

Trabajo Fin de Grado

"The Sleep of Reason Produces Monsters": Questioning the Dualism Reason/Nature in Mary Shelley's *Frankenstein*

Autora

Beatriz Soto Paciencia

Directora

Bárbara Arizti Martín

Facultad de Filosofía y Letras Año 2022-2023

Abstract

Mary Shelley's *Frankenstein* has worked as a cautionary tale for more than two hundred years. Since its first publication at the beginning of the nineteenth century, the novel has been highly influential and many researchers have studied the text in depth. This dissertation discusses scientific responsibility and the dangers of unethical practices in science while analyzing the relationship between reason and nature present in the novel. Although this dualism has traditionally favored reason (humanity) over nature, Shelley's story questions it by highlighting the importance of nature and pointing at the flaws of an ambitious mind, like Frankenstein's. Ultimately, this dissertation proves that the novel defends a more equitable relationship between the two while criticizing the lack of balance of his main character.

Table of Contents

Introduction	4
Questioning Dualism in Frankenstein	9
Conclusion	21
Works Cited	23

I. Introduction

Frankenstein; or, The Modern Prometheus was written by Mary Shelley when she was just 19 years old. During a stormy summer in Geneva in 1816, Mary and her future husband, the poet Percy Shelley, used to spend the nights talking about science and telling ghost stories in the company of Lord Byron and John William Polidori. One night "they seem to have dared each other to write their own ghost stories" (Groom, 2018). These conversations along with a nightmare Mary Shelley claimed she had around that time, inspired her to write Frankenstein (Groom, 2018). The first version of the novel was finally published in 1818. Since then, a lot has been written about it and Shelley's monster has become extremely popular in western culture, not just because of her novel, but because of many retellings of the story in different media (Groom, 2018). The popularity of the creature she once imagined is such that the novel is often alluded to in different fields of contemporary society. As Nick Groom points out in his introduction to the text: "Dr Christiaan Barnard himself described the first human heart transplant in 1967 as a Frankenstein experiment" (Groom, 2018). It is actually the scientific field, in which Shelley's novel resonates most strongly. Not just because it is "the definitive modern parable of the dangers of scientific and technological progress", but because it is invoked in practically any debate regarding scientists allegedly "playing God" (Groom, 2018). Frankenstein can be considered, therefore, "a warning from the past on abuse of power in the future" (Groom, 2018). Although the role of ethics in science is one of the most studied interpretations of the novel, this dissertation aims to analyze Shelley's text from a less visited point of view, focusing on the dualism reason/nature and how it is questioned throughout the novel.

In the last century, scientific knowledge and its application through technology have progressed at an amazing speed. However, there are questions that only time can answer and it seems that we are too impatient to wait for them. Scientific discoveries can be very positive for humankind, but only if they are applied responsibly. It is important, therefore, to be cautious and think beforehand about the possible consequences that a new technology may carry along. As scientist Stephany J. Bird stated in one of her articles: "researchers have a responsibility not only to oppose the misuse of their work, but further, to attend to its foreseeable societal impacts" (as cited in Nagy et al., 2020, p.754). This is linked to what is known as "the Frankenstein Myth", a myth that takes its name from Mary Shelly's novel, which deals precisely with the dangers of "unchecked ambition and humanity's tendency to play with forces beyond our control" (Nagy et. al., 2020, p.738). This essay, therefore, is going to explore the dangers of carrying out scientific projects in an irresponsible way, approaching *Frankenstein; or, the Modern Prometheus* (Shelley, 1818) as a cautionary tale.

The choice of Shelley's novel to discuss science ethics is perfect, since *Frankenstein* has become a ubiquitous tale in Western culture and most people are familiar with the story and its creature. Since the text was published at the beginning of the nineteenth century, a lot has been said about Frankenstein's monster. Some researchers have even compared the creature, a being perfectly capable of learning and experiencing human emotions, with a kind of Artificial Intelligence (Byrd & Paquette, 2021, p.340). For this reason and the fact that we live in a world where technology develops so fast and AI is a reality, Shelley's novel is more relevant and contemporary than ever.

At the time Shelley published *Frankenstein*, a lot was already happening in the scientific field that could be considered unethical. As Nick Groom explains in his introduction to the novel, animal vivisection was very common then and transplantation was being seriously investigated by many scientists. Tooth transplants were actually a reality and sometimes teeth were forcibly removed from servants, just to give an example (Groom, 2018). He also mentions cross-species inoculations and Jenner's research on the spread of cowpox infection at the end of the eighteenth century. According to Groom "deliberately infecting human subjects with animal diseases was highly controversial, even if it resulted in immunity" (Groom, 2018). The ethics of some of these practices are still disputed in the twenty-first century, and as happens in Shelley's novel some researchers question the way in which new technologies are used.

Although this dissertation approaches *Frankenstein* as a warning against applying science in a reckless way, it focuses specifically on the novel's answer to dualism. Western culture has been thinking in binary terms since Aristotle defined reality in pairs of opposites (male/female, light/darkness, good/evil, etc.) more than two thousand years ago. The terms that appear in the second position are what Anne Williams calls "categories of otherness" (Williams, 1995, p.18) and they are highlighted in Gothic literature and in Shelley's novel. Although the binary pair reason/nature is not as ancient as the ones Aristotle suggested in his *Metaphysics*, it is the most relevant for the analysis of the novel in this dissertation. However, before starting the examination of the dualism reason/nature in *Frankenstein*, it is important to clarify the meaning of the term "dualism" and how the concept works. The Australian philosopher Val Plumwood (1993) defines it with these words:

Dualism is a relation of separation and domination inscribed and naturalised in culture and characterised by radical exclusion, distancing and opposition between orders constructed as systematically higher and lower, as inferior and superior, as ruler and ruled, which treats the division as part of the natures of beings construed not merely as different but as belonging to radically different orders or kinds, and hence as not open to change. (47-48)

According to Plumwood (1993), therefore, these pairs of opposites are not balanced, since one of the terms in the dualistic pair is dominated by the other. Furthermore, the second term is not considered worthy by itself, but only in relation to the dominant one. Metaphorically speaking, it could be said that the slave only exists to serve the master (52-53). In the case of the dualism reason/nature therefore, all that is associated with rationality is considered 'superior' to the natural world (Plumwood, 1993, p.44). Freya Mathews (2017), another Australian philosopher, associates this preference of reason over nature with the Cartesian thought, which assumes that human beings are the only beings in possession of intellect and, therefore, the only ones with an intrinsic value (p.2). Plumwood criticizes Cartesian thinking and the denial of our connection with nature by western culture, at the same time that calls attention to thinkers such as David Suzuki, who affirms that "humans are animals and have the same dependence on a healthy biosphere as other forms of life" (Plumwood, 1993, p.6).

In an article about Ted Hughes, a poet who had a great respect and admiration for nature and animal life and wrote extensively about it, it is said that this "separation of humanity from nature has a long history". The article points at Industrial capitalism and its expansion through colonialism as the main cause of the destruction of nature

(Bandyopadhyay, 2013, p.2). Plumwood is also cited to support the idea that it is precisely the reason/nature dualism that makes us perceive nature as a mere source for humankind's necessities. Additionally, some researchers highlight the importance of the Enlightenment in this lack of balance between reason and nature. As Ana Pinel Benayas explains, thinkers at that time wanted to eradicate all kinds of theological opposition and encouraged people to conquer reason. Paraphrasing her words, the Enlightenment (as an ideological movement), is one of the many murderers of God, since reason works now as a substitute for religion and sits in the throne that God leaves vacant. This fact establishes a new hierarchical order which wants to assure the progress of humanity away from superstition (Pinel Benayas, 2020, p.227). This entailed a tremendous advance for humankind, but it also contributed to separating humans from nature even more, bringing along devastating consequences, as this dissertation means to prove with the analysis of *Frankenstein*.

The binary pair reason/nature is directly connected with the dangers of "playing God", one of the main themes in Shelley's novel. The weakening of 'nature' in favor of 'reason' unconsciously gives us the right to exploit it for our benefit. This lack of respect for nature, something we are part of and without which we cannot survive, can bring terrible consequences; not just for other species, but for our own. As happens to Victor Frankenstein, if we transgress the limits of nature, it may turn against us. Therefore, the analysis of Shelley's novel in this dissertation aims to prove that it is important to think things through before acting, because whether we are aware of it or not, our acts always have consequences and they may be catastrophic. Although this binary perspective is still prominent in western culture, dualism has been questioned in recent years (especially since Derrida's deconstruction) and many criticize the

unbalanced relationship of binary pairs (Elbow, 1993, p.51). As Hélène Cixous affirms, every time we find a pair of opposites (day/night, sun/moon, male/female...) there is some kind of domination (Elbow, 1993, p.51) and it is always the term representing 'the norm' which subordinates 'the other'. Mary Shelley's *Frankenstein*, however, already questioned the dualism reason/nature.

Thus, the purpose of this dissertation is to demonstrate that Shelley's novel questions the superiority of reason over nature, the opposite of what the dualism suggests. Furthermore, she criticizes careless science and advocates for a more humble behaviour regarding nature and its laws. To prove this, this paper is going to analyze the novel in detail, focusing especially on Frankenstein's character, whose experience of the dualism reason/nature is extremely unbalanced. This dissertation will start discussing the ambition that often moves human beings to break natural laws to get some kind of public recognition and the dangers that it involves. Then, it will prove how Shelley's novel criticizes blind science, by providing some instances from the text that defend a more balanced relationship between reason and nature, and sometimes even revert the dualism by making nature the dominant term.

II. Questioning Dualism in Frankenstein

Frankenstein, or The Modern Prometheus warns us about the dangers of transgressing the limits of the natural order. This offence against nature is often connected to men's ambition, a vice present in the novel from the beginning, when Frankenstein apprises Walton of the risks of his enterprise (he wants to find an alternative route to the Americas through the North Pole): "You seek for knowledge and wisdom, as I once did;

and I ardently hope that the gratification of your wishes may not be a serpent to sting you, as mine has been" (Shelley, 1818, p.17). Frankenstein is telling his story in retrospect, so he speaks from experience. Some psychologists affirm that blind ambition might be linked to perfectionism and an obsessive-compulsive personality (as cited in Yager & Kay, 2023, p.261). Individuals who suffer from this malady are so selfcentered, that they often disregard important aspects such as family, friends and other obligations in order to pursue a goal that may be impossible to achieve (Yager & Kay, 2023, p.261). There are plenty of instances throughout history in which "to the detriment of others, individuals single-mindedly strive to be the first person to invent something unique, explore untraveled geographic regions, conquer summits, or break athletic records" (Yager & Kay, 2023, p.261). It is clear, therefore, that both characters fit this profile. The fact that Walton is an explorer in the North Pole is also very significant because there, we find nature in its purest state. It is probably the most inhospitable place on Earth for a human being and yet, Walton is willing to risk his life in order to achieve his goal. This establishes a parallelism between the two characters in the first pages of the novel, since they are not only very ambitious men, but also ready to confront nature. Besides, both share the intention of helping humanity with their work and effort. However, unlike Walton, Frankenstein does not have anybody to point at the risks of his project. Although his family and friends show their concern for his wellbeing, they ignore his machinations and, therefore, they cannot really warn him about the dangers they may lead to. Furthermore, he is even encouraged by one of his teachers with these words: "the labours of men of genius, however erroneously directed, scarcely ever fail in ultimately turning to the solid advantage of mankind" (Shelley, 1818, p.30); of course, in this case, Frankenstein carries out his experiment with the most absolute secrecy.

The circular structure of the novel (it ends in the North Pole where it begins), is reflected also in terms of theme, since the idea of ambition is again present in Frankenstein's words, when he tells Walton that he felt "destined for some great enterprise" from an early age (Shelley, 1818, p.161). He actually mentions the word directly when he is about to die at the end of the novel: "Farewell, Walton! Seek happiness in tranquillity, and avoid ambition, even if it be only the apparently innocent one of distinguishing yourself in science and discoveries" (Shelley, 1818, p.167). This straightforward message could suggest that any level of ambition is dangerous, but then Frankenstein asks a rhetorical question and admits that even though he had failed on his scientific adventure, someone else may succeed (Shelley, 1818, p.167). The danger then is not ambition itself, but blind ambition; that is, not taking into account the magnitude of the project or the possible consequences that it may carry along. This is clearly the case with Victor Frankenstein, who aims to defeat death by discovering the secret of life. "What had been the study and desire of the wisest men since the creation of the world, was now within my grasp" (Shelley, 1818, p.33), these words suggest that even though he is aware of the scale of his proceedings, his ambition and the fact that he is succeeding in his task blind him. Not only that, before the accomplishment of his endeavour, he already shows delusions of grandeur by daydreaming about his scientific achievement: "a new species would bless me as its creator and source; many happy and excellent natures would owe their being to me" (Shelley, 1818, p.34). By the end of the novel, however, he has learnt his lesson and refuses to tell Walton about his discoveries to avoid him the suffering he has gone through. Frankenstein assures him that some knowledge can be dangerous and advises him against trying to "become greater than his

nature will allow" (Shelley, 1818, p.33). This reference to nature is important because it suggests that we should be more humble and respect the natural order.

Although knowledge is symbolically connected with brightness, as happens to Frankenstein when he first discovers the secret of life, "from the midst of this darkness a sudden light broke in upon me" (Shelley, 1818, p.32), it is often associated in the novel with unhappiness. This is evident not just in the case of Frankenstein, whose scientific breakthrough only brings him misery, but also in the creature's: "increase of knowledge only discovered to me more clearly what a wretched outcast I was" (Shelley, 1818, p.96). Furthermore, when he recognizes his reflection on the water and he becomes aware of his monstrosity, he is "filled with the bitterest sensations of despondence and mortification" (Shelley, 1818, p.82). The fact that it is nature which shows him the truth (he is also reminded of his condition by the shadow he creates under the moonlight) is very interesting too, because it connects nature with knowledge. If we accept the dualism established by western culture, nature is defined "as passive (...) as the 'environment' or invisible background conditions against which the 'foreground' achievements of reason or culture take place" (Plumwood, 1993, p.4). However, the novel is turning nature into an active participant in this passage, which questions the dualism reason/nature by balancing the pair. According to Plumwood (1993), Cartesian thought made nature incapable of action, and therefore, once intentionality is restored, the gap between nature and reason disappears (p.5). For the creature, the natural world is actually the only consolation, as he tells Walton at the end of the novel: "when I felt the cheering warmth of summer, and heard the rustling of the leaves and the chirping of the birds, and these were all to me, I should have wept to die; now it is my only consolation" (Shelley, 1818, p.171). Nature does not judge the

creature, the sun shines for him too and he can feel the blow of the wind on his cheeks as everybody else. This idea also supports, therefore, the importance of nature and questions the binary pair.

As happens in Gothic literature, Shelley's novel gives visibility to 'the other'; in this case, nature. In fact, there are many instances throughout the text in which we can see the natural world as a positive force. Both, Frankenstein and the creature find some kind of shelter in nature, as if it were a healing power for them. "My spirits were elevated by the enchanting appearance of nature" says the latter (Shelley, 1818, p.83). For Frankenstein, the magnificence of 'Mother Nature' also brings tranquility to his soul, as is shown when he sees Glacier Montanvert for the first time and he is immediately overrun by a "sublime ecstasy". He reflects this idea with these words: "the sight of the awful and majestic in nature had indeed always the effect of solemnizing my mind" (Shelley, 1818, p.68). The fact that nature brings him out of darkness can be associated with the idea that human beings belong to the natural world and any attempt to distance oneself from it only results in suffering and alienation. Frankenstein spends two years focused on his scientific pursuit, which keeps him away, not only from the natural world and its delights, but also from his loved ones: "my eyes were insensible to the charms of nature. And the same feelings made me neglect the scene around me caused me also to forget those friends who were so many miles absent" (Shelley, 1818, p.35). At this point of the novel, the unbalance of the dualism reason/nature is represented by Frankenstein's character. It is his distancing from nature and his community that leads him to destruction. As Friedman and Kavey state, working in isolation makes researchers' labours difficult and dangerous, not only because their work is not supervised by other scientists, but also because they cannot get

any advice from their peers (as cited in Byrd & Paquette, 2021, p.338). The topic of isolation appears symbolically connected to nature too, not only when Frankenstein is separated from it while he works in his lab, but also when he is surrounded by it. There is actually a very powerful image of isolation in the novel, when Frankenstein is in the secluded island where he travels to fulfill his promise to the creature: "I left the house (...), and walked on the beach of the sea, which I almost regarded as an insuperable barrier between me and my fellow-creatures" (Shelley, 1818, p.128). The immensity of this division can be read as a reflection of Frankenstein's transgression, since he has violated the laws of nature and now feels separated from the rest of the world, as if he did not belong.

Thus, whether we are aware of it or not, the truth is that nature is always there, all around us. When Frankenstein is collecting bones or torturing animals, he is being observed by nature ("the moon gazed on my midnight labours") as if it were a witness of his transgression (Shelley, 1818, p.34). Maybe that is why he thinks he is going to die when he is adrift in a little skiff: "I looked upon the sea, it was to be my grave" (Shelley, 1818, p.130). This happens right after Frankenstein decides to break his promise of creating a female companion for the creature. He knows now that he made a terrible mistake and does not want to make another. He used to take what he wanted, when he wanted; for him, nature was just a resource for his own motivations. This is after all, how a dualistic relationship works according to Plumwood: "the identity of the underside is constructed instrumentally" (Plumwood, 1993, p.53). However, by this time in the novel, his understanding of the dualism reason/nature is less unbalanced, because he is now aware of the consequences of breaking the natural laws. Indeed, dying in the middle of the sea would be very poetic, as some kind of revenge of nature

for his transgression. Again this image of Frankenstein surrounded by so much water gives us an idea of how insignificant we are in comparison to the vastness of nature. In a situation like that, reason is clearly subordinated to the forces of nature and not the other way around. Therefore, this is a clear example of the questioning of the dualism reason/nature in the novel.

Shelley's cautionary tale not only highlights the importance of nature, it also ridicules reason by showing the unexpected consequences that an overbearing mind can cause. The fact that human beings often become dependent on the technology they create is quite ironic. In the novel, both Frankenstein and the creature are aware of this. The former realizes its condition of vassal when it is too late. His pride blinded him and did not let him think about the repercussions of his scientific achievement. "I was the slave of my creature", he admits (Shelley, 1818, p.116). Further in the novel, the creature uses the same appellative to refer to him: "Slave (...). Remember that I have power (...). You are my creator, but I am your master; obey!" (Shelley, 1818, p.127) Frankenstein has, therefore, become a slave of his own creation, the same way human beings cannot live without technology nowadays. Again, this points at the importance of being in harmony with nature and not losing our connection with it in favour of technology. In our determination to become more technologically advanced, we are becoming less capable of solving problems by ourselves, in other words, less rational. Shelley's novel defends this need for harmony and the importance of a balanced mind: "a human being in perfection ought always to preserve a calm and peaceful mind, and never allow passion or transitory desire to disturb his tranquillity" (Shelley, 1818, p.35). These are the words Frankenstein tells Walton once he has learnt his lesson. He understands now that no pursuit of knowledge is worthy if it "has a tendency to weaken

your affections, and to destroy your taste for those simple pleasures in which no alloy can possibly mix". For him, if this happens, that study is not suitable for the human mind (Shelley, 1818, pp.35-36). Of course, at the moment of the experiment, his mind lacked this calmness and balance that is present in nature.

The figure of Frankenstein in the novel represents that kind of reason that is unbalanced. When he is collecting pieces of human bodies from a cemetery in the middle of the night, he does not feel any kind of irrational fear: "the church-yard was to me merely the receptacle of bodies deprived of life" (Shelley, 1818, p.32). He is, indeed, a very rational man. There is even a moment in the novel in which the creature accuses him of not having a heart: "unfeeling, heartless creator! You had endowed me with perceptions and passions, and then cast me abroad an object for the scorn and horror of mankind" (Shelley, 1818, p.102). Thus, Frankenstein is just focused on reason; but science without heart is unbalanced. Biologist Kevin M. Esvelt stated that there is actually a clear message for scientists in Shelley's novel: "wisdom is knowing whether, when, and how to develop new technologies—and when to lock them away for as long as we can" (as cited in Nagy et al., 2020, p.754). Frankenstein never stopped to reflect on how his creature would feel if he ever became alive, not even how he would react towards him. Being successful in your scientific discoveries is not enough, morals matter too. In fact, the first words of the creature to Frankenstein are about responsibility: "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. You purpose to kill me. How dare you sport thus with life? Do your duty towards me and I will do mine towards you" (Shelley, 1818, p.70). The words that Frankenstein uses the first time he addresses his creature are also very significant (he is actually the first to speak): "Devil! Do you

dare approach me? (...) Begone, vile insect! or rather stay, that I may trample you to dust!" (Shelley, 1818, p.70). The fact that he uses the words "vile insect" to refer to the creature and talks to him with such contempt, as if he were a mere ant he could crush with his thumb at any time, is again a proof of how Frankenstein feels superior to nature. Groom supports this idea in his introduction to the novel by affirming that this insult "is an extreme instance of making the Being bestial" (Groom, 2018). As he explains, when the novel was written, animal rights were limited to intelligence, which at the time was defined "as obedience to humans, domestication and compliancy, and expressing familial instincts" (Groom, 2018). Thus, the creature is identified here with nature (that is, the oppressed term in the dualism reason/nature), because he is being considered less than human (Groom, 2018).

The novel's support of a more balanced relationship between reason and nature seems to mirror Frankenstein's evolution, since his mind starts being completely logical and becomes less and less rational as the story progresses. This is seen more clearly towards the end of the novel, once he has become aware of the irresponsibility of his acts. The fact that his mind only finds peace in the unconscious is very symbolic: "it was during sleep alone that I could taste joy. O blessed sleep! Often, when most miserable, I sank to repose, and my dreams lulled me even to rapture" (Shelley, 1818, p.156). Apart from these dreamy visions and some delirium resulting from fever or desperation, there are other instances in which he consciously behaves in an irrational way, like when he invokes spirits to aid him or calls on heaven looking for support (Shelley, 1818, pp.155-156). This superstition is not proper of a rational mind and yet, Frankenstein asks the spirits of the dead to help him end the life of the monster he has created (Shelley, 1818, p.154). There is actually a moment in the novel in which he

remembers his dear friend Clerval, killed by the creature, with these words: "has this mind so replete with ideas, imaginations fanciful and magnificent, which formed a world, whose existence depended on the life of its creator; has this mind perished? (...). No, it is not thus" (Shelley, 1818, p.118). These lines suggest that Frankenstein believes in the afterlife, where his friend still exists. Curiously enough, in his despair, he also asks nature for help: "Oh! Stars, and clouds, and winds, ye are all about to mock me: if ye really pity me, crush sensation and memory; let me become as nought; but if not, depart, depart and leave me in darkness" (Shelley, 1818, p.110). The fact that he clasps his hands while exclaiming these words, reminds us of the act of praying, contradicting his rational mind and creating a parallelism between nature and God. This is again questioning the dualism reason/nature and the superiority of the first term over the second. On the other hand, there is also a very symbolic moment in which Frankenstein kneels on the grass and kisses the earth to make an oath. This can be read as a reconciliation with nature, as if by killing the monster he so thoughtlessly created, he would amend his transgression (Shelley, 1818, p.154).

Although *Frankenstein* cannot be considered a religious novel nor his protagonist described as a devout character (the word 'God' appears in the text mostly as a mere interjection), the fact that the novel is highly influenced by Milton's *Paradise Lost* (1667) makes it necessary to discuss the connections. There is a passage in which the poem is directly mentioned by the creature, since it is one of the books he has access to. After reading it, he realizes that there are some similarities between the story it tells and his situation: "like Adam, I was created apparently united by no link to any other being in existence; but his state was far different from mine in every other respect. He has come forth from the hands of God a perfect creature" (Shelley, 1818, p.94). These

words show a parallelism between Adam and the creature and also between God and Frankenstein (both "warring with his creatures" as it is written in the same passage). However, as Shelley's monster points out: unlike Adam, he is not perfect, because Frankenstein is no God. This idea can also be connected to the dangers of "playing God". As has been discussed in this dissertation, the novel portrays nature as some kind of omnipresent force. The lesson, therefore, is clear: transgressing the natural laws to fulfill some scientific achievement may not have the results we expected, even if the intentions were good like Frankenstein's. Again, the novel is questioning the supremacy of reason over nature.

It is clear that by the end of the novel, the protagonist is aware of his temerity, that is why he refuses to create a female partner for the creature and the reason why he warns Walton against his secret when he shows curiosity about the procedure: "Are you mad, my friend? (...). Peace, peace! Learn my miseries, and do not seek to increase your own" (Shelley, 1818, p.161). Frankenstein does not want others to commit the same mistake. Some pages earlier, when he is talking to the magistrate in Geneva, he cries the following words, desperate: "Man, how ignorant art thou in thy pride of wisdom! Cease; you know not what it is you say" (Shelley, 1818, p.153). Although 'man' here refers to the magistrate in particular, it can also be read as a symbolic reference to all humanity, as if Frankenstein wanted to dissuade us from following his steps. In fact, the allusion to ignorance and the syntactical similarity of the last sentence to the biblical phrase: "Forgive them; for they know not what they do" (English Standard Version Bible, 2001, Luke. 23:34), supports the idea that the word 'man' also has a plural meaning in this passage. On the other hand, there is a certain parallelism here between the magistrate's pride and Frankenstein's, since when he was creating the

monster, he never thought he could be mistaken, just as the magistrate now thinks he is right. There is some criticism in these words, therefore; not just of men's pride in general but of his own too (self-criticism). Furthermore, he is crying for a consciously responsible humanity, which points again at the importance of balance in the relationship reason/nature. As some researchers affirm, however, "scientists may find it difficult to accept that science sometimes produces unintended consequences"; that is why, it is essential that they reflect about their motivations and the limits that might be necessary to avoid a bad use of their work (as cited in Nagy et al., 2020, p.754).

Thus, Shelley's novel keeps reminding us how dangerous science can be, if it is not carried out responsibly. It is not Frankenstein's experiment itself that the text criticizes though (it is successful after all), but the protagonist's attitude towards what he has created. The creature expresses it in this way: "Oh, Frankenstein, be not equitable to every other, and trample upon me alone, to whom thy justice, and even thy clemency and affection, is more due" (Shelley, 1818, p.70). The monster begs him for his attention; he reminds him that, as his creature, he should be like Adam and instead he feels like "the fallen angel". These words not only suggest that the creature is an intelligent being, but also that he possesses an incredible sensibility. In other words, what could have been an asset for humankind, becomes a nightmare because Frankenstein abandons the monster when he should have taken care of him. "I was benevolent and good: misery made me a fiend" says the creature (Shelley, 1818, p.71), which means that if his creator had acted responsibly, he could have avoided all the suffering that he brought upon him and his loved ones. In Nick Groom's introduction to the novel (2018), the author also criticizes Frankenstein's carelessness in his proceedings and advocates for a responsible way of applying science: "his focus on

outputs enables Victor to abdicate any responsibility or liability. This is bad science – detached and amoral. To put it bluntly, science without accountability is not only dehumanizing, it is also ultimately potentially lethal" (Groom, 2018). Thus, Frankenstein's lack of liability for his actions turns a rational project into an irrational one, because it does not consider the possible consequences. Reason is therefore stripped of all its authority, questioning again its dominance over nature.

III. Conclusion

As this dissertation has tried to prove, Shelley's novel has been warning us about the dangers of bad science for two-hundred years and it has done it by questioning the dualism reason/nature throughout the text. Whereas nature is portrayed as a powerful and inspiring force, reason (humankind) is often presented with many flaws. In his pursuit of recognition, Frankenstein thoughtlessly undertakes a scientific project that goes against the natural order. Although his experiment is successful (he is able to create a being, in his own words, "of fine sensations"); his life soon turns into hell for not having taken responsibility for his creation. This means that trying to progress in science is not bad in itself, as long as scientists are responsible for their work. They should also consider if a particular experiment can be beneficial for humanity or on the contrary, it may help to destroy it as it turns out in the novel. Frankenstein makes a terrible mistake and it is too late for him to rectify, but he tries to warn others of the risks of ambition and lack of reflection when starting an enterprise. The novel, thus, defends a more balanced relationship between reason and nature and criticizes men's

blind ambition through his main character, a brilliant scientist that, however, does not foresee the risks of transgressing nature.

Shelley's story is, therefore, the perfect example of a cautionary tale and the fact that it still resonates powerfully after so many years, suggests that human behaviour has not changed that much. Humanity has not yet learnt the lesson that the novel is trying to transmit: that we should be less arrogant and more humble before thinking we can violate natural laws without consequences and that we should reflect before taking action. Our society needs to understand that science must not be a new religion, that we should not follow it blindly and pretend that statements such as "it is science" or "science says so" are enough to end a discussion. Humanity needs to take time to reflect about things and comprehend that a scientific breakthrough can be more harmful than beneficial if it is not approached responsibly. There are lots of warnings out there, they have been there for a long time, Shelley's novel is just a good example. It now depends on us to take notice of them or not. Frankenstein realized it when it was too late, but maybe there is still time for humanity.

Works Cited

- Bandyopadhyay, N. (2013). Ted Hughes and his Animal World: Analysis of the Poems of Ted Hughes by the Yardstick of Eco-Criticism. *Galaxy: International Multidisciplinary Research Journal*, 2(4). Retrieved from https://www.galaxyimrj.com/V2/n4/Nibedita.pdf
- Byrd, J., & Paquette, P. (2021). Frankenstein: a creation of artificial intelligence? *AI & Society*, *38* 331-342. doi:10.1007/s00146-021-01298-7
- Elbow, P. (1993). The Uses of Binary Thinking. *Journal of Advanced Composition*, 13(1), 51-78
- English Standard Version Bible. (2001). ESV Online. https://esv.literalword.com/
- Groom, N. (2018). Introduction. In *Frankenstein or, The Modern Prometheus* (pp. 9-50). Oxford University Press.
- Mathews, F. (2017). The Dilemma of Dualism. In S. MacGregor (Ed.), *Routledge Handbook on Gender and Environment* (pp. 54-70). New York: Routledge.
- Nagy, P., Wylie, R., Eschrich, J. & Finn, E. (2020). Facing the Pariah of Science: The Frankenstein Myth as a Social and Ethical Reference for Scientists. *Science and Engineering Ethics*, 26, 737–759. doi:10.1007/s11948-019-00121-3
- Pinel Benayas, A. (2020). Victor Frankenstein y la Racionalidad Instrumental. *Estudios Humanísticos. Filología*, 42, 223-234. doi:10.18002/ehf.v0i42.6260
- Plumwood, V. (1993). Feminism and the Mastery of Nature. London: Routledge.
- Shelley, M. (1818). Frankenstein; or, The Modern Prometheus. Oxford: Oxford University Press.
- Williams, A. (1995). *Art of Darkness: A Poetics of Gothic* (2nd ed.). Chicago: University of Chicago Press.
- Yager, J.& Kay, J. (2023). Ambition and its Psychopathologies. *The Journal of Nervous and Mental Disease*, 211, 257-265. doi: 10.1097/NMD.000000000001644