

## **Perils of Creation: Science and Technology in Mary Shelley's *Frankenstein***

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### **Abstract**

*This article explores the ethical and moral implications of scientific discovery in Mary Shelley's *Frankenstein* (1818), focusing on the destructive potential of unregulated ambition. Through Victor Frankenstein, the first modern scientist, the narrative captures the moral void of creation. He gives life to a being and yet pays no thought to the moral obligations of care. The absence of responsibility and rejection culminate in destruction. The pain of knowledge, when coupled with an absence of compassion, manifests as tragedy.*

*This article addresses the ethical void in the scientific endeavours portrayed in *Frankenstein* and links Shelley's caution to the present-day scenario with artificial intelligence, high-end biotechnology, and genetic engineering. The essence of Shelley's caution demonstrates the contemporary need to guide scientific pursuits with compassion, ethics, and responsibility. The article demonstrates Shelley's prophetic awareness of the perils of science lacking empathy, illustrating how her caution is relevant to the ethical challenges of the twenty-first century.*

**Keywords:** ambition, creation, responsibility, ethics, science, destruction, technology.

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## Introduction

One of the most influential nineteenth-century novels, Mary Shelley's *Frankenstein* combines elements of Gothic horror, science fiction, and philosophical reflection and was published anonymously in 1818, when Shelley was only eighteen. Set during a time of rapid scientific advancement and social change, when new experiments in galvanism, anatomy, and chemistry and debates about life and creation were stirring, Shelley's novel addresses the implications of pushing natural boundaries too far, as Goulding observes, "The scientific experiments of the early nineteenth century blurred the boundaries between life and death in ways that deeply unsettled the public imagination" (258).

Shelley's narrative, therefore, becomes both a critique of enlightenment rationalism and a moral reflection on human responsibility in the face of scientific progress. Science was rapidly changing public imagination during Shelley's lifetime, and experiments like those of Luigi Galvani on animal electricity and Erasmus Darwin on spontaneous generation helped shape the novel, which confronted the implications of the notion that human beings might be able to control life itself, a notion that challenged established religious and moral limits. She was not afraid of science itself but rather its irresponsible application. In *Frankenstein*, she grapples with the possibility that the quest for knowledge might exist at the expense of human responsibility. As Susan J. Wolfson notes, "Frankenstein compels us to confront the ethics of creation and the responsibilities that follow acts of imaginative and scientific power" (10).

In 1818, Mary Shelley wrote *Frankenstein*, a Gothic novel about a young scientist named Victor Frankenstein from Geneva who studies chemistry and anatomy and ultimately manages to create a living being from dead body parts. When the Creature (not Frankenstein) is brought to life, Victor is disgusted by its hideous appearance and leaves it alone; the Creature, unable to fit in with humans, becomes sad and angry and kills Victor's younger brother William, his friend Clerval, and his wife Elizabeth on their wedding night. Hunted by the Creature, Victor pursues it over mountains and icy lands until he dies in the Arctic, and the Creature, who has come back after his death, full of remorse, kills himself.

## Literature Review:

Contemporary scholars such as Anne K. Mellor have argued that Shelley's novel challenges the "masculine model" of scientific knowledge that seeks control and domination over nature rather than harmony with it, and Victor's attempt to create life without female participation represents his rejection of natural processes that require female involvement: when women are removed from the act of creation, nature and ethics become unbalanced, resulting in chaos (Mellor 274-286). George Levine characterises *Frankenstein* as "a parable of the self-divided by its own intelligence", an illustration of how intellectual pride estranges humanity from moral feeling (3-30). Marilyn Butler views the novel as a romantic counter to enlightenment rationalism: science divorced from sympathy is alienating. These interpretations

deepen our understanding of Shelley's complex engagement with knowledge, power, and morality (10). This article explores the ethical and moral implications of scientific discovery in Mary Shelley's *Frankenstein*, examining how unchecked ambition and the pursuit of knowledge without responsibility lead to personal and social catastrophe.

### **Analysis and Discussion:**

#### **Scientific Ambition and the Birth of the Creature:**

At its heart, *Frankenstein* is a warning against unaccountable creation. The protagonist of the novel, Victor Frankenstein, exemplifies the spirit of Enlightenment science: he is obsessed with the "secrets of heaven and earth" and driven to understand the mysteries of generation or life itself and to defeat death by reanimating a body through the piecing together of body parts (22). However, when he actually creates the creature, his joyous moment of triumph becomes a moment of horror:

His limbs were in perpetual motion, so that he was unable to sit in a reposeful posture for any length of time. His yellow skin scarcely covered the work of muscles and arteries beneath; and his hair was of the colour of brass, and clung to his temples. (42)

This description symbolises the breakdown of rational control, which is the point at which knowledge turns monstrous because it lacks moral direction. The moment that Victor describes his creation in disgust signals the end of reason and the beginning of the moral crisis. This moment of horror shows the profound irony of scientific ambition: the same action that reflects humanity's mastery of nature becomes the sign of its destruction. Victor's quest for knowledge echoes the myth of Prometheus, who stole fire from the gods to give to man and paid for his defiance with his life, as Shelley makes clear with her subtitle *The Modern Prometheus*. Victor's desire to exceed human limits reflects humankind's ongoing impulse to mastery, a mythic parallel that underscores Shelley's critique of Enlightenment faith in reason and invention and anticipates contemporary discussions about technology that seeks power without accountability.

Shelley's narrative tone shifts from wonder to warning, revealing the contrast between scientific pursuit and moral awareness. In this way, Victor's scientific pursuit embodies the intellectual optimism of the Enlightenment, a period that believed that human reason could unlock all the mysteries of the universe, but Shelley contrasts this optimism with the Romantic belief that emotion, morality, and imagination are just as important to human advancement as reason. Victor, who ignores the moral and social consequences of his experiment, is cut off from family, friends, and society, and loses his humanity in the pursuit of his goal, and Shelley reveals the moral failure at the centre of his scientific success; the novel is not only a caution against scientific hubris but also an exploration of the necessity for compassion in all acts of creation.

### **The Creature as a Mirror of Humanity**

Despite his creator's labelling him as a 'monster', Shelley makes clear that the creature is more human than his maker. The creature starts life as an innocent, curious being who learns language, observes human relations, develops empathy, and understands love, kindness, and community from the De Lacey family. The creature most wants to be accepted, so he decides to approach the old, blind man, thinking that because the man is blind, he would not judge the creature by his appearance. When the other family members return and see the creature, however, they react with fear and violence, and the creature's hope for friendship becomes despair. When he saves the life of a drowning girl and is shot by her father, he cries, "I was benevolent and good; misery made me a fiend. Make me happy, and I shall again be virtuous" (78).

Here, Shelley humanises the creature and makes him the moral centre of the novel, suggesting that monstrosity is created by society's prejudice rather than by nature. As a result of this and other experiences, he becomes filled with rage rather than benevolence. Shelley demonstrates that the monster is a product of social prejudice, not the product of inherent evil. Shelley presents a model of the moral development of the creature that presages contemporary psychological theories that behaviour is learnt rather than innate and that the creature is not driven by inner evil but by persistent rejection. This theme has contemporary resonance with social alienation brought about by technological development in which people might feel emotionally isolated even though they live in a highly connected digital age.

### **The Failure of Moral Responsibility**

In *Frankenstein*, Victor refuses to accept his moral responsibility to the life he has created, and his failure to do so is encapsulated in his words, "I rushed out of the room, unable to endure the aspect of the being I had created" (43). E. A. Waites argues, "Victor's abandonment of the Creature reflects a profound psychological disavowal of responsibility" (419). Shelley cautions that creators like scientists, parents, or artists must assume moral responsibility for their creations, and when they do not, destruction results: The creature kills William, Clerval, and Elizabeth, leaving Victor entirely alone, and Shelley demonstrates that knowledge without compassion only brings suffering. The deaths of those close to Victor serve as symbolic punishment for his moral blindness, reinforcing Shelley's argument that the creator's negligence is the true sin of the novel. Today, the awareness of moral limits is reflected in scientific institutions with ethical review boards, humane experimentation, and bioethics education, suggesting that Shelley influenced later thinking on these issues and that her cautionary message has taken hold in the scientific community.

The destruction of the female monster also reveals Victor's fear of female creativity and the processes of birth and regeneration, which Shelley uses to critique the erasure of women from the scientific narrative, a criticism that is still applicable in contemporary scientific settings, such as the gender bias against including

women in research projects in areas like genetic cloning and reproductive technologies.

### **Ethical Dilemmas and the Demand for a Female Companion**

The most poignant scene in the novel takes place when the creature demands a female companion, claiming that companionship will make him stop being violent: "I demand a creature of a different sex, but as horrible as myself; the gratification is small, but it is all that I can receive" (139). Victor at first concurs, but when he begins to create the new creature, he fears the results: "a race of devils would be produced upon earth" (160); he destroys the incomplete female, a sign that he is beginning to recognise moral responsibility, but too late: "I shall be with you on your wedding night" (163).

This event marks Victor's irreversible descent into moral chaos, showing that remorse without action cannot undo ethical failure, which is fulfilled when Elizabeth is killed. In this episode, Shelley shows the difficulty in making moral choices. Victor tries to take control of the results of his earlier error by destroying the female creature, but his actions without communication or compassion only compound the situation, and the novel implies that a responsible scientist would have had more empathy and understanding than Victor does. The tragedy of Victor is that his moral awareness arrives too late to avert the catastrophe.

### **The Consequences of Hubris**

The final scenes of the novel depict Victor chasing the creature across the Arctic tundra. What has driven him to create life has become an obsession with destruction, and, exhausted and near death, he cautions the following:

Seek happiness in tranquillity, and avoid ambition. Shelley uses Victor's dying words as a moral epilogue, turning the narrative into a timeless warning for future generations. even if it be only the apparently innocent one of distinguishing yourself in science and discoveries. (200)

When the creature discovers Victor dead, he laments:

I am miserable, I was not made for the use and purposes of others, to be trodden underfoot by them, and abused and maltreated as I have been, both by you, by those out of whose hands you received me, by that being to whom you have given me, and that murderer, whose villainous deeds I have abhorred since I had being to abhor. (210)

The deaths of the creator and the creature serve as the moral conclusion of the novel: unregulated scientific ambition is self-destructive.

### **Shelley's Warning in the Modern Context**

Shelley's message is not just for her historical period. In the early nineteenth century, she was speaking to concerns about galvanism, anatomical dissection, and the limits of human experimentation. In the twenty-first century, it has direct relevance to modern issues of artificial intelligence, genetic engineering, and

biotechnology, all of which are capable of producing new forms of life, even intelligent machines, and all of which raise similar ethical questions, such as 'What obligations do creators have to their creations?' How can humanity balance curiosity with caution? Shelley answered that question definitively: science itself is not evil, but it must be tempered by conscience. This timeless lesson makes *Frankenstein* a prophetic text for the twenty-first century, where the boundaries between human and machine are increasingly blurred.

### **Modern Relevance and Technological Allegory**

Victor and the Creature's relationship can also be interpreted as an allegory of modern technological dependency: if Victor can no longer control his creation, then human beings may no longer be able to control their inventions, whether it is artificial intelligence, automation, or digital surveillance. The creature exclaims, "I am your master; obey!" and this resonates with contemporary anxieties about machines becoming smarter than their creators. Shelley anticipated the dilemma of advancement: for every new invention that increases human power, there is a greater risk of losing control. Her warning is relevant today as artificial intelligence becomes capable of making autonomous decisions and bioengineering tools like CRISPR allow for the editing of human genes. Victor was ambitious in his desire to change nature, and Shelley reminds the modern world that the exercise of intellectual power must always be tempered by compassion, lest creation be lost to ethical direction. Shelley, however, recognises that each new age has its own version of a *Frankenstein* moment, when human invention outpaces moral reflection, and the novel, which continues to challenge each new generation to re-evaluate its ethical limits before they are crossed, is as relevant today as it was in Shelley's time.

### **Isolation and Emotional Disconnection**

Victor, in his quest for scientific glory, cuts himself off from his family and friends, and the creature is rejected by every human he encounters, suffering the same isolation and alienation that destroys empathy and morality in both Victor and the creature. Shelley, writing in the 19th century, warned against emotional disconnection, and this warning has a special resonance in the technological age we live in; the more we rely on machines, the more we risk losing compassion and human connection. These themes are deepened through Shelley's use of multiple narrators: Walton, Victor, and the creature. The framing of the story with Walton's letters implies that the pursuit of knowledge goes on after Victor's death; the embedded narratives make clear that every story, like every scientific discovery, has moral consequences, and the reader is included in this ethical reflection, being called upon to judge the actions of creator and creature.

### **Conclusion**

*Frankenstein* is a reflection on the ethical implications of knowledge: Victor's crime is not his creation of life but his inability to nurture it; the creature's suffering is not evidence of evil but of the suffering that results from neglect and prejudice;

and Shelley implies that the real monster is not the one stitched together from corpses but the human heart without compassion. *Frankenstein* is still relevant after 200 years because it reflects a timeless dilemma: the struggle between human innovation and human ethics. Each new invention, from robotics to genetic modification, brings the same questions raised by Shelley in 1818: Creation without compassion is destructive, and ambition without ethics is self-destructive. But science, when guided by humanity, can illuminate the world; when driven by pride, it can destroy it. Mary Shelley's *Frankenstein* endures as a moral compass for the modern world, reminding us that scientific progress must always walk hand in hand with ethical responsibility.

### Works Cited

- Butler, Marilyn. *Introduction. Frankenstein*, by Mary Shelley, Oxford World's Classics, Oxford University Press, 1994.
- Goulding, C. "The Real Doctor Frankenstein." *Journal of the Royal Society of Medicine*, vol. 95, no. 5, 2002, pp. 257-259.
- Levine, George. "The Ambiguous Heritage of Frankenstein." *The Endurance of Frankenstein: Essays on Mary Shelley's Novel*, edited by George Levine and U.C. Knoepfelmacher, University of California Press, 1979
- Mellor, Anne K. "Possessing Nature: The Female in *Frankenstein*." *Frankenstein: The 1818 Text, Second Norton Critical Edition*, edited by J. Paul Hunter, W.W. Norton & Company, 1996.
- Shelley, Mary. *Frankenstein; or, The Modern Prometheus*. Edited by J. Paul Hunter, W. W. Norton & Company, 1966.
- Waites, E. A. "Mary Shelley as Frankenstein." *Psychoanalytic Review*, vol. 78, no. 3, 1991, pp. 419-438.
- Wolfson, Susan. J. "Introduction: Frankenstein, Race and Ethics." *The Keats-Shelley Review*, vol. 34, no. 1, 2020.