather than those conceived through traditional methods. Members of this society have divided into two classes, with the genetically inferior subject to harassment, prejudice, and regulation. The film introduces the audience to one of these faith babies, Vincent Freeman, who dreams of becoming a flight engineer for the corporation Gattaca. At birth, Vincent’s parents received the news that he had a 99% chance of dying young due to an abnormal heart. His parents have treated Vincent like an invalid, though he does not exhibit any physical limitations. Not wishing to tempt fate twice, Vincent’s parents create his brother Anton ‘naturally.’ He becomes Vincent’s physical, but not necessarily his intellectual, superior.

Unable to find work, and not appreciated by his parents as much as his sibling, Vincent strikes out on his own. Frustrated by his inability to get a non-menial job (he works as a janitor at Gattaca), Vincent decides to buy the identity of a genetically ideal individual, Jerome Eugene Morrow. Because of the nature of this society, genetic profiles have become the most precious commodity. Utilizing Jerome’s bodily fluids and clippings (hair, blood, urine, etc.), Vincent takes on the name and identity of Jerome (while Jerome now only uses his middle name, Eugene) and gains employment at Gattaca, this time as an engineer rather than a janitor.

In a society that places so much faith in technology, people trust readouts of DNA rather than believe in their senses. They have become myopic because they trust the results provided by technology without question, believing machines infallible. However, trust in humans rather than in technology remains the key to improving the race because superior genes do not necessitate superior morality. The filmmakers depict the use of technology in improving the species as unproblematic:

Unlike most bioethics texts that discuss gene therapy, however, GATTACA maintains that many of the problems associated with the new eugenics, such as genetic discrimination, genetic prophecy, and the homogenization of society, are not due to the technology itself. Rather, GATTACA proposes that these problems will only arise if the belief that individuals are no more than the sum of their genes becomes a matter of consensus: a black box.11

There is nothing wrong with seeking to improve the physical attributes of individuals as long as we seek to improve the emotional ones. Engineered humans might be physically superior but they suffer from the same emotional weaknesses that their predecessors did, including discrimination. Enhancement needs to be as much about the spirit as about the body.
6. Conclusion

*Frankenstein* and *Brave New World* deal with the loss of humanity through the auspices of technology. In *Frankenstein*, Victor exhibited moral failure, not because he created the Creature, but because he abandoned his responsibilities for his creation. While we identify with the society portrayed in the book, we also identify with the Creature, an orphan of early-modern society who must educate himself and rise above his ‘humble beginnings.’ In *Brave New World*, the situation reverses, with John the Savage taking on the role of the Creature. John mirrors the horror we feel for the society he has been introduced into. Huxley condemns this society not for its use of technology but for its worship of it in place of all other human endeavours. The films share many of these themes, depicting the effects of an over-reliance on technology and the subsequent marginalization of those who fall into socially constructed categories of the undesirable. The creation of individuals through artificial means alters the way society conceives of reproduction, the creation of life, and defines the natural. Conversely, even as technology shapes society, members of society remain accountable for the effects of technology. Scientists cannot ignore the repercussions of a technology, dismissing the effects as someone else’s problem. Just as they worry about how their new offspring will act towards them, members of society must appreciate the way they will react to their discoveries.

Notes

4. ibid, p. 220.

Bibliography


Michael J. Klein is an assistant professor of Writing, Rhetoric & Technical Communication at James Madison University, Virginia, USA.
Michael J. Klein’s chapter “Beholding the Uncanny: Replicants, Cyborgs and Clones in Science Fiction” deals with the role of artificially produced organism entities in the science fiction genre and the stance of the readers to this cyber-race. David Lindsay, Melissa de Zwart and Francesca Collins present “My Self, My Avatar, My Rights: Rights of Avatar Identity and Integrity in Virtual Worlds,” “Beholding the Uncanny: Replicants, Cyborgs and Clones in Science Fiction.” MJ Klein. Humanity in Cybernetic Environments, 2009. 3. 2009. Beyond Black on White: Document Design and Formatting in the Writing Classroom. MJ Klein, KL Shackelford. Writing Spaces: Readings on Writing, 2011. Incorporating Science Fiction into a Scientific Rhetoric Course. MJ Klein. Practicing science fiction: critical essays on writing, reading and teaching, 2010. 2010. The system can’t perform the operation now. Scientific American is the essential guide to the most awe-inspiring advances in science and technology, explaining how they change our understanding of the world and shape our lives. Today, the “uncanny valley” phenomenon remains almost as mysterious as when Japanese roboticist Masahiro Mori first coined the term in 1970. But scientists have begun venturing deeper into the metaphorical valley to better understand why robots or virtual characters with certain human characteristics can trigger such mental uneasiness. That understanding may prove crucial as humanlike robots or virtual companions enter homes and businesses in coming years. Whether in the form of cyborgs or clones, these characters often upset the balance of their societies, causing havoc and inviting scorn and misunderstanding. Ostensibly these works can be read as cautionary tales about the excesses of technological hubris in the face of modernity. However, the real focus of these works is not on the replicants and cyborgs, but on the fictional societies that spawn these creations, and by extension, the factual societies in which the authors were writing their stories. An examination of films finds that their critique of science impugns the morals of the scientists and industrialists who develop genetic engineering and cloning for selfish purposes, not the offspring of modern biotechnology.