A Companion to



AN FLECTRIFYING MODERN ADAPTATION

RANKENSTEIN

BY NICK DEAR

From the novel by Mary Shelley

DIVERSITY · DIFFERENCE · OTHERNESS

the college of arts + sciences











b. August 30, 1797
d. February 1, 1851
1816 – Begins writing Frankenstein
1818 – Frankenstein published anonymously

1831 – Third edition of Frankenstein published

Charles Stanton Ogle (1910), Bori Lon Chaney, Jr. (1942), Christo Fred Gwynne (1964), Fran Peter Boyle (1974), Rober Benedict Cumberbatch & Jonny Ron

1957

A BRIEF HISTORY OF FRANKENSTEIN IN THEATER & FILM 1823 1910 1930 1931

KINETOCRAM

Edison Studios releases a 16-minute silent film version of *Frankenstein*.



1935

Universal Studios releases *Bride of Frankenstein*, starring Elsa Lanchester as the bride and Mary Shelley.

Frankenstein, directed by James Whale and starring Colin Clive as Victor Frankenstein and Boris Karloff as the monster.

Peggy Webling's stage adaptation of *Frankenstein* opens in London.

Hammer Studios releases *The Curse of Frankenstein*, establishing their unique brand of technicolor Gothic that pushes horror cinema into a new phase.



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The play Presumption; or the Fate of Frankenstein by Richard Brinsley Peake debuts containing the line "It lives!," greatly influencing later depictions of monsters.



A Companion to **Frankenstein**

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A Companion to Frankenstein was created by the Cardinal Stage Company Education Committee with assistance from Monroe County Public Library.

Cardinal Stage Company

900 S Walnut St. Bloomington, IN 47401 812.336.9300 http://www.cardinalstage.org/

> **It's a poster!** Remove staples to reveal a *Frankenstein* timeline.

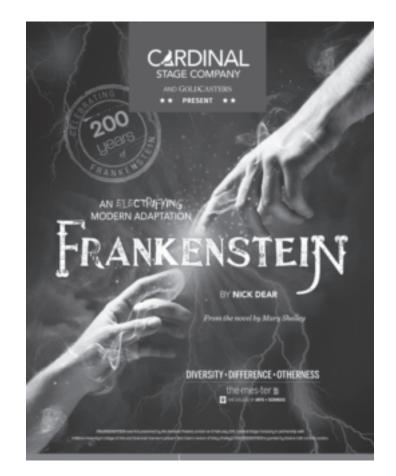
FRANKENSTEIN is presented by special arrangement with Dramatists Play Services, Inc., New York

Dear Friends and Supporters,

It was 10 years ago this fall that I proposed to College faculty a themed series of events over the course of a semester that would examine a complex issue and investigate it through the many disciplines represented in the College of Arts and Sciences at IU. My notion was that THEMESTER would be comprised of public presentations by scholars, artists, and activists, a mini-curriculum of theme-related courses, and the staging of thematic exhibitions and artistic productions. My hope was that not only students, but also faculty and staff, would be drawn into exploring challenging issues from the many doors that THEMESTER opened and would emerge with a keener understanding of the complicated issues of our time. The tongue-twisting name of THEMESTER took hold, and now the College is celebrating its ninth year of THEMESTER.

I also imagined that THEMESTER might extend beyond the College, drawing interest from the larger Bloomington community. I have long believed that the dramatic and visual arts enable us to probe deeply and gain subtle and powerful insights into the human experience while bringing enrichment and enlightenment to people of all ages and backgrounds. This partnership between the College and Cardinal reminds us that theatre, done well and done right, has the power to build bridges between the town and the gown.

Our first THEMESTER in 2009 was focused on Evolution and that year the College began our now long-standing partnership with Cardinal Stage with its production of Inherit the Wind. This year, the THEMESTER theme is Diversity - Difference - Otherness. To explore that theme, Cardinal presents a new adaptation by Nick Dear, directed by Cardinal founder Randy White, of the familiar tale of *FRANKENSTEIN*. The focus of the 19th-century novel by Mary Shelley was on modern science and what its misuse might mean for humanity, but Shelley also left room for her readers to consider those who turned difference into ugliness, and otherness into violence. Nick Dear's play focuses on the monster as the Other, and in an era of public criticism of people who are seen by some as "different" and "violent", the message of *FRANKENSTEIN* is even more compelling than it was when Shelley wrote. By exposing audiences to the very real and very human reactions to



monsters, Nick Dear's Creature and this Cardinal production achieve that which is most important to the mission of THEMESTER – to reveal hard truths and explore uncomfortable realities. Cardinal Stage's production gets to the heart of the dilemma of humanity. After all, as De Lacey says "No man is a monster!" and yet every day we create monsters of others and discard them as humans. Maybe the Creature has something to tell us.

I am delighted to be a member of the Cardinal Stage Company Board of Directors, and humbly pleased that I was able to play a role in forging the partnership between THEMESTER and Cardinal. Long may it thrive!

Jean Robinson

Cardinal Stage Company Board member

Former Associate Executive Dean of the College of Arts and Science

Professor Emeritus, Indiana University

Opening Statements

by Jane D. McLeod

Provost and Chair, Sociology, Indiana University Chair of faculty advisory committee of Themester 2017: Diversity, Difference, Otherness

> How do people come to be seen as *other*? How is *otherness* maintained politically and through social interactions? How is *otherness* represented in literature, film, and mass media? What are its implications for individual well-being and societal functioning? The 2017 Themester is dedicated to exploring how people are defined and understood through concepts of *diversity*, *difference*, and *otherness*. Each of these terms raises perplexing cultural and social issues, and our programming is designed to explore their nuances and connotations.

Our engagement with the concept of otherness draws from the full complement of the liberal artsarts, humanities, social sciences, and natural sciences-and from their wide-ranging subject matter-science fiction and dystopian literature (e.g., the Divergent series, The Hunger Games); social histories of racialized conflict (e.g., apartheid in South Africa and the Civil Rights movement in the US); and research on environmental change and invasive species, among others. Themester events and activities, such as the performance you will see of Frankenstein, aim to promote dialogue about the many forms of "otherness" we encounter, about the challenges and opportunities of living in a diverse society, and about how we can transcend differences to build effective local, national, and global communities.

Difference, in and of itself, is a neutral, descriptive concept—things are similar or different and difference is neither good nor bad. Difference yields clear benefits. Creative solutions emerge when we bring together people with different talents, skills, and perspectives. Our lives are enriched by unfamiliar ideas and new forms of artistic expression, even when they make us feel unsettled or uncomfortable. Yet social science research demonstrates that recognition of difference easily yields to differing evaluations. Without conscious intent, we evaluate people and ideas that are familiar more positively than those that are unfamiliar. Difference has the potential to divide as well as unite.

In the abstract and in reality, diversity is more complex. Diversity typically carries a positive connotation; it implies openness, acceptance, tolerance, inclusion, Diversity also invokes notions of identity: our memberships in social groups (defined, for example, by race/ethnicity, gender, social status, sexual orientation) and the meanings we derive from those memberships. Because of its association with identity, diversity asks more of us than merely accepting or tolerating difference. It asks also that we welcome and encourage the identities. experiences, and feelings associated with those differences. This is not easy to do; building and sustaining diverse communities requires active engagement and a willingness to learn from people and ideas different from our own.

Perhaps that is why many contemporary social challenges center on concepts of difference and diversity. Changing national demographics have provoked heated debates about immigration, citizenship, and basic human rights. Colleges and universities have struggled to recruit and retain faculty and students from traditionally underrepresented groups even as critics cast their efforts as unfair. Global climate change has led to declines in native biodiversity, prompting questions about how best to balance human activity with the well-being of the communities and non-human species that are at risk. Even as we confront these challenges, our efforts to develop effective responses have been stymied by increasing political polarization, decreasing empathy, and the entrenchment of difference. Transcending these divides requires that we confront difficult questions about how we understand and represent difference, how categories of difference are constructed and maintained. how notions of difference are used to support and undermine communities, and how individuals and collectives resist binary demarcations of the self vs. "other." The 2017 Themester faculty advisors proposed the theme of diversity, difference, and otherness back in 2015 because we believe that investigating these concepts will help prepare students to make a positive contribution to our increasingly multicultural, multiethnic, multinational world, and to the future of a planet that is rapidly exceeding its capacity to sustain human life.

What does Frankenstein contribute to our investigation of these concepts? Difference and otherness reverberate through every scene of the play. Victor Frankenstein literally creates an "other." a Creature different from human. However, the process of becoming "other" does not end with this creation but carries through the play as the Creature's attempts to become part of human society are met with rejection and contempt. Cast out by his creator, greeted with disgust and horror, rebuffed by the companion he most seeks. the Creature is overcome with anger, hate, and a quest for revenge. While no such "creature" exists in our world, the Creature's struggles for acceptance and his growing bitterness in the face of failure resonate with the experiences of many people who live on the margins of society.

As you watch this performance, I encourage you to consider what you can learn from the Creature's journey about your own life and the communities to which you belong. Here are a few questions to help you on your way:



Bride of Frankenstein. Dir. James Whale. Universal Pictures, 1935. Film poster.

Victor Frankenstein builds a Creature who is not human. Is it inevitable that the Creature would be seen as different? How is the Creature similar to the people he encounters? How is he different?

Victor Frankenstein rejects the Creature soon after the Creature emerges. Why does Frankenstein reject the Creature? How do you think Frankenstein felt? Can you empathize with Frankenstein's position? How do you think you would respond if you met the Creature?

What do other people do or say that contributes to the Creature's status as "other"? What, if anything, could the Creature have done to resist being seen as different?

Have you witnessed "othering" behaviors at school, work, or in other settings? How are those behaviors similar to or different from what the Creature encounters?

What effect does rejection have on the Creature? What emotions does he experience? When he experiences kindness and acceptance, how does he respond?

The futures of Victor Frankenstein and the Creature are bound inextricably. What does their shared fate tell us about the relationship between people who hold the power to create "others" and those who are "othered"?

Thank you for attending this Cardinal Stage production of *Frankenstein*. The Themester committee welcomes your feedback on the play and on the broader themes of diversity, difference, and otherness. Submit your comments or send your answers to the questions above to *themes@indiana.edu*.

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Heather Reynolds

Associate Professor of Biology Indiana University

For ecologists, engaging with diversity, difference, and otherness is all in a day's work. Ecological systems exhibit enormous diversity, complexity. and contingency. with thousands of genetically and phenotypically (phenotype refers to an organism's observable characteristics) heterogeneous species engaging in myriad interactions with one another and with constantly changing physical and chemical environments. Ecosystems may thus be likened to snowflakes, with no two quite alike. What are the secrets of coexistence of different species? How and why do patterns of genetic, species, and habitat diversity change over space and time, and how do such patterns affect the functioning and stability of ecosystems? Why do some exotic species integrate smoothly into new communities, and others become invasive? Questions like these provide an endless source of fascination for ecologists, and exploring answers engages us with the mystery and beauty of nature while assisting humanity's ability to live in harmony as members of the biosphere. Excitingly, subfields such as urban ecology are challenging entrenched views of nature as "other" than human, helping to reimagine the city (perhaps the quintessential antithesis of nature). Our "biodiverse-cities" of the future can be cleaner, greener, healthier places where diverse communities of interacting plants, animals, and microbes supply food, clean water and air, energy, and spiritual renewal, vastly increasing the sustainability and resiliency of our human-built environments.

Phoebe Wolfskill

Assistant Professor of African American and African Diaspora Studies Indiana University

Scholar and activist W. E. B. Du Bois wrote, "Work, culture, liberty, - all these we need, not singly but together, not successively but together..." Du Bois positioned cultural and racial diversity when aligned with the goal of racial equality - as essential to national character and influence. The discipline of African American Studies abides by this fundamental belief in the recognition and inherent value of racial diversity. while underscoring that diversity is meaningless if only certain voices are heard. As a professor of African American and African Diaspora Studies with a PhD in art history. I position racial diversity as a primary point of study and conversation. considering the ways in which visual representations of human beings (as raced bodies) articulate ideas about self and identity, social community, socioeconomic class, and relationships of power. Artists of the African Diaspora have used visual imagery to reflect on racial identity and to meditate on the world around them. These rich and variable artistic expressions ultimately offer contemplations on what it means to be human.

Sarah Osterhoudt

Assistant Professor of Anthropology Indiana University

When thinking of diversity in connection with the environment. people often think of the variety of plants and animals found in faraway places - especially charismatic symbols of biological diversity such as giant pandas, majestic lions, or towering redwood trees. This is especially true with parks and protected areas, which are popularly imagined as places where nature is allowed to thrive unencumbered by humans. As a cultural anthropologist, I seek to expand ideas of environmental diversity, seeing places such as parks not only as places of biological diversity, but also as places that contain a diversity of cultural stories. For some, a forest may represent a pristine place in need of protection. For others, this same forest represents a long history of cultural interaction and care, a place where their ancestors lived or where they work to secure their family's livelihood. Which ideas of diversity become empowered, and which become silenced? Overall, by expanding our ideas of environmental diversity to include cultural realms, we can better appreciate all the factors that contribute in creating diverse - and beautiful - landscapes.

Frankenstein: A Timeline

by Rebecca Baumann

Head of Public Services, the Lilly Library, Indiana University

August 30, 1797

Mary Godwin (who will later, at marriage, change her name to Mary Shelley) is born. Her father. William Godwin, is a journalist, novelist and philosopher, famous for his radical, anarchist politics. Her mother, Mary Wollstonecraft, is also a novelist and philosopher. best known for her feminist manifesto, A Vindication of the Rights of Woman (1792). Mary Wollstonecraft dies ten days after the birth of her daughter. Marv Godwin is raised and educated by her father, who remarries when she is four years old.

June 1812

Mary Godwin meets the poet Percy Bysshe Shelley, who is already married to Harriet Westbrook. Percy Shelley is an admirer of William Godwin's political philosophy.

July 1814

Percy Shelley abandons his pregnant wife to elope with Mary Godwin. They bring Mary's sixteen-year-old stepsister Claire Clairmont with them as they travel around Europe. When Mary returns, she is destitute, pregnant, and faced with a very angry father. The child is born prematurely and dies in February of 1815.

January 1816

Mary Godwin gives birth to a son, William.

May 1816

Mary Godwin, Percy Shelley, and Claire Clairmont leave England to meet Claire's lover, Lord Byron, in Geneva. Byron has already achieved fame for his poetry and notoriety for his love affairs. They are joined at the Villa Diodati in Switzerland by Byron's personal physician, John Polidori.

June 1816

Inspired by their reading of ghost stories, Byron proposes that the members of the group at Villa Diodati each write their own ghost story. Intrigued by discussions of the principle of life and experiments in galvanism (the stimulation of muscles by electric current). Mary has a waking dream of a young scientist animating a body. The next morning, Mary begins writing the story that will become Frankenstein. The only other story to come from Byron's challenge is Polidori's The Vampyre (published in 1819 and based on a fragment penned by Byron).

December 1816

Percy's pregnant wife Harriet commits suicide. Mary and Percy are married later that month, and she becomes Mary Shelley.

1817

Mary completes *Frankenstein*. In September, her daughter Clara is born.

1818

Frankenstein is published in a three-volume edition. The novel is issued anonymously with a preface by Percy Shelley, and most reviewers assume that Percy is the author. The baby Clara dies. Mary and Percy's son William also dies this year.

1819

Mary gives birth to her fourth (and only surviving) child, Percy Florence.

1823

The play *Presumption; or the Fate of Frankenstein* by Richard Brinsley Peake debuts. Mary Shelley and her father attend one of its performances. The monster is depicted as a mute, blue-skinned hobgoblin who pantomimes along to various musical numbers. The play includes the line "It lives!" and greatly influences later depictions of the monster.

1831

The third edition of *Frankenstein* is published. This one-volume popular edition is heavily revised by Mary Shelley with a new preface and toneddown political radicalism. The 1831 edition of the novel is the one that is most commonly reprinted and read today.

1819-1851

Mary Shelley continues to write and publish, but none of her work achieves the fame of *Frankenstein*. Other novels include the postapocalyptic science fiction novel *The Last Man* (1826) and the historical novel *The Fortunes of Perkin Warbuck* (1830).

February 1, 1851

Mary Shelley dies of a brain tumor at age 53.

March 1910

Edison Studios releases a 16-minute silent film version of *Frankenstein*. In this version of the story, the monster is transformed from a real creature into a reflection in the mirror (of Victor Frankenstein), which fades away when Victor's better nature wins out.

February 1930

Peggy Webling's stage adaptation of *Frankenstein* opens in London. It becomes the basis for the 1931 Universal Studios film. The play also names the monster "Frankenstein," an error which has persisted throughout the monster's subsequent appearances in popular culture.

November 1931

Universal Studios releases *Frankenstein*, directed by James Whale and starring Colin Clive as Victor Frankenstein and Boris Karloff as the monster. The makeup by Jack Pierce and Karloff's distinctive shambling walk and mournful groans become perhaps the most iconic and memorable iteration of the monster.

April 1935

Universal Studios releases *Bride* of *Frankenstein*, directed by James Whale and starring Boris Karloff as the monster and Elsa Lanchester as the bride. She also plays Mary Shelley in the film's frame narrative, which tells the story of *Frankenstein's* conception in 1816.

1939-1948

Frankenstein's monster continues to appear in Universal horror films, including *Son of Frankenstein* (1939), Karloff's last appearance as the monster. Lon Chaney Jr. takes over the role in subsequent entries in the series.

December 1940

"New Adventures of Frankenstein" by Richard "Dick" Briefer debuts in Prize Comics. Considered to be the first American horror comic, the series is at its onset heavily influenced by the Universal Studios films. The series eventually falls prey to the censorious Comic Code Authority instituted in 1954.

May 1957

England's Hammer Studios releases The Curse of Frankenstein, their first color horror film. Along with 1958's Dracula, it establishes Hammer's unique brand of technicolor Gothic that pushes horror cinema into a new phase, punctuating classic Victorian horror with sex and gore.

1964-1966

Fred Gwynne plays Herman Munster, whose appearance is based on Frankenstein's monster, in the American sitcom *The Munsters*. The series' premise is that a family of monsters are kind, hardworking, middle-class Americans.

March 1971

General Mills introduces two monster-themed breakfast cereals: Count Chocula and Franken Berry.

1973

Brian Aldiss publishes Billion Year Spree: The True History of Science Fiction, which positions Frankenstein as the first science fiction novel. Aldiss's claim is still disputed, but there can be little question that a novel published by a pregnant teenaged girl in 1818 is one of the foundational texts of the modern-day genres of horror and science fiction.

December 1974

Horror comedy Young Frankenstein, directed by Mel Brooks and starring Gene Wilder, is released.

August 1975

The Rocky Horror Picture Show is released, transforming Victor Frankenstein into Dr. Frank-N-Furter, a "sweet transvestite from transsexual Transylvania" and continuing the long tradition of Frankenstein as a transgressive narrative.

November 1986

Gothic, directed by Ken Russell, provides a film version of the conception of *Frankenstein* and the summer Mary Shelley spent with Percy Shelley, Byron, Claire Clairmont, and Polidori.

November 1994

Mary Shelley's Frankenstein, directed by Kenneth Branagh, is released. The film attempts to return the story to Shelley's vision, making the monster (played by Robert De Niro) a misunderstood and sympathetic figure rather than an inarticulate brute.

September 1997

"Some Assembly Required," a Frankenstein-inspired episode of Buffy the Vampire Slayer, airs on television.

November 1997

"The Post-Modern Prometheus," an episode of *The X-Files* inspired by Mary Shelley's novel and James Whale's films, airs on television.

January 1998

Gods and Monsters, a film telling the story of director James Whale (played by Ian McKellen) is released.

February 2011

Nick Dear's Frankenstein, directed by Danny Boyle, premieres at the National Theatre in London. The play stars Benedict Cumberbatch and Jonny Lee Miller, who take turns playing Victor Frankenstein and the creature on alternate nights.

2014-2016

Victor Frankenstein, the monster, and the bride are main characters in Showtime's series *Penny Dreadful*, which reimagines several nineteenth-century horror classics.

2017

Universal launches its "Dark Universe," a reboot of their classic monster franchise, with *The Mummy*. *Bride of Frankenstein* is scheduled for release in 2019.



A portrait of Mary Shelley. Painted by Richard Rothwell. Royal Academy of Arts, London. 1840.

Nick Dear

Nick Dear was born in Portsmouth, England in 1955 and received his B.A. in comparative European Literature from the University of Essex in 1977. His best known plays are *The Art of Success* (1986), about the life of the 18th-century artist William Hogarth, and *Frankenstein* (2011). He wrote the television screenplays for Jane Austen's *Persuasion*, which won a BAFTA award and was subsequently screened in cinemas around the world, and Agatha Christie's Poirot.

When asked about adapting Mary Shelley's novel for the stage, Mr. Dear responded that. "It still has wonderful resonance: whereas Jane Austen looks back over the previous century, manners and marriage, Mary Shelley - only about 20 years younger – looks forward to the coming century, the machine age, the death of God, the humanist revolution. And the moral questions she airs about parental responsibility, scientific progress, difference and otherness, what it means to be human - will I hope feed into an evening in the theatre which is characterized more by questing intelligence than by creepy thrills."

Nick Dear currently resides with his wife in London.

Mary Shelley

It's difficult to condense the life of Mary Shelley, so let's start with the bare facts:

Mary Godwin was born in 1797. In 1814, she left home for Europe in the company of her lover, the poet Percy Shelley. They were married in 1816. That summer she began work on her first novel, *Frankenstein: or The Modern Prometheus*, which she published anonymously in 1818. When her husband drowned off the coast of Italy in 1822, she returned to England, where she edited and published his poetry, as well as writing and publishing novels, essays and short stories of her own. She died in 1851 at the age of 53.

Now let's scratch the surface a little...

Mary's mother, one of the most influential feminists of the 18th century, died ten days after giving birth to her. Her father raised her to live an expressive, freethinking life that was violently at odds with contemporary cultural norms. As a child, she was allowed to sit up late and join in conversation with many of the progressive thinkers of the day.

Mary was 16 years old when she left home with Percy. They were passionately in love, struggling to break free from the restrictions placed upon them by society. Despite teaching his daughter that marriage was a form of slavery for women, Mary's father virtually disowned her for running away with the wild young poet.

Although nearly penniless at the time, they travelled throughout the continent. When they returned, Mary was pregnant with her first child, which she lost during a premature birth. In 1816, after the death of Percy Shelley's first wife by suicide, they married and once more left England for Europe.

It was during the famous "haunted summer" of 1816, while living on Lake Geneva in Switzerland with her husband, her stepsister Claire and the poet Lord Byron, that Mary began work on the novel *Frankenstein*. Upon its anonymous publication in 1818, the book was well-reviewed, and immediately popular. While still a young woman, Mary saw it produced as a play that drove members of the audience to scream in terror.

Percy Shelley drowned in a storm at sea in 1822, leaving a nearly destitute Mary alone in Italy, with their only surviving child, Percy Florence. She was 24 years old.

By this point in her life, in addition to losing her husband, Mary had lost three children to common childhood illnesses of the day. For running away with Percy she had faced ostracism not only from English society, but from her father and many of her friends as well. She returned to England, and with the help of friends began to support herself as a writer. She dedicated herself to saving her dead husband's legacy, editing and publishing his poetry and even inserting biographical elements that were considered controversial at the time.

She is justifiably regarded as one of the earliest creators of the both science fiction and the gothic novel. Like other English Romantic writers, she mixed radical politics and feminism with artistic expression. *Frankenstein*, like many of her works, expresses the danger and loneliness that awaits anyone willing to challenge the established order. And like all great art, it raises more questions than it answers.

ESSAYS

Mary Shelley's Frankenstein and the **Birth of the Modern Monstrous**

by **Professor Linda Charnes** Department of English, Indiana University

Matters of Life and Death:

Scientific Ethics in Frankenstein

by **Associate Professor Lisa Sideris** and **Jacob Boss**, doctoral student *Religious Studies, Indiana University*

Diverse Adaptations of Frankenstein

by **Associate Professor Monique Morgan** and **Provost Professor Stephen Watt** Department of English, Indiana University

Frankenstein, Technology, and the **Industrial Revolution**

by **Associate Professor Monique Morgan** Department of English, Indiana University

Whose Monster is the More Probable Language Learner?

by **Professor Emeritus Phil Connell**

Department of Speech and Hearing Sciences, Indiana University

Mary Shelley's Frankenstein and the **Birth of the Modern Monstrous**

by Professor Linda Charnes

Department of English, Indiana University

Names have tremendous power. Proper names affiliate us with families, genders, cultures, ethnicities, and society, while descriptive names can be used to estrange us, as in the "fat kid," the "queer," the "freak," the "loser." But no name has more power to exclude someone entirely from human society than the "monster." Derived from two Latin words, monstrare (to show or demonstrate) and monere (to warn or admonish), the word "monster" combines the etymological history of both. Consequently, something or someone we call a "monster" visibly, through embodiment, appearance or behavior. is a sign or wonder in the world -- an omen that demands deciphering.

We tend to think of monsters as being horrifically ugly and "unnatural." To see what makes Mary Shelley's *Frankenstein* such a groundbreaking novel, we must comprehend how her representation of monstrosity partakes of and diverges from the long history that precedes it. The Medieval and Renaissance European belief in monsters was inseparable from theology. Monsters were evidence of God's displeasure, and deformed or malformed bodies wore visible signs of this condemnation. As the sixteenth-century French surgeon Ambroise Paré wrote:

It is certain that most often these monstrous and marvelous creatures proceed from the judgement of God, who permits fathers and mothers to produce such abominations from the disorder they make in copulation, like brutish beasts, in which their appetite guides them, without respecting the time, or other laws ordained by God and Nature.

The human body was understood to bear legible marks of moral predispositions. Anyone unfortunate enough to suffer a severe birth defect or abnormality, even a large and unusual birthmark. was at risk of being branded a monster. Even within this broadly construed notion of the monstrous, monsters were still mostly creatures who were born, sometimes by the coupling of the gods or demons with mortals (as with Grendel in Beowulf or Caliban in the Tempest). Paré's inclusion of both fathers and mothers in a process of birth means that however "unnatural" a creature might look, it still had a literal umbilicus to nature's processes.

In 1818, Mary Shelley's famous novel *Frankenstein* changed all that forever. The subtitle, "the Modern Prometheus," refers to the legendary mortal who stole fire from the gods and shared it with mankind, a myth that punishes the earliest human aspiration to become godlike. Prometheus wasn't a scientist, and he's certainly not modern. But by the time Shelley published her masterpiece, modern laboratories existed in England and Europe, complete with medical anatomy theaters. What makes Victor Frankenstein the "modern Prometheus" is his feverish compulsion to create the flame of life in a laboratory, solely through his own efforts, bypassing every known law of nature, biology, and reproduction. He wants no less than to re-animate lifeless matter.

Although Victor's creature is stitched together from body parts pillaged from filthy graveyards, the cliché of the lumbering zombie (the popular culture legacy of the novel) could not be more different from what Shelley actually wrote. Victor is horrified when the Creature opens his eyes: "His limbs were in proportion and I had selected his features as beautiful. Beautiful!-Great God!" The allegory is clear here. Victor is unprepared for the whole Creature being greater (or uglier) than the sum of its parts. Worse, as he admits, the instant his experiment is successful he loses all interest in the science he's pursued with monomania for the past two years. He flees the Being he has created, leaving it defenseless, alone and unguided. That the Creature on his table looks hideous is indisputable. But that he is a "monster" is entirely open to challenge. From the moment the Creature awakens. the reader is transported into the realm of moral monstrosity, a failure of human duty that we must lay squarely at Victor's feet.

With Shelley's novel, we make a modern turn to monstrousness residing less on the body and more in the soul and behavior. After all, Frankenstein precedes Oscar Wilde's Dorian Gray, Robert Louis Stevenson's Dr. Jekyll and Mr. Hyde, even Bram Stoker's Dracula. Moral monsters will become even more fearsome than those who wear deviance on their bodies (the famous Victorian figure "the Elephant man" is a gentle and loving soul despite a disease that makes him grotesque). For Shelley, monstrosity appears in the cruelties of apparently "normal" people. Victor's abandonment of the Being he has brought to life is as complete as his self-absorption. Wallowing in his own distress, his disavowal of the Creature leads to the death of his little brother. William, as well as an adopted family friend, Justine, who will wrongly be convicted of, and hung for, William's murder. We cannot attribute Victor's behavior to how he was raised, as Shelley takes pains to show the reader Victor's idyllic childhood, coddled by the most loving of parents. We can find no excuses for Victor's failures aside from something fundamentally missing from his character: the quality of empathy and the courage of responsibility.

Shelley's novel created the template for a future of Godzillas and zombies, as well as the proverbial "mad scientist," spawn of industrial chemicals and nuclear radiation, of the hubristic scientific laboratories of modern life stripped of human sentiment and ethics. By the nineteenth century, monsters became the byproducts of a newly privileged belief in the powers of experimental science and its unholy drive to "penetrate into the secret parts of Nature," as Shelley writes of Victor. That such an undertaking is seen as masculine is never in doubt in the novel, from the pillaging of graveyards to harnessing the secrets of electricity to animating dead matter. The novel portrays a scientist obsessed with usurping the functions of an always feminized nature, and metaphors of rape subtend the narrative, gendering the refusal to respect the boundaries either of bodies or of ethical social life. With this creation story, Shelley breaks the umbilicus to God and nature and tethers the monstrous instead to the hubris of modern scientific masculinity.

Perhaps the most innovative power of Shelley's vision of the monstrous is how it arises expressly out of the dynamics of relationship. Which brings us back to names. The Creature in the novel is never given a proper name. Instead he is relentlessly tagged, by Victor in his journals, as "the Fiend," "the monster," "the Demon," "the Devil." Yet Frankenstein is an epistolary novel, composed of letters from different characters, including an extensive narrative from the Creature himself. The larger narrator function belongs to ship's Captain Walton, whose letters to his sister, Mrs. Saville, open the novel and establish its benchmark of values:

I have one want which I have never yet been able to satisfy; and the absence of an object of which I now feel as the most severe evil. I have no friend, Margaret: when I am glowing with the enthusiasm of success, there will be none to participate my joy; if I am assailed by disappointment, no one will endeavor to sustain me in dejection.

The novel begins with the "severe evil" of loneliness, and throughout, it will be this affliction -- of having no true friend nor companionship with others -- that deforms the inherently good disposition that resides in the Creature's body. What, Shelley asks, are the emotional and human duties people owe each other, especially parents to children? What is the role of compassion and fellow-feeling in countering industrial and instrumental forces that dehumanize everyone, from rich to poor? At bottom, Mary Shelley takes on one of Shakespeare's most plaintive questions, posed over two centuries earlier by a despondent King Lear about his daughters: "Is there any cause in Nature that makes these hard hearts?"

Mary Shelley had read Shakespeare's plays, where the "monstrous" almost always appears in human form and character. She had read John Milton's epic poem Paradise Lost, wherein Satanic evil consists of the absolute enclosure of narcissism. Never having met her own mother -- the famous first feminist Mary Wollstonecraft, who died giving birth to Mary -- the young author had her own investment in the importance of bonds between people. For the eighteenyear-old Shelley, the monstrous inhered in cruelty, irresponsibility, the withholding of love, exclusion, and scapegoating. Arguably the first sociologist of monstrosity, Shelley reveals less that "monsters" can be created on laboratory tables than that they become locked into their monstrosity by a culture that offers them neither succor nor friendship. Hers is a new version of the monstrous for a modern age, with its grimy Industrial Revolution, exploitation of the poor and children working in unsafe factories and appalling conditions, proliferation of destitute families living on the streets of London, even as an elite caste of wealthy business titans began to dominate England's major cities. We should argue about who is most to blame in the devastation ultimately wrought by Shelley's notorious Creature. But her brilliant novel makes one thing indisputable: it takes a village to raise a Monster.

Matters of Life and Death: Scientific Ethics in Frankenstein

by Associate Professor Lisa Sideris and Jacob Boss, doctoral student

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Mary Shelley (1797-1851) composed *Frankenstein* in 1816 while vacationing in Switzerland during one of the coldest summers in recorded history. Dense atmospheric dust from a volcanic eruption in what is now Indonesia created freakishly frigid temperatures and dark and dreary days throughout much of Europe and North America. Shelley and her companions were driven indoors where they took to writing ghost stories at the fireside.

The idea that Shelley's dark tale of scientific overreach was spawned by alarming, widespread shifts in climate has captivated scholars who note that cold, violent, or gloomy weather appears on nearly every page of the novel. The climatic birth of *Frankenstein* has special resonance today, as we witness our own weird weather events and as scientists contemplate what may be the ultimate act of technological hubris: geo-engineering strategies to bring global temperatures under human control.

But is *Frankenstein* best understood as a critique of scientific arrogance and techno-mastery? To answer this question, we need to explore not only the physical environment but also the scientific and ethical contexts that shaped the book.

The period in which Shelley composed *Frankenstein* was characterized by intense fascination with the processes of life and death, as well as deep uncertainty about these categories. At a time when few people could swim, tales of drowned persons seemingly brought back to life were rampant. In the late eighteenth century, physicians in England established a "Society for the Recovery of Persons Apparently Drowned." Annual processions of individuals seemingly brought back from the dead by the Society's methods did little to quell public anxiety about the reliability of death pronouncements. Only the onset of putrefaction, it seemed, was a trustworthy indicator of death. Stories of miraculous resurrection and doubtful death fed public fears of being buried alive, as literary scholar Sharon Ruston argues.

Then as now, the prospect of "curing" death elicited society's greatest hopes and fears. Attempts to resurrect the (confirmed) dead were not unknown. Italian physician Luigi Galvani (1737-98), observing what appeared to be the animating effect of electricity on a dead frog, began similar experiments with hanged criminals. The burgeoning science of resurrection that took his namegalvanism—influenced Shellev's portrait of Victor Frankenstein as a man consumed with locating "the principle of life." Victor ambitiously proclaims life and death as "ideal bounds" for his research. Shelley's Preface to the 1831 edition of Frankenstein alludes to galvanism as a "token" of contemporary hopes and fears: "Perhaps," she writes "a corpse would be re-animated ... the component parts of a creature might be manufactured, brought together, and endued with vital warmth."

That galvanic methods were conducted on bodies of the criminal dead points to another relevant feature of nineteenth-century science. During Shelley's lifetime, the professionalization of medicine was in full swing. Cadavers were urgently needed for medical experimentation and training of surgeons. The Murder Act passed in 1752 had made it legal for physicians to obtain the bodies of convicted murderers; dissection was deemed an additional form of punishment. But demand greatly outstripped supply. To make up the shortfall, "resurrectionists"-body-snatchers- supplied corpses to medical schools. While they benefited enormously from the practice of grave-robbing, medical professionals were eager to dissociate themselves from the profane resurrectionists who incited fear among the public.

Shelley portrays Victor Frankenstein as a blend of scientist and resurrectionist. He gathers the gruesome materials for his creation during nighttime visits to gravevards. Other corpses begin to accumulate as the story unfolds-those of Victor's brother William, his friend Clerval, and his bride Elizabeth. Upon animating his creation. Victor is troubled by visions of his bride decomposing before his eyes, and taking the form of his deceased mother. "I thought that I held the corpse of my dead mother in my arms ... I saw the grave-worms crawling in the folds of the flannel." Though he is not directly responsible for these deaths. Victor's association with resurrectionism suggests that even his loved ones may not be safe from the anatomist's incessant need for corpses. In short, Victor represents the nineteenth century's deep ambivalence toward scientific discovery.

Cinematic renderings of *Franken*stein have portrayed Victor as wildly exultant over his bold creation. "Now I know what it feels like to be God!" Victor boasts in an early adaptation. Shelley tells a far more complex tale. Initially driven by desire for esteem and glory—and perhaps some impulse to aid humankind—Victor is instantly remorseful, even sickened, by the sight of the enlivened creature. His anxiety about his powers of creation, and their potential unforeseen consequences, feels strangely modern and familiar to us.

Every technology emerges in response to a combination of environmental stimuli and personal ingenuity. In myth, fire is stolen from the gods and wielded by humans to remake the world. In the history of science, inventors whose creations have shaped the world sometimes liken themselves to the fire-stealing Prometheus. They tend to identify with the first part of the myth in which a daring being snatches power and knowledge from the divine abode. In the second movement of the Promethean legend, however, the hero is cast into unceasing torment and punishment for his transgression.

Shelley did not neglect this second movement. *Frankenstein* is subtitled "The Modern Prometheus," and Victor's scientific pursuits send him careening from the sweetest ecstasies of discovery and invention to the depths of utmost despair and destruction. "It was the secrets of heaven and earth that I desired to learn," he declares. Victor seeks to "unfold to the world the deepest mysteries of creation," only to find himself, like Prometheus, "chained in an eternal hell."

Today, gene editing tools such as CRISPR promise to unfold some of those deep mysteries, hastening the collapse of science fiction into fact. Enthusiasts of gene editing look toward the elimination of unwanted inherited conditions, the resurrection of extinct species, and the enhancement of human and animal bodies. Technology invites humans to see themselves as divine creators, and the earth as the garden or laboratory within which to explore and celebrate our manipulation of nature. "We are as gods and might as well get good at it," in the words of modern-day resurrectionist Stewart Brand.

Currently, two major paths are being pursued for the intentional creation of new forms of life: the alteration of biological life through genetic modification and the development of artificial intelligence or synthetic life. In the nightmares of technologists, these new forms are able to reproduce, and by sheer power and quantity, replace the human species. Similarly, we find Victor torn between manufacturing a mate for his lonely creature and abandoning his research forever, for fear of spawning a race of monsters. He shudders to realize that "future ages might curse me as their pest, whose selfishness had not hesitated to buy its own peace at the price, perhaps, of the existence of the whole human race."

Is it inevitable that future generations will curse us for the technologies we bring to life? In some interpretations, Victor Frankenstein fails not as a creator but as a parent. His crime was not the hubris of technological creation but his abandonment of the creature. This interpretation speaks to modern fears that the offspring of our minds will ultimately supersede or destroy us. Tesla founder Elon Musk, for example, frequently expresses anxieties that artificial intelligence poses a threat to humanity's survival. Colonizing Mars may be our only escape. On the other hand, Japanese roboticist Masahiro Mori believes robots will absorb and share our cultural values, even our religions. Which vision is more disturbing?

Much hinges on whether we re-

sponsibly steward our creations or flee from them in horror. Shelley's work appears prophetic because the aims that possess its tormented protagonist are of perennial concern to human beings: to search out the secrets of heaven and earth, to gain control over the world and our lives, and to struggle against death itself. Perhaps we do well to read Frankenstein not as a blanket indictment of science and technology, and the creative impulse, but as a cautionary tale about the dangers of science and technology divorced from deep ethical reflection.

For all her powers of imagination, Shellev could not have envisioned our present intimacy with technology. Beyond our daily communion with smartphones, laptops, and other devices, an ever-rising number of us have technology implanted directly into our bodies --- pacemakers, artificial limbs, synthetic joints, transplanted organs, even microchips. Soon we may be able to grow replacement organs for ourselves. Most jarringly, modern science suggests that, like Frankenstein's creature, we too are composite beings whose bodies are composed of bacteria, fungi, viruses, and archaea that together can outnumber our human cells. Heavy metals, plastics, and other pollutants are also part of the very fabric of our living tissues. Like a coral reef. a human body is home to many creatures and creations. Perhaps there is no escaping the "other." It lives within us. As technology allows us to enhance our bodies and engineer our global environment in ever more dramatic ways, we will have to consider carefully the ethics of seeking to become our own creators.

Diverse Adaptations of Frankenstein

by Associate Professor Monique Morgan and Provost Professor Stephen Watt

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Frankenstein pervades popular culture, seen frequently on stage, film, TV, Halloween decorations, even cereal boxes. Yet most firsttime readers of Mary Shelley's 1818 novel, Frankenstein, or the Modern Prometheus, are shocked because it differs so radically from so many of its adaptations. In adaptions of the novel for commercial films the creature is often portraved as awkward, shuffling, and mute, whereas in Shelley's novel he quickly scales glaciers and speaks persuasively using elevated diction influenced by Milton's Paradise Lost. In the films the mad scientist often harnesses lightning using elaborate mechanical equipment; by contrast Shelley provides few details about Victor Frankenstein's methods, though we are told that as a child he was fascinated by his father's demonstrations of electricity, and that he "infuse[s] a spark of being" into his creature. In popular culture, Victor works with an assistant in an isolated castle: Shellev's Victor works alone in an attic in a bustling university town. And in monster-movie versions of Frankenstein, the scientist is wholly misguided and the creature induces horror, whereas Shelley presents a complex, sympathetic meditation on Victor's aspirations and oversights, and leaves unanswered the question of whether the creature's violence was caused by his unnatural origin or by his subsequent abandonment and mistreatment.

Some of these changes were effected just five years after the novel was published, in the first stage adaptation: Richard Brinsley Peake's *Presumption, or the Fate of Frankenstein* (1823). In Peake's play, the creature

is mute and Frankenstein has an assistant (here named Fritz, not Igor). As its title would imply, Peake's play is more overtly moralizing than Shelley's novel, yet it still maintains some sympathy for the creature. A reviewer in The London Morning Post said of the creature, "he is in the beginning of his creation gentle, and disposed to be affectionate and kind, but his appearance terrifies . . . the alarm he excites creates hostility . . . and revenge and malignity are thus excited in his breast." The stage directions call for the creature's skin to be blue-gray, though reviewers often thought it looked green or vellow. In other respects, the creature's appearance matched Shelley's description in the novel: he had black hair, "straight black lips," and "watery eyes." He was played by Thomas Potter Cooke, and the playbill listed his character's name as a blank: " - ." After seeing the play, Mary Shelley, who was "much amused," praised this decision: "this nameless mode of naming the unnamable is rather good." (The tendency to confuse "Frankenstein" as the name of the creature rather than his creator began later.)

Many widely recognized revisions of the novel Mary Shelley wrote originate, perhaps oddly, more than a century later in popular American films from the 1930s. After British director James Whale signed a fiveyear contract with Universal Studios in 1931 and made one film, he turned to Frankenstein, casting a little-known actor, Boris Karloff, as the Monster. Karloff had appeared in a number of silent films prior to this, but barely managed to earn a living. All that would change. By 1935 and the production of Whale's

movie The Bride of Frankenstein, the actor had become so associated with the part that his name was emblazoned on advertising posters in font nearly as large as that of the film's title. And his first name was no longer necessary to promote the movie, only "starring KARLOFF." The Son of Frankenstein was released in 1939, and in 1944 Boris Karloff starred as a mad scientist in The House of Frankenstein, which featured another actor in the role of the Monster and appearances by other wellknown horror film characters such as Dracula and the Wolf Man.

The style of these films and characters grew in prominence as well. In preparation for directing Frankenstein, Whale viewed several examples of German horror films from the 1920s, F.W. Murnau's vampire film Nosferatu (1922) for example. Shot in the visual style of what is commonly referred to as "German expressionism," films like Nosferatu and the earlier The Cabinet of Dr. Caligari (1920) provided an aesthetic to match the content of the emergent horror film. Whale incorporated elements such as low-key lighting, slanted stage settings, and angular or "canted" framing of shots to heighten the film's sense of the bizarre—or the monstrous. Perhaps the most obvious of these effects accounts for the Monster's unnatural appearance, with his heavily madeup face, padded costume, and awkward gestures and movement.

The 1970s gave us two modern classics that moved Frankenstein's genre into comedy and camp (and moved the scientist to Transylvania – Dracula's native land). In Mel Brooks's Young Frankenstein (1974),

Frederick Frankenstein, grandson of the original mad scientist, moves to a castle in Transylvania and discovers his grandfather's research. The movie parodies James Whale's films in its German expressionist visuals, its electrical apparatus for creation, and Frankenstein's scream: "It's alive!" Frederick's assistant mistakenly provides an abnormal brain to transplant in the creature, which inhibits the creature's physical coordination and mental development. Unlike Victor in Shelley's novel, Frederick Frankenstein does not abandon his creation. Instead, he provides instruction and affection, with partial success, and later performs a second experiment to boost the creature's brain power. The film thus stresses both nature and nurture, and, in keeping with its status as a comedy, offers the characters much happier endings than Shelley's Gothic novel does. Jim Sharman's The Rocky Horror Picture Show (1975) takes the premise of Shellev's novel as the basis for a camp musical celebrating sexual liberation and experimentation. In one of its most famous songs, Dr. Frank-N-Furter declares, "I'm just a sweet transvestite from transsexual Transylvania." Whereas Shelley's Frankenstein was motivated by scientific ambition to create life and was later asked by his creature for a companion, Frank-N-Furter creates the perfect man, Rocky, as a companion for himself. Rocky, however, seeks companionship from another character. Rather than debating nature vs. nurture. the film instead explores self-expression and sexual freedom, and itself adopts a camp aesthetic of exuberant excess.

Two decades later, Kenneth Branagh's film *Mary Shelley's Frankenstein* (1994) attempted, as its title implies, to return to the original novel. In many respects, it is a more faithful adaptation of Shelley, most notably in including minor characters like Robert Walton, the Arctic explorer, and Waldman and Krem-



Actor Tim Curry as Dr. Frank-N-Furter (left) from The Rocky Horror Picture Show. 1975.

pe, Victor's professors at Ingolstadt. The creature, played by Robert De Niro, is rejected because of his disfigurement, yet learns to speak eloquently. This version imagines a creation scene using science that would have been available in Shelley's time. Victor (played by Branagh himself) derives the necessary sparks from electric eels, which emerge from a fluid-filled sac; the imagery suggests Victor is usurping the creative powers of sexual reproduction. In some respects, though, Branagh's film is over-thetop (though never quite as campy as Rocky Horror), as when Victor casts off his dressing gown to run through his laboratory bare-chested, or in the film's grotesque and unexpected climax.

In 1997, episodes inspired by Frankenstein aired in two television series that straddled the boundary between horror fantasy and science fiction (as did Shelley's novel). Buffy the Vampire Slayer's "Some Assembly Required" literalizes and critiques society's objectification of women through a plot involving two high school boys who want to construct the perfect woman out of individually beautiful body parts. The X-Files's episode "The Post-Modern Prometheus" explores the themes of presumption, isolation, and acceptance through a modern story involving genetic engineering told through black-and-white German expressionist imagery. Mary Shelley's novel, then, has been repeatedly reanimated with a diverse array of genres, social critiques, and emotional responses.

Cardinal Stage is performing Nick Dear's adaptation of Frankenstein, which premiered in 2011 at the Royal National Theatre in London. The first London performances were directed by Danny Boyle and starred Benedict Cumberbatch and Jonny Lee Miller, who took turns playing Victor Frankenstein and the creature on alternate nights. This casting decision highlighted Victor and the creature's status as doubles, vying for power and bringing out each other's worst impulses - a theme already prominent in Mary Shelley's novel and Nick Dear's script. Dear's play also takes up the novel's parallelism between Victor's fiancée and the possible female creature and makes it more explicit, pushing it much further than Mary Shelley did. Many of the central themes of Shelley's novel - parents' responsibilities to their children. scientists' responsibilities to their test subjects and to society, society's unfair structures of power and prejudice. and the wonders and challenges of learning - are at the heart of Dear's play, and will continue to inspire. challenge, and haunt audiences.

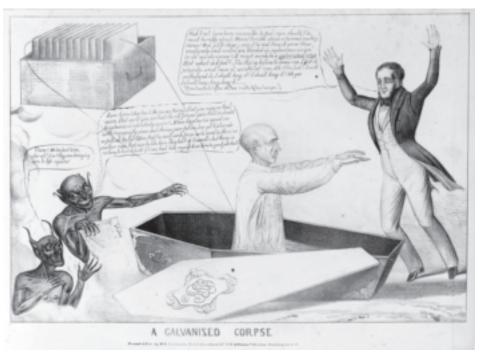
Frankenstein, Technology, and the Industrial Revolution

by Associate Professor Monique Morgan

Department of English, Indiana University

Frankenstein and technology. For many people, this phrase will conjure images of elaborate electrical equipment that harnesses the power of lighting to animate a monstrous corpse as his creator maniacally screams, "It's alive!" This frequent and powerful motif in popular culture has its origin in James Whale's 1930s films Frankenstein and The Bride of Frankenstein. Mary Shelley's novel, in contrast, offers little detail about Victor Frankenstein's procedure to animate his creature, though we know he gathers body parts from many different corpses and chooses those of unusually large size to make his surgical work easier. Shelley does hint at the importance of electricity, though. When Victor is a teenager, he is amazed to witness lightning destroy a tree. His father explains electricity to him by using a kite to draw an electrical charge from a cloud and by building a small electrical device. When Victor is an adult, his goal is to "infuse a spark of being" into his creature, and his language may well be literal.

In the early nineteenth century, the public was fascinated by "animal electricity" or "galvanism," named after Luigi Galvani, who found that electrical charges produce motion in muscles. Some speculated that animal electricity might be the vital principle responsible for life. Galvani's nephew Giovanni Aldini performed public demonstrations of galvanism by connecting the bodies of recently deceased animals to a Voltaic pile (an early form of battery) to produce motion. He experimented on the head of an ox, frog legs, and the body of a dog. In the most notorious example, in January 1803, he produced motion in various body parts of the murderer George Forster, one hour after he had been executed at Newgate Prison. Aldini made Forster's jaw quiver, one eye open, and his fist contract. Mary Shelley was certainly aware of galvanism. Aldini's demonstrations In 1816, though, British industry was not powered by electricity; it was increasingly powered by steam engines fueled by coal. Though the steam engine had been invented earlier, in the 1760s through the 1780s, James Watt, working first with John Roebuck and later with Matthew Boulton, developed more efficient designs that made it more practical to apply steam engines to



Robinson, Henry. A Galvanized Corpse. 1836. H.R. Robinson, New York.

were widely covered in the popular press. Moreover, John Polidori, Byron's personal physician and author of *The Vampyre*, saw galvanic experiments performed in Edinburgh, and Polidori likely discussed them with Byron and the Shelleys during the summer of 1816 when they stayed together in Switzerland. manufacturing. Around the same time, Richard Arkwright patented the water frame, a machine for spinning multiple threads at once. His initial 1769 patent used water power, but in the 1780s, he developed a version powered by a steam engine. Soon after, the power loom was invented; it was able to weave threads together into fabric. The Industrial Revolution thus began with Britain's textile industry, and large mechanical equipment installed in factories replaced spinning wheels and hand looms in cottages. By 1820 cotton textiles made up half of British exports. In the following decade, steam engines began to be used to power land transportation, and soon railroad tracks were being laid across the English landscape.

There were, of course, stark human consequences to industrialization. The workforce became more mobile and population centers shifted as laborers moved to northern cities, especially Manchester, where the fac-

tories were concentrated. Between 1770 and 1850. Manchester's population grew from about 25,000 to more than 300,000 people. Working conditions in factories were unhealthy, the hours were long, and children were part of the labor force. Eventually, industry became somewhat regulated. The Factory Act of 1833 prohibited children under the age of nine from working in textile mills, and the 1842 Mines Act declared that no women or girls, and no boys under age ten, were allowed to work underground in mines. Working hours were regulated in the 1847 Ten Hours Act, which made it illegal for women or children in any industry to work more than ten hours per day. Children worked in factories out of economic necessity; wages were so low that one or two adults could not earn enough to support themselves and a family, so their children had to contribute to the household's income.

The precarious position of exploited laborers may have an analogue in Frankenstein's creature. In *Signs Taken for Wonders*, Franco Moretti



Actress Elsa Lanchester from Bride of Frankenstein. 1935.

reads the monster as a metaphor for the "proletariat" - a term that refers to industrial workers in a capitalist system. "Like the proletariat, the monster is denied a name and an individuality," Moretti argues (85); "Like the proletariat, he is a collective and artificial creature" (85). And as Moretti points out, the creature is quite literally made from the bodies of the poor, from those most hurt by economic, technological, and social change. For in the early nineteenth century, medical schools in need of cadavers to dissect most often got them from prisons, poor houses, or grave robbers. When Mary Shelley began the novel in 1816, the poor were especially vulnerable to hunger and vagrancy, for several reasons. There had been a number of food shortages during the Napoleonic Wars, which had just ended in 1815. And 1816, known as "the year without a summer," suffered from unusually cold and cloudy weather, which triggered crop failures, outbreaks of disease, and migrations of the poor hoping to find better conditions elsewhere. The underlying cause of these European catastrophes was the 1815 eruption of Mt. Tambora in Indonesia. The volcano sent so much dust and debris in the atmosphere that it temporarily changed the global climate. Tambora created the cold and rainy weather than kept the Shelleys indoors telling ghost stories, which inspired Mary to write Frankenstein. According to Gillen D'Arcy Wood, "the experience of Mary Shelley's creature most closely embodies the degradation and suffering of the homeless European poor in the Tambora period, while the violent disgust of Frankenstein and everyone else toward him mirrors the utter [lack] of sympathy shown by most affluent Europeans toward the millions of Tambora's climate victims suffering hunger, disease, and the loss of their homes and livelihoods." Frankenstein may not describe technology at length, but Mary Shelley grounds the novel in contemporary science, reflects on global events, and sympathetically portrays the suffering caused by the Industrial Revolution and climate change.

Whose Monster is the More Probable Language Learner?

by Professor Emeritus Phil Connell

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Everyone knows the Frankenstein story: a mad scientist creates a hideous man-like giant by stitching together body parts taken from corpses and soon after the monster breaks free to terrorize the early nineteenth-century European countryside. Fewer know that Frankenstein was not the name of the monster but was the name of the mad scientist who created him. And far fewer know that the scientist created a monster who had no language, and that, before the monster's rampaging adventures began, he met a talented amateur language teacher who helped him become a fluent speaker.

These events are part of a story that Mary Shelley told in her first novel, Frankenstein, published in 1818, which Nick Dear adapted for the theater in 2011. The purpose of this essay is to examine whether the less known part of the story, the language teaching part, is believable. Sir Walter Scott. a famous novelist and contemporary of Shelley, criticized her novel for lacking an important characteristic of all good science fiction, that the story be "probable". He used the term to refer to a reader's willingness to accept even the most bizarre and unusual circumstances in a work of fiction if the characters respond to the circumstances in ways that could be described as probable. Scott concluded that the language teaching part of the story violated the reader's expectation of probability. My purpose in this essav is to reconsider the evidence that led to Scott's decision from the perspective of modern science.

I will then extend the analysis to Dear's play by considering whether the changes he makes to the language-teaching methods would improve the probability of the results.

Science has made great strides since 1818 in deepening our understanding of how language works and why children come to acquire it more easily than adults. In a nutshell, what we have learned is that children are born with a mental module that makes them language-learning geniuses. Without effort or intention, children use their modules to help them acquire the basic attributes of the language spoken or signed around them in less than three years. In comparison, adults are poor language learners. They can acquire a new language, but, compared to young children, their progress is slower, their learning requires more effort, and their final level of attainment is lower compared to young children. They learn without full access to the mental module. Their learning performance can be improved to some degree by having a dedicated language teacher but they rarely reach native competence. There are, however, exceptional cases where native-like fluency has been attained. These unusual learners seem to have been able to avoid losing access to the language module.

In Mary Shelley's original version of the language-teaching part of the story, the monster learns language indirectly; by surreptitiously watching a man teach a woman a second language. The monster watches the sessions from a hidden vantage point from which he can hear what they say, see the words they write on a writing board, and read books along with them. The monster gains competence in step with the woman, and they both reach full competence in about four months of daily lessons. The fact that the monster never has an opportunity to engage in the language lessons as actively as the woman, who repeats words and phrases, answers questions. and creates sentences on her own, does not necessarily make the method ineffective for him as I will explain later.

In Nick Dear's theatrical version of the Frankenstein story, the monster is taught by an old blind man named De Lacey who befriends him and teaches him a language while lecturing him about topics that could be described as world knowledge. He begins by teaching the monster to write the alphabet, to say letter sounds, and then read words. De Lacey uses writing and spelling as a principle teaching method even though he has no ability to see or evaluate his pupil's writing attempts. From these simple beginnings, the next teaching episode we see is De Lacey giving the monster a lecture on "Original Sin," referring to abstract concepts such as conscience and guilt. The fact that the monster understands the lecture implies that he has attained adult-level language fluency sometime during the year he has been meeting with De Lacey. Having a dedicated teacher who meets with him regularly for a year increases the probability that the method

could have been effective. But since so little detail is provided about the actual language lesson, it is impossible to judge the probability of their effectiveness.

Shelley's method wins my vote as the teaching method that would be more likely to be successful. Her method has aspects that bear a similarity to the way some children who have movement and coordination problems successfully acquire a language. Some children who have a physical impairment such as cerebral palsy have no ability to respond to someone who speaks to them. In the past, it was commonly assumed that these children could not acquire a language or could acquire only a rudimentary language. With the development of computer technology that allows one to spell out words using input from eye-movement or muscle movement sensors, we now know that many of these children progress in language acquisition at a normal rate. Using this technology, many now attend regular elementary, junior, and senior high schools, graduate from college, and go on to obtain productive employment. Shelley's monster did not have a physical disability that took away his capacity to speak. His silence is intentional. Given that children can acquire a language while remaining silent, it makes sense to believe that our monster could too.

I must temper my enthusiasm for Shelley's method to some degree because the monster described by Shelley and Dear is an adult, and thus would be far less capable of acquiring a language than a child would be. Nonetheless, I grant Shelley more credit than Sir Walter Scott did for creating a teaching scenario that has a chance of being successful. My estimate of its effectiveness would increase if the monster had the brain of one of those special adults who retain some of their language-learning genius throughout their lives, and in this context, af-



Actor Karl Johnson as De Lacey and Benedict Cumberbatch as The Creature from Frankenstein. Dir. Danny Boyle. Olivier, National Theater, London. 2011.

ter death. Countering this negative, though, is the fact that the monster was observing an adult struggle to learn a language, and learning from her mistakes might have improved his learning performance.

Sir Walter Scott found Shelley's teaching scenario to be so improbable that he could not recommend the book. I think that if he were to come alive today, perhaps by the intervention of a mad scientist, his mind would change to my way of thinking. I hope you can find that probable.

FRANKENSTEIN: FRANKENSTEIN: ADDREEMAN THE MODERN PROMETHEUS MODERN PROMETHEUS. MART W. STREAM MART W. ATTEL PHIL

First U.S. edition of Mary Shelley's Frankenstein or The Modern Prometheus. Philadelphia: Carey, Lea & Blanchard, 1833.

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Young Romantics: The Tangled Lives of English Poetry's Greatest Generation by Daisy Hay (Adult Nonfiction 821.809 Hay)

Hideous Love: The Story of the Girl Who Wrote Frankenstein by Stephanie Hemphill (Young Adult, Hempil)

American Born Chinese by Gene Luen Yang (*Graphic Novels Yang*)

Cane by Jean Toomer (*Adult Fiction, Too*)

Invisible Man by Ralph Ellison (Adult Fiction, Ellison)

Everything I Never Told You by Celeste Ng (Adult Fiction Ng)

s Karloff (1931), pher Lee (1957), ken Berry (1971) t De Niro (1994), Lee Miller (2011), ry Kinnear (2014)

FRANKENSTEIN'S MONSTER

1974



1994

2011



or comedy g Frankenstein, ted by Mel ks and starring Wilder, is sed.

e Rocky Horror Picture ow is released, nsforming Victor ankenstein into Frank-N-Furter, sweet transvestite om transsexual ansylvania."

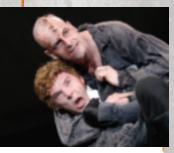


Gothic, directed by Ken Russell, provides a film version of the conception of *Frankenstein*.



1997

"Some Assembly Required," a Frankenstein-inspired episode of *Buffy the Vampire Slayer*, airs on television.



Nick Dear's Frankenstein, directed by Danny Boyle, premieres at the National Theatre in London.



Mary Shelley's Frankenstein, directed by Kenneth Branagh, is released. The film attempts to return the story to Shelley's vision.

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