



El sueño  
de la razón  
produce  
monstruos

# THE SLEEP OF (SCIENTIFIC) REASON PRODUCES (LITERARY) MONSTERS

OR, HOW SCIENCE AND LITERATURE SHAKE HANDS

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Enlightened reason and romantic imagination were seen as two opposing ways of conceiving art and life. Today, from our historical vantage point, it is difficult to understand one without the other. As if the nightmares of science were nothing more than the food of romantic monsters. This article analyses the evolution of fantastic literature and the birth of scientific fiction in the nineteenth century, as well as the conflict between the rational and the supernatural.

Keywords: Enlightenment, Romanticism, vampires, Frankenstein, science fiction.

In 2013, the indefinable filmmaker Albert Serra premiered *Història de la meva mort* (“The story of my death”), an original and controversial film that imagines a meeting between the actual Italian libertine Giacomo Casanova (1725-1798), and Count Dracula, an invention of literary fiction. The film opens with the elderly Casanova who decides to leave France, home of the Enlightenment, to retire in the Carpathians and begin drafting his memoirs. In Serra’s film, Casanova embodies the values of the Enlightenment movement, whose main purpose was to rescue society, by way of culture, from superstition, irrationality and folklore, ubiquitous since the Middle Ages. However, Casanova meets a disturbing character in the Carpathians, a symbol of times to come: the vampire imagined by Bram Stoker (1847-1912). A being devoid of light, he lives off superstition and ritual, a ghost, a legend incarnate. He personifies Romanticism, knocking at the door. This surreal plot creates a questionable, yet seductive, film. The film, aside from its pretentiousness, has the virtue of confronting two realities that are relevant to the subject of this document: enlightened reason and romantic imagination; Casanova and Dracula; science and literature.

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## ■ SCIENTIFIC REASON

Voltaire (1694-1778), the philosopher who best represents the spirit of Enlightenment and the Age of Enlightenment, complained that between 1730 and 1735 vampires were the only topic of conversation throughout Europe (Polidori, 2013). We know of several cases of late seventeenth and early eighteenth century reports concerning a strange epidemic in several towns in Serbia, Hungary, Russia, Silesia and Poland.

According to the reports, several corpses were found in their coffins without signs of decay and full of liquid blood. Based on this fact, superstition led people to believe these corpses emerged from their tombs at nightfall to feed on the blood of the living. In the popular imagination, they became known as vampires or the undead. A century after Voltaire,

Jules Verne (1828-1905) departed from his usual «scientific» novels and wrote a fantasy story, *The Carpathian castle* (1892), in which he tried to end the superstition of the undead with a vampire farce. Today, we know that the origin of the legend of vampires lies in diseases that were poorly understood at the time, such as rabies, porphyria or anaemia, some of

Francisco de Goya. *The sleep of reason produces monsters*, 1797-1799. «Los caprichos» series. Etching and aquatint, 20.1 x 30.6 cm.



Private collection, Paris



MÉTODE

The French philosopher Voltaire (on the left) complained that between 1730 and 1735 vampires were the only conversational topic throughout Europe. Over a century later, in 1892, Jules Verne tried to end the superstition of the undead in *The Carpathian castle* (above).

John William Polidori (on the right) published *The Vampyre* in 1819. It is recognised as the first vampire tale categorised as literature. The new spirit of Romanticism was retreating from the Reason of Enlightenment; seeking tradition instead of modernity, legend and myth instead of rational analysis.

whose symptoms include hypersensitivity to the sun and pallor. All of them are related to blood in some way, so patients often needed blood transfusions to counteract the affects of disease.

Blood carries a special symbolic consideration for almost every culture in the world. In the Christian tradition, according to the dogma of transubstantiation, the bread and wine used in the Eucharist actually become the body and blood of Jesus Christ, strengthening our relationship with the Creator. When we consume ordinary foods, they become part of our body; when we eat the Bread of Life and drink the Blood of Christ, we become part of Christ. Also, some ancient beliefs in other cultures involve this idea that feeding on something involves acquiring some of its properties. This is why some cannibalistic tribes devoured the bodies of their defeated enemies, in order to acquire their strength. This analogy is not new: Freud discussed the idea of the Communion as a kind of ritualistic cannibalism (Le Breton, 1998).

### ■ THE ROMANTIC DREAM

Over seventy years after Voltaire commented on Europe's fixation with vampires, near his homeland at the foot of the Swiss Alps on the shores of Lake Geneva, a group of artists gathered in Villa Diodati

and rekindled the myth of the vampire. According to legend, endless rain in the summer of 1816 kept the group at home for days and boredom led them to improvise an unusual competition: each person would write a ghost story. It was another famous libertine, like the aforementioned Casanova, that made the suggestion: Lord Byron (1788-1824). That evening yielded two stories. The first of these, *The Vampyre* (1819), is a short story of just over twenty pages written by John William Polidori (1795-1821), Byron's young personal physician. It is unanimously recognised as the first literary tale of the myth of the vampire (Espasa, 2013). While it is true that *Lenore* (1773) by Gottfried August Bürger (1747-1794), some vampire poems by Keats (1795-1821) and *The bride of Corinth* (1797) by Goethe (1749-1832) were written before this, Polidori's aristocratic vampire made it a popular theme amongst such writers as: Ernst T. A. Hoffmann (1776-1822), Sheridan LeFanu (1814-1873), Alexandre Dumas (1802-1870), Edgar Allan Poe (1809-1849) and, of course, Bram Stoker, whose *Dracula* (1897) bears striking similarities with the vampire in Verne's *The Carpathian castle*. However, unlike Verne, Stoker was not trying to eliminate the myth, but to reinvigorate it. Thus, the new romantic spirit retreated from enlightened reason to defend imagination. It turned away from the light, towards darkness and misty atmospheres, away from modern

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Universal Pictures

*Dracula*, by Bram Stoker, is part of a literary theme descended from Polidori's aristocratic vampire. Stoker's novel is reminiscent of *The Carpathian castle* by Verne, yet, unlike the latter, its objective was not to end the myth of the vampire, but to rekindle it. In the picture, a still from *Dracula* (1931), with Bela Lugosi as the vampire.

empiricism towards medieval tradition, legends and myths.

The representation of night, darkness and shadow are common motifs used by the romantic artists to show the importance of the subconscious, which they investigate. It is during the night, when dreams and nightmares occur, that monsters such as vampires are created. This approach, fascinated by the exploration of the subconscious through dreams, perfectly fits the spirit of the time. And, of course, night is also the time that is most conducive to lovemaking. Let us not forget that vampires are always represented, to a greater or lesser extent, as lewd and passionate beings, full of desire. Unlike a different, more modern monster, the zombie, which is motivated only by a feeding frenzy, the vampire is a refined being with high-class manners, pre-eminent among its peers. The difference between the vampire and the others, just as in real social hierarchies, is blood. Actually, it has been noted that Polidori's vampire, the elegant and mysterious aristocrat, tremendously seductive

yet indifferent to others, may represent none other than Byron himself, whose relationship with Polidori seems to have been rather strained.

### ■ ON REALITY AND FICTION

The second tale that was born that fantastic night in Villa Diodati was *Frankenstein; or, the modern Prometheus* (1818), by Mary Wollstonecraft Shelley (1797-1851), considered the first science fiction story in universal literature (Martínez-Gil, 2004). The novel is a splendid reflection on scientific morality, the creation and destruction of life and the audacity of humanity in its relationship with God – hence the analogy with the mythical Prometheus. The synopsis is well known: Victor Frankenstein, scholar and scientist, gives life to a being comprised of dead body parts. Shelley explained in the introduction the origin of her inspiration:

Many and long were the conversations between Lord Byron and Shelley, to which I was a devout but nearly silent listener. During one of these, various philosophical doctrines were discussed, and among others the nature of the principle of life, and whether there was any probability of its ever being discovered and communicated. They talked of the experiments of Dr. Darwin, (I speak not of what the Doctor really did, or said that he did, but, as more to my purpose, of what was then spoken of as having been done by him.) who preserved a piece of vermicelli in a glass case, till by some extraordinary means it began to move with voluntary motion. Not thus, after all, would life be given. Perhaps a corpse would be re-animated; galvanism had given token of such things: perhaps the component parts of a creature might be manufactured, brought together, and endued with vital warmth.

(Shelley, 2006, p. 11)

The Italian physician, Luigi Galvani (1737-1798) became famous during the late eighteenth century for arguing that the brain of animals produced electricity, which caused their limbs to move. The theory was debated in university faculties of major European cities and encouraged the idea that a corpse could be reanimated. Following this theory, it seems that in 1818, the same year *Frankenstein* was published, Andrew Ure (1778-1857) tested the theory at the University of Glasgow with the corpse of a hanged prisoner. He applied an electrical current and was able to reanimate it for a second. What was nothing more than a grotesque and unpleasant spectacle for those present at Ure's experiment went further in literary fiction: Doctor Frankenstein reanimates a dead body. However, unlike Doctor Ure's disembodied arm,



National Portrait Gallery, London

Mary Wollstonecraft Shelley wrote what is considered the first science fiction story in literature. Her *Frankenstein; or, the modern Prometheus* (1818) is a reflection upon scientific ethics, and a romantic critique of unfettered scientific ambition.

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Universal Pictures

Still from the film *Frankenstein* (1931), with Boris Karloff as the creature.

Victor's creation remains alive when the electrodes are disconnected (Pérez Pérez, 2007). With the scientific obstacles overcome, Shelley delves into the moral dilemmas of the case.

Although the monster created by Doctor Frankenstein in his laboratory was originally intended to be good, he becomes a fiend. He is lonely and hulking and is feared and hated by everyone. This development of his character resembles the ideas of another philosopher from the Enlightenment, Jean-Jacques Rousseau (1712-1778), who proposed that humans are naturally good but are corrupted by society. In addition, given that the wickedness of Frankenstein's monster is presented as a consequence of enforced solitude, it has been linked to the opinions of the libertarian philosopher William Godwin (1756-1836), Mary Shelley's father, who advocated that solitude engendered vices and

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happiness could only be achieved as part of society. The words of the creature in his first dialogue with his creator are especially moving – and illuminate these points –, as he compares his suffering with Goethe's young Werther, and asks his creator for a companion to relieve his anguish and prevent him from committing suicide as Werther did:

In the *Sorrows of Werter*, besides the interest of its simple and affecting story, so many opinions are canvassed, and so many lights thrown upon what had hitherto been to me obscure subjects, that I found in it a never-ending source of speculation and astonishment [...] But I thought Werter himself a more divine being than I had ever beheld or imagined; his character contained no pretension, but it sunk deep. The disquisitions upon death and suicide were calculated to fill me with wonder. I did not pretend to enter into the merits of the case, yet I inclined towards the opinions of the hero, whose extinction I wept, without precisely understanding it.

(Shelley, 2006, p. 169)

Repudiated and exiled from the civilised world, seeking revenge the monster kills Victor's brother and fiancée and is pursued by Victor as far as the frozen oceans of the Arctic lands. There, Victor dies and the creature dramatically disappears across the ice, in a conclusion with Freudian and Nietzschean overtones.

#### ■ PROMETHEUS'S FIRE

Goethe's *The Bride of Corinth*, mentioned above, is not only the story of a vampire, but also a sharp criticism of Christianity and of a God who exacts bloodshed. Goethe had written another attack on divinity, in this case pagan, about Zeus: the poem *Prometheus* (1789). The tale of the Titan who stole fire – reason, knowledge, progress, science – from

the gods to give it to men and was punished for his pride in another version of this classical tale, which is different from Shelley's. While Goethe's Prometheus is an optimistic tribute to human potential, Shelley's is a typically romantic criticism of excessive scientific ambition. The connection to Goethe does not end here. We have also seen Frankenstein's monster captivated by an excerpt

from *The sorrows of young Werther* (1774), a text considered fundamental to Romanticism. Apparently, Mary Shelley read the text repeatedly and perhaps it was her voice praising Goethe through the monster's

words. In fact, it has also been suggested that just as Werther's suffering seems to be the inspiration for the creature's agony, Goethe might have been Shelley's model for the scientist Victor Frankenstein. Goethe, apart from being a writer, was also an alchemist, a mason, a scientist – he wrote some important studies on osteology and plant morphology that even influenced Charles Darwin –, a traveller and a poet with reputed psychic abilities (Pulido Tirado, 2012).

Ten years before *Frankenstein's* first edition, Goethe had already published the first part of *Faust* (1808), the famous play about the old scientist who, tired and disappointed with the scientific knowledge he has acquired over a lifetime of sacrifice and study, agrees to make a pact with the devil to recover the youth he has wasted on earth in exchange for his soul. The play's protagonist is a scholar and an individualist. He lives outside dogmas, investigating the origin of the world and its phenomena, as does Shelley's protagonist Victor. Both characters are archetypes of the enlightened scientist, obsessed with explaining the world exclusively through science and reason, trying to know as much as God. Like Faust, Frankenstein seems to make a deal with an evil force from the great beyond that leads him to his death. The eternal human ambition of being equal to the gods, and the scientific and literary practices of the time, mix in the minds of Doctor Victor Frankenstein in fiction and Johann W. Goethe in reality. Both dreamed about reaching eternity in their works, and they did in these two parallel worlds.

## ■ THE MONSTERS OF REASON

In 1799, Francisco de Goya (1746-1828) made his famous engraving *The sleep of reason produces monsters*, part of the «Los caprichos» series. The picture shows a man – representing the scientist – leaning on a desk, probably exhausted after long hours of research and scholarly work. He embodies the sleeping reason. Nocturnal and fantastical animals emerge in his dreams: owls, bats and cats surround him in shadow. There are many interpretations of the meaning of the image. It has been interpreted, for instance, as an exaltation of enlightened rationalism, noting the dangers of unbridled fantasy. In this reading, the absence of reason – as it is

sleeping – calls forth menacing monsters. However, an alternative interpretation posits the nocturnal phantasmagorias could also aid the sleeper, because reason alone is monstrous. Understood from this point of view, art cannot be reduced only to reason (Antonio Mora, 2007). Working between the end of the Enlightenment and the early Romantic periods, Goya embodies the dichotomy between these two approaches to life and art which had been in opposition for a long time: enlightened reason and romantic imagination; Casanova and Dracula; science and literature.

Almost until the end of the nineteenth century, the evolution of fantasy literature is seen as the confrontation between the rational and the supernatural. But with the turn of the century there was a change of mentality, and the emergence of new genres, first the scientific novel with Verne (1828-1905) and then speculative fiction with H. G. Wells (1866-1946). Later, we would have scientism with

Asimov (1920-1992) and many others (Martínez-Gil, 2004). All of them blurred the boundaries between reality and fantasy, and showed the result has been greater and better when the two joined together, two halves of a whole, with science and literature shaking hands. ☺

## REFERENCES

- Antonio Mora, M. (2007). "El sueño de la razón...": Apuntes sobre la idea de Razón en el grabado de Goya. *Espéculo. Revista de estudios literarios*. Retrieved from <http://links.uv.es/OEexp0M>
- Le Breton, D. (1998). Ceci est mon corps. Manger la chair humaine. *Religiologiques*, 17, 99–111. Retrieved from <http://links.uv.es/eKDCbD3>
- Martínez-Gil, V. (Ed.). (2004). *Els altres mons de la literatura catalana*. Barcelona: Galàxia Gutenberg.
- Pérez Pérez, N. (2007). *Anatomia, química i física experimental al Reial Col·legi de Cirurgia de Barcelona (1760-1808)* (Unpublished doctoral thesis), Universitat Autònoma de Barcelona, Spain. Retrieved from <http://links.uv.es/Cylu7xA>
- Polidori, J. W. (2013). *El vampir*. Barcelona: Angle.
- Pulido Tirado, G. (2012). Vida artificial y literatura: Mito, leyendas y ciencia en el Frankenstein de Mary Shelley. *Tonos digital: Revista electrónica de estudios filológicos*, 23. Retrieved from <http://links.uv.es/E07Vt40>
- Shelley, M. (2006). *Frankenstein*. Barcelona: Vicens Vives.

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