

# Thought Experiment

## THE SCIENCE FICTION AND HORROR OF FRANKENSTEIN

Kelly Lagor

It is a dark and stormy night. As lightning crashes outside the castle, the lab's equipment flares to life, and sparks cast stark, dancing shadows on the bare stone walls. Dr. Henry Frankenstein stalks between the instruments, examining their dials, as his hunched assistant, Fritz, trails closely behind. Amid the contraptions is an examining table, a lifeless body strapped upon it, draped in a white sheet. Soon, the table and its morbid cargo are raised through an opening in the roof into the raging storm above.

Lightning strikes, and electricity surges through the equipment. As the table is lowered, Frankenstein rushes to its side.

The body's hand twitches.

"Look, it's moving," Henry says. "It's alive," he breathes. "It's alive."

The creature's hand lifts.

Frankenstein bellows, "It's alive! It's alive!" He turns his eyes, mad with victory, toward the heavens. "In the name of God, now I know what it feels like to be God!"

*Description of a scene from Frankenstein (1931)*

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In Mary Wollstonecraft Godwin Shelley's *Frankenstein* (1818), Victor Frankenstein, a young scientist, attempts to ease human suffering by conquering death. He succeeds in his lonely venture by restoring life to dead tissue, but is repulsed by his creation. In a fit of hysterics, he flees, leaving the monster unnamed and desperate for love and guidance. After the monster experiences the fearful reactions of others to his appearance, he becomes embittered and bent on revenge, eventually destroying everyone Frankenstein loved, Frankenstein, and finally himself.

*Frankenstein* is the first modern science fiction novel, a story of humanity's reach terrifyingly achieving its grasp; but Shelley wrote of no assistant, no castle, no specific lab equipment, not even a twitching hand. Instead, there's a rolling yellow eye, prelude to a slow and somber condemnation of the materialism of the Enlightenment through a reactionary Romantic lens, penned by a young woman ostracized from her family and polite society for choosing to live by her own values and be with the man she loved.

The 1931 film emphasizes the novel's more gothic elements—its imposing environments, the monstrous threat of an unnatural creature—to weave an expressionistic horror tale, elevated by the affecting character work of Boris Karloff as the monster. It would smash box office records, and Karloff's iconic visage would become as culturally endemic as the Frankenstein metaphor that preceded it.

But how exactly did such an iconic science fiction novel become an equally iconic horror movie?

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It was on a dreary night of November, that I beheld the accomplishment of my toils. With an anxiety that almost amounted to agony, I collected the instruments of life around me, that I might infuse a spark of being into the lifeless thing that lay at my feet. It was already one in the morning; the rain pattered dismally against the panes, and my candle was nearly burnt out, when, by the glimmer of the half-extinguished light, I saw the dull yellow

eye of the creature open; it breathed hard, and a convulsive motion agitated its limbs.

*Frankenstein* (1818)

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While groundbreaking in many respects, *Frankenstein* was far from the first monster story. Monsters are as old as storytelling's oral tradition. In *On Monsters* (2009), an expansive survey of all things monstrous, Professor Stephen T. Asma illustrates how our definition of monsters has changed over time, evolving from the merely unfamiliar to the decidedly sinister.

The mythological griffin offers an interesting case study in early monstrosity. With their leonine bodies and eagle heads, griffins were common in Greek literature, representing wisdom, strength, and cunning. Their literary origins trace back to a popular seventh-century BCE travel chronicle by the Greek poet Aristeas. While visiting Central Asia, Aristeas encountered the nomadic Scythian people, who told tales of horse-sized, beaked, quadrupedal griffins that nested in the gold-saturated sands of the region.

It was uncommon for monsters, like the griffin, to be created out of whole cloth; most had some grounding in reality. In the case of griffins, the region the Scythian people inhabited was rich not only in gold mines, but also fossils, including the horse-sized, quadrupedal, beaked species *Protoceratops* and *Psittacosaurus*. Prior to the eighteenth century, most cultures did not believe the world was more than a few thousand years old, and many held that the world and its creatures were created in a complete and perfect state by deities. It is therefore unsurprising that an ancient Scythian encountering fossilized dinosaur bones would assume they belonged to a still extant species.

It is also unsurprising that when ancient natural philosophers set out to systematically categorize all the creatures in creation, monsters from myths and folktales made the cut. The most notable of such surviving works is Pliny the Elder's thirty-seven-volume compendium of all Roman knowledge, the *Naturalis Historia* (77 CE). A model for future encyclopedias, it would include nearly every creature described to Pliny (aside from werewolves, because humans that shape-shifted strained Pliny's credulity) and would remain the ultimate authority on strange creatures through the coming centuries.

As the world became more interconnected and populous, what was considered monstrous gradually shifted. In addition to rampant stereotyping of other cultures and races (which can help foster a kind of dysfunctional social cohesion), it was also common to characterize human deformity as monstrous. In Roman society, for example, many deformities, including things like hermaphroditism, were taken as bad omens, and such people would be killed to ward off the potential catastrophe their existence foretold. These kinds of damaging superstitions flourished until a more rational scientific method came along to systematically debunk them.

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How can I describe my emotions at this catastrophe, or how delineate the wretch whom with such infinite pains and care I had endeavored to form? His limbs were in proportion, and I had selected his features as beautiful. Beautiful!—Great God! His yellow skin scarcely covered the work of muscles and arteries beneath; his hair was of a lustrous black, and flowing; his teeth of a pearly whiteness; but these luxuriances only formed a more horrid contrast with his watery eyes, that seemed almost of the same color as the dun white sockets in which they were set, his shriveled complexion, and straight black lips.

*Frankenstein* (1818)

Prior to the first century CE, many of our beloved, modern monsters were already popular figures, including demons, witches, vampires, ghosts, and werewolves. Early horror tales made the eventual jump to written media shortly after printing became widely accessible. The Chinese had already been in the printing business for a few hundred years before Johannes Gutenberg's version was invented, with Chinese printing mostly dedicated to educational and religious texts. Once the printing press was in Europe, printing soon became both fast and cheap, ushering in the era of mass communication in the West, which boosted literacy and made education attainable by more than just the elite. Sonnets, satire, essays, political tracts, philosophical treatises, and newspapers would be published alongside tales of ghosts, werewolves, zombies, war criminals like Vlad the Impaler, and serial killers like Gilles de Rais and Elizabeth Báthory.

Literacy drove demand, which led to a gradual honing of storytelling craft. Both the increasingly sophisticated narratives of plays and epic poetry, along with the proliferation of folktale chapbooks, influenced Miguel de Cervantes's *Don Quixote* (1605 and 1615), which poked fun at overdone romantic plots that emphasized chivalry and noble virtues. Its popularity would lead to the decline of such plots for nearly two centuries and mark the beginning of a shift toward greater literary realism.

A few decades after *Don Quixote's* publication, the Renaissance gave way to the Enlightenment. It was a wild time. Radical ideas, like reason, tolerance, progress, and liberty, were increasingly finding their way into written works. The discontent such ideas fostered would eventually lead to the American and French Revolutions. The emphasis on reason also meant big things for the Scientific Revolution. A renewed interest in things like the systematic classification of life on Earth led to species designations to be based on observation of function and anatomy, which returned Pliny's monsters to the realms of fiction. Investigations into the physical properties of matter revealed the principles of magnetism and electricity, just as studies of human anatomy laid bare the body's mechanistic nature.

With the rise in popularity of anatomical studies, grave robbing and murder were often used to supply medical schools with corpses, it's no wonder science and horror were often uncomfortably bedfellows in the public imagination. One of the more ghoulish experiments of the late eighteenth century was performed by the Italian physician Luigi Galvani, for whom the principle of galvanism, or electricity produced by chemical action, would be named. To demonstrate that electricity animated living things, he sent pulses of electricity through a dead frog's spinal cord, which caused convulsive movements in its legs. This same principle would be publicly demonstrated in London in 1803 by Galvani's nephew, Giovanni Aldini, on the corpse of an executed criminal, causing his face to grimace, and his hand to raise and clench.

In response to the Industrial Revolution, and the mechanistic materialism of Enlightenment thinking, a countermovement arose. The Romantics were an artistic and intellectual movement that revered nature above all, and looked fondly back upon the magic, superstitions, and chivalry of the medieval period. This movement would also inspire the first horror novels. Written largely for women and by women, Gothic novels emphasized terror, and often romance, in their plots full of capable women facing supernatural threats amid gloomy and imposing surroundings. The genre gets its name from an early example, *The Castle of Otranto: A Gothic Story* (1764), by Horace Walpole. Despite being panned by critics, it was an immediate hit, and more of the type soon followed, including *Vathek* (1786), *The Mysteries of Udolpho* (1794), and *The Monk* (1797).

Oh! No mortal could support the horror of that countenance. A mummy again endued with animation could not be so hideous as that wretch. I had gazed on him while unfinished; he was ugly then, but when those muscles and joints were rendered capable of motion, it became a thing such as even Dante could not have conceived.

*Frankenstein* (1818)

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It was into this heady intellectual environment Mary Shelley was born in 1797. Her mother, Mary Wollstonecraft, had lived as an outspoken feminist in a time before feminism, had been a reporter on the ground during the French Revolution, and a political philosopher before women did that sort of thing, penning the landmark *A Vindication of the Rights of Women* in 1792. Mary's father was the journalist and philosopher William Godwin, who was known for his notorious anarchist and utilitarian views, and penned the infamous *Enquiry Concerning Political Justice and its Influence on Morals and Happiness* (1793), and known for his anarchist and utilitarian views. Wollstonecraft would die shortly after giving birth to Mary, but Godwin raised her in the kind of rigorous intellectual environment he and Wollstonecraft intended for her, hoping for her to one day become an influential writer herself.

Mary's parents had been exiled from polite society for their beliefs before Mary was born, but due to their ideals of equality, liberty, and happiness, they became heroes of the Romantics. Growing up, Godwin would entertain admirers like the poet Samuel Coleridge, who Mary, as a child, got to hear recite his epic poem, *Rime of the Ancient Mariner* (1798). Another admirer was the poet Percy Bysshe Shelley, son of a wealthy politician. Percy had been expelled from Oxford in 1811 for penning and sending an atheistic pamphlet to all the bishops and heads of the colleges. A huge fan of both Wollstonecraft and Godwin, Percy struck up a correspondence with the latter. Godwin, being in poor financial shape, valued Percy's friendship, and deep pockets.

When a twenty-two-year-old Percy first met a seventeen-year-old Mary in 1814, they quickly became hopelessly infatuated with each other. When they ran off to the continent, along with Mary's stepsister Claire, they were shunned by both their families; Percy not only for his beliefs, but also because he was already married with two children, and Mary for ruining her reputation by running off with Percy. Mary felt betrayed by the lack of support from her father, who had railed all his life against the institution of marriage.

They spent the rainy spring and summer of 1816 at the Villa Diodati on the shores of Lake Geneva in Switzerland in the company of Lord George Gordon Byron, a Romantic poet with whom Claire was infatuated, and Byron's personal physician, John Polidori. 1816 would become known as the year without a summer, the result of the massive eruption of Mount Tambora in modern day Indonesia, which threw so much ash into the atmosphere it disrupted the global climate, causing low temperatures, floods, and famines. So it was, indeed, on a dark and stormy night in May, when the group found themselves stuck indoors. With Byron annoyed with Claire's advances, Mary annoyed with Polidori's advances, and Shelley depressed, they spent an evening reading to each other from *Fantasmagoriana* (1812), a French anthology of German ghost stories. When Byron challenged all present to write something better, two icons of modern horror were born. Polidori would write *The Vampyre* (1819), which later inspired Bram Stoker's *Dracula* (1897), and Mary spent the next nine months, some of the happiest in her life, writing *Frankenstein*.

She channeled all her frustrations with her family and English society into the novel. Her nameless monster is a Lockean blank slate who learns through direct observation and experience. The creature thus deduces many tenets of Romantic philosophy as being the best way to live a life that uses love as a central guiding

principle, not fear, and the idea that judgment of others should be based on what they do, not who we assume them to be based on our prejudices. It is a Romantic novel for its new brand of nobility and chivalry; a gothic drama for its sweeping vistas, depth of feeling, and monster bent on revenge; and a science fiction novel for its “What if?” scenario that extrapolates upon the science of the day, and its commentary on scientific progress. It sold out its entire five hundred copy print run at the time of its anonymous 1818 publication and became a controversial topic of discussion for years to come.

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*Music.—Frankenstein rushes from the laboratory, without lamp, fastens the door in apparent dread, and hastens down the stairs, watching the entrance of the laboratory.*

FRANK. It lives! [It lives.] I saw the dull yellow eye of the creature open, it breathed hard, and a convulsive motion agitated its limbs. What a wretch have I formed, [his legs are in proportion and] I had selected his features as beautiful—beautiful! Ah, horror! his cadaverous skin scarcely covers the work of muscles and arteries beneath, his hair lustrous, black, and flowing—his teeth of pearly whiteness—but these luxuriations only form more horrible contrasts with the deformities of the Demon.

*Presumption; or, The Fate of Frankenstein (1823)*

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Despite its present-day ubiquity, *Frankenstein's* popularity did not begin with the novel, but from its stage adaptations. The first of these, *Presumption; or, the Fate of Frankenstein*, opened the same month Mary returned to England in July of 1823, after the death of three of her four children from illness, and Percy from accidentally drowning.

Theater in England in the 1800s was a bit of an odd affair due to the lingering influences of a seventeenth century decree whereby King Charles II. All theater had been banned as sinful under Puritan rule. Charles reversed this ban, but henceforth allowed only patented, “serious” plays to be staged on designated royal stages. All other performances were required to have “less serious” elements, like music, pantomime, or spectacle. Thus, when the playwright Richard Brinsley Peake adapted Mary’s novel, it included songs, a mute monster, and a staged avalanche. Mary and Godwin saw the play together in August. “I was much amused,” she later wrote to a friend, “[and] it appeared to excite a breathless eagerness in the audience.” The play was an immediate hit, and, of course, sparked an instant conservative backlash against its themes.

Many recognizable *Frankenstein* tropes come from Peake’s play: the hapless assistant named Fritz, the creature’s unnatural skin color, mute groaning, pacification by music, and the iconic “It lives!” line. It also deemphasized the ambiguous moral philosophy of the novel in favor of themes of community and romance.

Additional adaptations followed, keeping *Frankenstein* alive in the cultural imagination long past Mary’s death in 1851. Its popularity as a controversial topic also led to its cooption as a metaphor by public figures for sacrilege, political hubris, and scientific taboos. In a short time, the concept of *Frankenstein* was known by far more people than ever read the novel.

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### *Universal Horror and Frankenstein*

CHEM. FADE IN  
SHOT EXT. CURTAINS INT. THEATRE  
Mr. Van Sloan comes on—speaks—exits—

VAN SLOAN

How do you do—Mr. Carl Laemmle feels that it would be a little unkind to present this picture without just a word of friendly warning. We are about to unfold the story of Frankenstein. A man of science, who sought to create a man after his own image—without reckoning upon God. It is one of the strangest tales ever told. It deals with the two great mysteries of creation—life and death . . . I think it will thrill you . . . it may shock you . . . it might even . . . horrify you! So then, if you feel that you do not care to subject your nerves to such a strain, now is your chance to . . . well . . . we've warned you!

Frankenstein *screenplay by Garrett Fort and  
Francis Edwards Faragoh (1931)*

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As Frankenstein evolved in the cultural consciousness, so did horror fiction. More folklore-inspired novels were published, like *Sleepy Hollow* (1820), *The Hunchback of Notre Dame* (1831), *The Picture of Dorian Gray* (1890), and *Dracula*; as well as horrific science fictional works, like *The Mummy! Or a Tale of the Twenty-Second Century* (1827), *The Strange Case of Dr. Jekyll and Mr. Hyde* (1886), and *The Invisible Man* (1897); not to mention the macabre, genre-bending work of Edgar Allan Poe.

Horror could also be found in the early days of cinema, including select trick films by Georges Méliès, such as *Le Manoir du Diable* (1896). The first cinematic *Frankenstein* was made by Edison Films in 1910, which sees the creature made alchemically by Frankenstein, only to be later absorbed back into Frankenstein via a mirror. Universal Pictures, however, would make the most iconic adaptation of Mary Shelley's novel, as well as pave the way for the evolution of the modern horror movie.

Universal was originally founded on the East Coast as a cabal of independent film-making companies known as the Independent Motion Picture Company in 1909, by its president Carl Laemmle Sr. After Laemmle bought out most of the companies, he changed the name to Universal and moved to Studio City in 1915, both for California's mild, sunny climate, and to escape the stranglehold on distribution and camera patents by the Edison Trust (later busted by the government). In Studio City, Laemmle created a completely self-contained movie studio community, where the early horror classics, *The Hunchback of Notre Dame* (1923) and *Phantom of the Opera* (1925), were filmed.

In 1931 Gothic fiction was as popular as ever, and Universal, in dire financial straits due to the Depression, was looking for a moneymaker. The studio bought the rights to a successful stage adaptation of *Dracula*, and Bela Lugosi, star of the American stage version, was cast as the Count. The film became a surprise blockbuster, so Laemmle decided to bet on horror again. They'd had their eye on a stage version of *Frankenstein*, so those rights were purchased, and a screenplay was written that pulled from both stage and novel. Lugosi passed on the monster's non-speaking role, and it instead went to forty-four-year-old Boris Karloff, a former stage actor just starting his film career, allegedly after he was spotted by director James Whale in the studio commissary.

With its Gothic sets, gadget-filled laboratory, landmark makeup design by Jack Pierce, and Karloff's empathetic portrayal of the mute monster, the film remains a wonder. Audiences lined up for hours to see *Frankenstein*, and it smashed box office records and launched Karloff's career as a star. Universal Pictures had created a monster.

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MEDIUM SHOT

FRANKENSTEIN (laughing crazily)

It's alive! It's alive!

Victor leaps forward.

VICTOR

Henry—in the name of God!

FRANKENSTEIN (Standing up, his feet apart)

God? Now I know how it feels to be God!

Frankenstein *screenplay* (1931)

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Nearly every subsequent Universal horror film in the thirties would adhere to the same winning *Frankenstein* formula of including scientists alongside monsters. See the archeologists in *The Mummy* (1932), the chemist protagonist in *The Invisible Man* (1933), and the Frankenstein sequels' inclusion of Doctor Septimus recreating Frankenstein's work in *The Bride of Frankenstein* (1935), and Frankenstein's scientist son in *Son of Frankenstein* (1939). It's unsurprising to see, then, how monster movies gradually became science fiction films.

With the onset of World War II, the ambiguous morality of mad scientists and empathetic monsters gave way to more black and white scientist heroes and against atomic or extraterrestrial creatures. Professor and critic Vivian Sobchack explains in *Screening Space* (1987) that while both monsters and creatures are terrifying "others," a monster is inherently more knowable, and therefore more empathetic, than a creature, which represents an external threat, and nothing more. As monsters are knowable, their stories are personal and involve their wants and needs. Creatures merely destroy. The evolution of the Frankenstein monster over time makes for an interesting case study of this thesis.

In the novel, the monster is a viewpoint character. We as readers cannot see the monster's hideous face. We can only hear his voice and experience his life alongside him. So when others react to his attempts to do good with disgust and fear, we empathize. In the stage plays, and the 1931 movie, the monster becomes more creature-like due to his muteness, but his inner world is still knowable thanks to an actor's emoting, perfected in Karloff's moving 1931 portrayal. As more starkly drawn villains came into style, the monster became more villainous, being increasingly used for violence over the course of the seven sequels. Karloff, who'd always had an affection for the role, stepped down after *Son of Frankenstein* (1939), disillusioned by the monster's transformation into what he considered a "mindless clown."

With the dropping of the atomic bomb, the bottoming out of studio coffers after the Supreme Court ruled against studios owning their own theaters, and the rise of television, low-budget atomic creature features would replace monster-driven horror movies. To make extra money, movie studios began selling local television stations, which needed more programming, cheap packs of films, including the 1957 "Shock!" package of Universal horror films. Originally targeted at all age groups, these movies boomed in popularity with teenagers, triggering not only a horror revival, but also a new *Frankenstein* Renaissance. Frankenstein's monster has since been sent to space, made from teenage car crash victims, met a Japanese mega-monster, been a sitcom dad, a gold-underwear-clad body builder, and a character on a children's cereal box. "It's alive!" is right. This monster will never die.

While science still can't restore life to dead tissue, we should never underestimate

the humanities. By 1931 both Mary and the *Frankenstein* novel, had been largely forgotten, but the women's movement of the 1970s brought awareness back to her writing, and she has since gained her rightful spot beside her husband in the history of Romantic literature.

