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The Year Is 2093: Reanimation From Frankenstein To Prometheus As Sci-fi Metaphor For (Dis)Embodied Female Futures And Colonization Of Space

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Chapter Ten

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Reanimation from Frankenstein *to* Prometheus *as Sci-fi Metaphor for (Dis)Embodied Female Futures and Colonization of Space*

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"I do not wish women to have power over men; but over themselves."

—Mary Wollstonecraft (1759–1797)

INTRODUCTION: SCIENCE FICTION BECOMES SCIENCE FACT

Visionary civil rights activist Dr. Martin Luther King Jr. was a *Star Trek* fan. His chance encounter in 1967 with Nichelle Nichols, the actress cast as Lieutenant Nyota Uhura of the starship *Enterprise*, convinced her to stick with the role. "For the first time on television," Dr. King reportedly said to her, "we [African Americans] will be seen as we should be seen everyday. As intelligent, quality, beautiful people who sing, dance, and everything, but who can go into space."[1] King was speaking about the negative stereotyping of African Americans in entertainment media, and his belief that changing this would help to precipitate lasting change in other sectors of society. *Star Trek* had made inroads by making Nichols the first African American to portray a non-subservient role on screen; her Black female embodiment was a stand-in for all Blacks. Alongside Nichols, George Takei had been cast as Lieutenant Hikaru Sulu. At the time, the Japanese American internment during World War II was so recent, that Takei himself was a survivor of one such internment camp in Kansas, where his family had been forcibly relocated before his high school and college years. But the science fiction

television saga cast Takei and Nichols' embodiments in a renewed light. Together with their spaceship crew, Sulu and Uhura would "go boldly where no man has gone before."

As early as the 1960s then, narratives of speculative fabulation were reaching wide and varied audiences, using their diverse casts and adventurous story lines as a platform for countering racism in America. The adventures of the starship *Enterprise* buoyed the ongoing Space Race, by championing a reality in which human exploration of deep space was already possible. Through science fiction, space exploration was romanticized as the next logical step in human scientific exploration, and one which would benefit all of humanity. By the time *Apollo 11* landed astronauts on the moon on July 20, 1969, *Star Trek* had already become a well-worn metaphor for confronting the unknown, though it wouldn't be until 1983 that European American astrophysicist and engineer Dr. Sally Ride would actually become the first American woman in space. Dr. Mae Jemison would eventually follow her as the sixteenth American woman in space, and the first African American woman, bringing her talents as a physician and chemical engineer onto the space shuttle *Endeavour* in 1992.

Today, science fiction continues to place humans in contexts far outside our present reality, in a projection of achievements we may one day accomplish. Typified by technologized settings and adventurous and futuristic staging, the science fiction genre often imagines how technology and/or altered environmental factors impact life as we know it. But the genre's descriptions of unfamiliar technologies, creatures, and planets are not spontaneous inventions of our imaginations. Rather, they evolve with human experience, often referencing previous visual and linguistic imagery in increasingly intricate ways. Science fiction and science fact routinely mingle in these creative knowledge pathways, blending known reality with the potentials of the unknown. With fiction pushing us to envision technologies, landscapes, and bodies we cannot yet know to be real, it is no surprise that we name both our fictional and actual spacecraft in an articulation of this wonder, from *Enterprise* to *Endeavour*. Consistent with this picturing of ourselves among the cosmos, present-day astronomers naming and describing newly discovered planets regularly participate in *worlding*. Their worlding practices convert the probabilities of faraway gaseous masses, and planets revolving around other suns, or exoplanets, into relatable worlds for popular audiences. As a cultural anthropologist of astronomers, Lisa Messeri has observed: "When not enough observational data exists to transform planets into worlds, exoplanet astronomers shape these planets through language," relying "on the language of 'Earths,' 'Neptunes,' and 'ocean worlds.'"[2] Where this extensive use of metaphor surfaces as a normal and necessarily symbiotic pathway across

the practice of both science and science fiction, it participates in "creating a visual language" that flows from existing ideas.[3]

And where investigations of the cosmos continue to influence science fiction, so, too, do our fascinations with the mysteries of the human body. In fact, science fiction can claim its earliest start in the narrative of Victor Frankenstein, the eponymous physician of Mary Shelley's 1818 novel, who sparks life into an inanimate mass of reassembled body parts. Two hundred years ago in England, as Shelley crafted what arguably became the first literary work of science fiction, electricity was still an emerging phenomenon, and a technology whose applications had yet to be fully understood. Though the invention of the portable, automated external defibrillator was yet a long way off (more than a century ahead), *Frankenstein* posits science's abilities to reclaim life after death not as speculation, but as fact. This portrayal of the *reanimation* of life, this revivification of the human body, is the subject of this chapter.[4]

As a sci-fi fan myself, and sociocultural linguist, I bring attention to *Frankenstein: Or The Modern Prometheus* and other related narratives as a grouping of science fiction, or reanimation science subgenre. In this chapter, I trace a genealogy of reanimation science across key films in an examination of how the subgenre persuasively uses language in its manipulation of life and death. Through visioning reanimation as a transformative and reproductive process controlled by male scientists, physicians, and engineers, or "mad scientists," films like *The Brain That Wouldn't Die* (1962), *Passengers* (2016), and *Prometheus* (2012) disempower, disable, and disfigure women by turning them into monsters, zombies, and alien incubators. These acts of violence dehumanize by manipulating the *animacy* of women characters through imagery that glorifies Western civilization. Lowered to animal states of lesser sentience and greater vulnerability in these films, women's future bodies are presented as acceptable objects of the mad scientist's experimentation.

Here, I aim to show how these science fiction films act as a public discourse of science, and create a prophetic vision in which gender inequality will never cease and people of color will have little to no influence. Within the realm of science fiction, where our terrestrial realities are frequently suspended in order to embrace worlds where anything—even equality—is possible, why, I ask, is it that women appear to have reached a glass ceiling in the futuristic reanimation subgenre?

These are ideas and futurisms that we must, as zoologist and feminist theorist Donna Haraway suggests, continue to pay attention to, because they influence our terrestrial thinking as to which changes may be possible, and what redress is needed for a more environmentally sound and socially just multispecies future here on Earth. For these reasons, Haraway proposes a role

for speculative feminism in our examination of futurisms, and attention to the erasure of female perspectives in Western knowledge-seeking.[5] Activist and political prisoner Mumia Abu-Jamal, too, has pointed out that the explosive popularity of outer space science fiction is no coincidence.[6] With the original *Star Wars* film debuting in 1977, just after the horrors of the Vietnam War, American teenagers, along with the wider public, found relief in picturing themselves within the iconic story line as "rebels," rather than the imperialists that they were (and are), as passive beneficiaries of the American military-industrial complex. Their denial was an expression of "psychosis," as Abu-Jamal puts it, with the revelation of Luke Skywalker and Darth Vader's blood relation surfacing as an allegory for the fate of the colonized subject, errantly deluded into thinking rebellion was ever his own idea.[7]

GENDERING, ANIMACY, AND THE VOICE OF SCIENCE IN TELEVISION AND FILM

As a child of the 1980s, I read *3-2-1 Contact Magazine,* and watched Dr. Mae Jemison launch into space only a few short years after the tragedy of the space shuttle *Challenger*. For decades, my father was the only Black aeronautical engineer at his firm, and on Saturday mornings he and my educator mother paid it forward by volunteering with the local chapter of the National Society of Black Engineers (NSBE). As part of NSBE's Excell Program, they taught mini-seminars in math and physics to young Black middle-school students in classrooms organized at Cal State University Dominguez Hills. It was through the Excell Program that my sister and I learned skills in basic computer programming, gained early exposure to algebra, and participated in launching homemade rockets alongside our male counterparts. Through Excell, and because of seeing Dr. Jemison on television, I attended Space Camp as the only Black eleven-year-old in my age group, confident there was a place for me among the cosmos. My expectation of belonging had been livened and animated by role models and experiences that valued my voice, and normalized my sense of exploration.

Because I grew up watching *Quantum Leap, Sliders, Doctor Who,* and *Star Trek: The Next Generation* (each of which featured men in mad scientist roles) with my family, it wasn't until much later that I learned about Lt. Nyota Uhura, and the role series creator Gene Roddenberry had outlined for her as the translator, linguist, and communications officer of the *Enterprise*. Eventually studying Swahili in college as part of my journey in becoming a linguist and anthropologist, I came to appreciate the meanings of her name in *nyota* (star) and "uhura" as a derivative of *uhuru* (freedom). Now, more than ever, I can understand how

seeing Lt. Uhura on television inspired a young Dr. Jemison to aim for space, even though Uhura, born in 2233, was from the distant future, because she has also become a powerful muse to me. This may have been why I was surprised at the controversy over *Doctor Who*'s casting of a woman (Jodie Whittaker) for the very first time in the role of the Doctor, beginning in its 2018 season.

Since the British series' 1963 start, the Doctor has been a Time Lord, an alien who travels across time and space saving civilizations using an esoteric understanding of astrophysics, and instead of dying, self-regenerates into a new bodily reincarnation and personality. Therefore, it was rather ludicrous that some fans found it implausible for a woman to portray the role. Fans taking to Twitter to voice their displeasure were met with an equal and opposite response. Miriam-Webster's Dictionary tweeted: "'Doctor' has no gender in English."[8] Yet another user tweeted on the irony of the debate: "Oh great a female Doctor Who. What next? Female real doctors? Female pilots? Female scientists? Female sisters and mothers? Female WOMEN?!"[9]

Where these tweets deftly undermined the gendering of science fiction and its implications for everyday real life, they also amplified how words like "doctor" are routinely imbued with additional social and cultural meanings that serve to maintain the gender binary. Though "doctor" is not intrinsically gendered, and can describe all sorts of people (including those who are not physicians, but PhDs), the tendency to refer to women as "female doctors" and men as simply "doctors," is a form of overlexification that inherently constructs men as standard and women as substandard. These uses of language persist in subjugating women, even as White men are increasing in their college dropout rates in the United States, and by 2026, 57 percent of American college students will be women.[10]

But the cynicism of some fans toward the possibility of a Time Lord with a female embodiment additionally relays an even larger problem with the gender segregation of scientist and physician roles in television and film. A study of fourteen television programs popular among middle school–aged children, including *CSI, Friends, Bill Nye the Science Guy,* and *The X Files,* found that if female scientists were portrayed, they were more likely to show qualities of dependence, caring, and romantic interest.[11] This selective inclusion, by default, assists in the social construction of scientists' independent and dominant behaviors as largely male and masculine. Such media images are all the more important, because by the age of twelve, interest in science, technology, engineering, and mathematics (STEM) declines for both boys and girls, and bias, often unconscious or implicit, results in the exclusion of girls from advanced educational opportunities in STEM and related fields.[12]

Gender disparities in STEM, in turn, appear to provide evidence of biologically driven differences in abilities and interests, even though there is no factual

basis for this. Crucially, misleading views such as these are likely to be disseminated through science fiction films, as well as hospital dramas and crime procedurals, which are where people generally receive their greatest exposure to science, technology, and medicine.[13] This is as opposed to other sources of information, including news, documentaries, and educational programming. Popular scientist narratives project a voice that, similar to Abu-Jamal's observations of *Star Wars,* communicate science and space exploration as achievements endowed with "extra-human authority," as communication studies scholar Thomas Lessl has identified, constructing a powerful mythology that purposes our venture in the heavenly cosmos.[14] This voice of science is often represented in the "mad scientist" trope popularized through science fiction film, and particularly through adaptations of *Frankenstein,* which portray men in the mechanical creation and (re)animation of life. Modern Western society approaches synthetic creation as an enduring limitation of science, the achievement of which, as historian of science Kurt W. Back describes, is the "culmination of the acquisition of knowledge and the power that this knowledge brings."[15] This patriarchal-God-complex obsession with creating life effects a paradoxical and dehumanizing exclusion of women (without whom organic human life cannot be birthed) that also reflects their societal "alienation from science itself."[16]

Where male-dominated science and science fiction venerates an ability to imbue inanimate materials with *animacy,* it further implicates reanimation as a highly gendered political act, one which uses, to borrow from linguistic theorist Mel Y. Chen, "animacy hierarchies to manipulate, affirm, and shift the ontologies that matter the world."[17] The power in this manipulation comes from an ability to delineate who among us is most human and least animal, with "animal" analogizing various forms of deviance and alterity, including femininity and queer sexualities.

In the present chapter, I build upon Chen's argument to theorize the Western masculine persona as additionally empowered through its endowing with the ability to reanimate, or imbue with life force that which is understood as without life, or inanimate. This is exactly how the story of Frankenstein explores the most ultimate of scientific knowledges, by drawing upon the myth of *Prometheus,* named for a word meaning "forethought" or "foresight" in the Indo-European language of Ancient Greek. As humankind's greatest benefactor, Prometheus was the immortal male god that created "man" from clay. He later stole fire from Mount Olympus to give it to humankind, effectively providing a pathway to human independence and enlightenment. Though his crime was discovered by Zeus, Prometheus never showed remorse, and he was subsequently sentenced to a punishment of eternal torture; by day, a vulture would pluck out his liver (understood by the Ancient

Greeks as the seat of emotion), and by night, his liver would regenerate, enabling the torture to continue.

Revered by some as a rebel and an inquisitive muse, Prometheus, for others, has come to symbolize the dangers of corrupting the "natural" order, particularly because of ethical questions posed by biomedical research on the body. This spectre of ethical overreach continues to be the subject of most popular films concerning science, with male physicians and scientists facilitating discovery and enlightenment through secret experimentation on humans and animals.[18] Though these films do largely piece together dramatic and horrific story lines that illustrate problems with the mad scientist's zealous pursuit, they use reanimation science as a symbol of men's potential to conquer life indefinitely, without the buy-in of women.

READING *FRANKENSTEIN* AS CRITICAL FEMINIST DISCOURSE ON REANIMATION SCIENCE

When it comes to popular sci-fi and the many ideas associated with reanimation science, Mary Shelley's *Frankenstein* offers numerous examples of language as a tool of inequality in relationships between scientists and their test subjects. For example, at the very end of the novel, as the reanimated monster voices an indictment of his human creator, he describes how his silencing by others mirrors his societal marginalization.

> You, who call Frankenstein your friend, seem to have knowledge of my crimes and his misfortunes. But, in the detail which he gave you of them, he could not sum up the hours and months of misery which I endured, wasting in impotent passions. [. . .] Am I to be thought the only criminal, when all human kind (*sic*) sinned against me? [. . .] Even now my blood boils at the recollection of this injustice.[19]

While the monster describes his isolated existence as a torturous purgatory, he also connects his plight with notions of criminal deviance, but also injustice. This layering of ideas within the use of language signals what linguists identify as a connection between language and *discourse,* the set of "broader ideas shared by people in a society about how the world works."[20]

Grasping the multilayering of ideas in discourse requires an investment in contextualizing meanings within their sociohistorical context. Accordingly, discourse also refers to any and all context-specific uses of connected language in everyday activity, including settings of news, entertainment, literature, and film.[21] Bringing these definitions together, discourses are

worldviews that surface in verbal talk (the things that we say), as well as everyday textual and visual-graphic communication (e.g., SMS/texting, billboards, facial expressions, hand gestures, etc.). Through discourse, we explicitly state how we feel about our social world, and also implicate further meanings. Sociocultural linguists investigating discourse can contribute to the dismantling of hegemony by helping to uncover how uses of language and communication support systems of power and patterns of social inequality.[22] This intent to engage language and discourse as sites in the reproduction of power is understood as a *critical* stance in linguistics.[23] And in *Frankenstein,* where the monster's experience of linguistic inequality implicates broader concerns about social inequality, the discourse gathers additional meaning with attention to disempowerment as conceptualized in nineteenth-century Europe. As Mary Shelley imagined him, the monster was a nonconsenting accomplice to Frankenstein's experimentation, in a time when men were increasing their societal domination through surgical dissection, scientific experiments in reanimation, and bureaucratic and regulatory oversight.

England was undergoing a period of rapid industrialization and biomedical innovation, accompanied by turbulent class shifts, identity politics, and professionalization of healing sciences. The Anatomy Act of 1832, for example, revised the earlier Murder Act of 1752, by providing that bodies beyond those of executed murderers could be used for dissection. With the rise of biomedicine, more and more bodies were needed for anatomical studies and the training of surgeons. Cadavers were routinely obtained by grave robbers known as "resurrectionists," and additionally, through murder. The new legislation aimed to intervene by limiting licenses for the practice of anatomy, and allocating only the unclaimed corpses at hospitals, prisons, and public workhouses to anatomists. But some cynics continued to protest both the legislation and the practice of anatomy, believing that corpses would still be consigned to science against the wishes of the dead poor.[24]

Death repeatedly plagued Mary Shelley as she made her life as a writer and editor in and around nineteenth-century London. Her mother, feminist and antislavery author Mary Wollstonecraft, died when Shelley was only sixteen years old, leaving behind an extensive legacy that included her influential review in 1789 of Olaudah Equiano's abolitionist narrative.[25] Shelley also drew further inspiration from the contemporary exploits of Giovanni Aldini, who called himself a Galvinist after his uncle, the late physicist Luigi Galvini. In 1803, Aldini used primitive batteries to run voltaic current through the deceased body of George Foster, a prisoner executed only an hour before. Aldini's ethically dubious experiment, performed in front of a gathering of physicians and curious others at the Royal College of Surgeons in London, appeared to make Foster's body come back to life. As the current raced

through Foster, it caused his body to temporarily animate: his eyes twitched and opened, his palms constricted into fists, and his legs kicked.

But Foster remained dead.

Still, his limited reanimation carved out a strong profile for Galvinists, and inspired numerous subsequent (and potentially unethical) experiments by other male physician scientists.[26] It is therefore fascinating how Mary Shelley's novel positions male physicians as unreliable witnesses, and counters their voices with women authorities. All throughout *Frankenstein,* letters written to "M.S." introduce the account, producing a story within a story that Margaret Saville moderates and Mary Shelley herself creates. The novel is therefore a "body of knowledge" that requires scientific scrutiny on the part of the reader, as it narrates the assembly and reanimation of a corpse (itself an embodiment of scientific knowledge).[27] Shelly devises further complexity through her description of the second creature that Dr. Victor Frankenstein agrees to create in response to the monster's impassioned request (and threats), but then later destroys. Though the physician sets about assembling a female monster, he was never fully comfortable with the idea because it would wrench the power of creation from his hands: ". . . a race of devils would be propagated upon the earth, who might make the very existence of the species of man a condition precarious and full of terror."[28]

Ultimately, Frankenstein finds an out by framing his dismemberment of the female monster as a form of revenge. But the violence with which he acts mirrors biomedicine's broader assault on women. As he narrates, "I thought with a sensation of madness on my promise of creating another like to him, and, trembling with passion, tore to pieces the thing on which I was engaged."[29] Scholars have interpreted these aspects of Shelley's novel as an intense meditation on how the patriarchal control of scientific knowledge-seeking encounters the female body as a threat. Literary theorist Alan Rauch contends that, "Frankenstein, as repulsed as he is by the creature he has created, is completely unable to contemplate the notion of a *female* embodiment of knowledge."[30] Further, Frankenstein's dismemberment of his female creation provides an analog to Victorian representations of women's bodies in pieces, as disseminated by the surgical profession. Contemporary instructional texts like Henry Gray's *Anatomy* were, at the time, helping to make dissection intrinsic to the practice of Western biomedicine. Through these texts, the nineteenth-century surgeon (a man, by default) was empowered to author the body, with distancing language and original illustrations as tools of scientific objectivity and masculine omniscience (see August's analysis of racialized surgical dismemberment in chapter 8 of this volume). The legacy of these surgical texts lives on in modern textbooks and the continued domination of men in the surgical profession. Though women comprise at least

half of the applicants to medical schools in the United States, as of 2015 only 19.2 percent of American surgeons are women.[31]

In this sense, Dr. Victor Frankenstein conceals the ideological violence he enacts on the female body as an act of revenge stemming from his purported concern and contrition. However, even in his dying moments, Frankenstein (like Prometheus before him) never expresses regret for having manipulated reanimation science. Rather, he is of the opinion that he was always entitled to pursue scientific achievement:

> When I reflected on the work I had completed, no less a one than the creation of a sensitive and rational animal, I could not rank myself with the herd of common projectors.[32]

Persuasively, then, Frankenstein describes himself as entitled to the scientific endeavor; he marks himself as superior through references to other people as "common projectors," though his creation does not rank nearly that high, for it is "animal." He dies making his declaration of male entitlement to scientific enlightenment, while the monster banishes himself to the punitive snows of the artic. Like Prometheus in the Ancient Greek myth a thousand plus years before him, Frankenstein wrenched the sparks of technology for his own advantage, and literally created a life-form. This is undoubtedly the imagery that Mary Shelley had in mind when she subtitled her novel, *The Modern Prometheus.* In her creative mind, the ancient myth found new life as a cautionary tale on scientific overreach, updated with the emerging technologies of the nineteenth century. Since the time of her writing, further discourses of reanimation science, as pictured in popular film, continue to relay master narratives of power through "ideas, values, identities and sequences of activity" that may not be explicitly laid bare.[33]

DISEMBODIED, DISFIGURED, DISABLED WOMAN AS ANIMAL: *THE BRAIN THAT WOULDN'T DIE*

Though the story of Prometheus likely originated in Mesopotamia, by around 750 to 650 BC the myth had been reinterpreted by the Greeks, who made him into a deity.[34] In those days, the Greeks did not dissect human cadavers due to cultural and religious taboos, and this meant that Aristotle, Galen, and others practiced anatomy largely through the comparative study of animals, which were thought to be less sentient and rational (see, for example, the discussion by Wright in chapter 2 of this volume). With influence from the Egyptians, these taboos increasingly faded after the third century BC, but the hierarchical differences between humans and animals remained, helping

to justify the use of the cadavers of prisoners, the poor, and vulnerable others for experimentation in Western society. This paved the way for the more advanced anatomical studies that would enable later improvements in surgical practice, and enhance knowledge of how muscles and tissues respond to electrical stimulation vis-à-vis Galvinism.[35]

This is how the 1962 black-and-white horror film *The Brain That Wouldn't Die* opens, with a male surgeon implementing a Galvinist-type experiment on an unnamed patient declared dead in the operating room. Dr. Bill Cortner (played by Jason Evers) cuts the patient's skullcap open to apply electrical probes to the brain, while instructing a male colleague to massage the patient's heart. Though the procedure somehow results in the patient's resuscitation, the supervising surgeon on the case questions Cortner's ethics. Their exchange reveals Cortner to be hungry for the power to control life, through a discourse that affirms the dominion of people over animals.

In other words, while it is acceptable to experiment on animals, and even primates—humanity's closest relative, it is not okay to experiment on humans. Curiously however, their dialogue completely elides the fact that medical experimentation was at the time being carried out on people without their consent, from California, to Puerto Rico and Alabama. This includes the taking of Henrietta Lacks's cervical cancer cells in 1951 to create a cell line later injected into American prisoners, Jews, and others without their knowledge.[36] In addition, the Tuskegee Syphilis Experiment (1932–1972) blatantly denied curative treatment to rural African Americans for decades in an effort to document the disease's sequela, or unabated progression. What's more, thousands deemed "mentally disabled" were being forcibly sterilized in hospitals and mental health institutions, adding to the numerous African American, Puerto Rican, and Native American women also surgically sterilized without their knowledge into the 1980s.[37] In this sense, it would seem that people experimented upon in real life without their consent are conceived as mattering no more than the "rabbits, mice, monkeys" that the lead surgeon mentions.

> Lead surgeon: You don't explore on people! Before you put a scalpel to one, an operation like this needs testing under any condition. Over, and over again. Rabbits, mice, monkeys—((wagging finger)) not people!
>
> Cortner: That man who should be dead now won't think so. There's more to surgery than just being a carpenter to patch up walls. Or a plumber to drain pipes. Our bodies are capable of adjusting in ways we've hardly dreamt of. If we can only find the key. I'm so close now, so very close.
>
> Lead surgeon: The key to what?
>
> Cortner: Complete transplantations. To be able to transplant limbs and organs, to be able to replace diseased and damaged parts of the body as easily as we

replace eye corneas now, so that the new parts will join together as though they were born there.

Lead surgeon: ((shakes head)) Can't be done!

Cortner: It can be done! With my new special compound I've created, I'll do it. I know I can do it.

It would be easy to dismiss this film as a low-brow horror flick, with yet another crazy, mad scientist at its center. However, the subtexts of its narrative, across both its verbal and visual semiotics, demonstrate that at a time of widespread, forced medical experimentation on women and people of color in the United States, science-themed movies were a tool of erasure, countering public distrust in the medical establishment by featuring characters (like the lead surgeon) who vehemently object to such abuses. Set in a completely White world void of racial diversity, the film additionally mirrors the objectification of women in America. Ultimately, Dr. Cortner ends up trolling beauty pageant contestants and models in search for the "perfect" body to attach to the severed head of his fiancée, which he manages to keep "alive" in his laboratory with his "special compound." In this, the film relays powerful symbolism affirming the covert empowerment of (White male) biomedical doctors through discourses of the supremacy of science, and regimes of beauty that show preference for heteronormative, able-bodied White women, to the exclusion of all others.

As the story goes, the severed head of Dr. Cortner's fiancée Jan (played by Virginia Leith) becomes installed in his secret laboratory after a terrible car accident that injures them both. Only able to salvage Jan's head from the wreckage, Cortner works with his henchman Kurt to position it in a shallow dissecting tray, where its blood pools and circulates among bubbling vials, crisscrossed tubing, and electrical wiring, in a manner most certainly inspired by Galvinism. Satisfied with this laboratory setup, Dr. Cortner keenly observes, with Kurt by his side (Figure 10.1):

Kurt: Her eyelids! I saw them move. It can't be! My eyes are deceiving me!

Cortner: What you see is real. What's done is done, and what I've done is right. It's the work of science.

Speaking the way he does, Dr. Cortner comes across as drunk with his own confidence. But in describing his act as "the work of science," his words encode an additional layer of meaning. This discourse simultaneously constructs him as an indirect agent of science and human reanimation as an inevitable innovation, allowing Cortner to depersonalize his role in this horror. Rather than a dangerous physician gone rogue, Cortner is merely an

overzealous scientific optimist who usurps his fiancée's personhood because he loves her too much to "let" her die. However, in exerting power over Jan's death and her principal body part—her head, Cortner becomes a quintessential enforcer of heteronormative patriarchy, for he plans not to continue his relationship solely with her head. Instead, he wants a body for her too, and it must be beautiful and sexually appetizing.

As the film continues, Cortner's search leads him to troll a string of slim blondes, and a beauty pageant seeking to name Miss Body Beautiful (where he gets his "side course in anatomy" and a chance "to look for some bodies"). However, he becomes most intrigued by the prospect of Doris (played by Adele Lamont), a lone model who, by some estimates, has "the nicest body I've ever seen." Cortner mentally rehearses this description of Doris, lustfully biting his lip repeatedly, as he sleazily visions her model physique.

Next, Cortner makes his way out to Doris's home and studio. Inside, she poses for several photographers in her bikini and high heels, and Cortner slips into the room, unannounced and uninvited (Figure 10.2). As the modeling session concludes, he endears himself to her with seductive promises to cure the facial scar she hides with her shoulder-length mane. Referring to her scar, she says, "Doesn't it make you sick?" Doris's words and actions cast her facial scar as a dehumanizing injury to her feminine attractiveness (interestingly, the scar has resulted from a previous sexual assault). Cortner cleverly preys upon her insecurities.

> Cortner: To me you're not ugly. I see only beauty in you. You have a lovely body and a . . . face that can be made beautiful again also.
>
> Doris: Yeah, I've heard that song before.
>
> Cortner: I'm a doctor. I know. My father's one of the leading plastic surgeons. If anyone can help you, we can. I know I can!
>
> Doris: I've been to doctors. It's no use. The scar tissue's too deep. No one can help me.
>
> Cortner: Yeah, that was a few years ago. Today, nothing's hopeless.

In the character of Doris, the film provides Cortner with yet another opportunity to revive his persuasive overtures of biomedical cure and scientific innovation. In his view, the future of biomedicine is now, and anything imperfect can be fixed and "made beautiful again," meaning he can make her into a future woman, a perfect woman. Their exchange signals that Western beauty must chase perfectionism, and that a woman can be further objectified through a focus on parts of her body rather than her full embodiment. It is a form of ideological dismemberment.

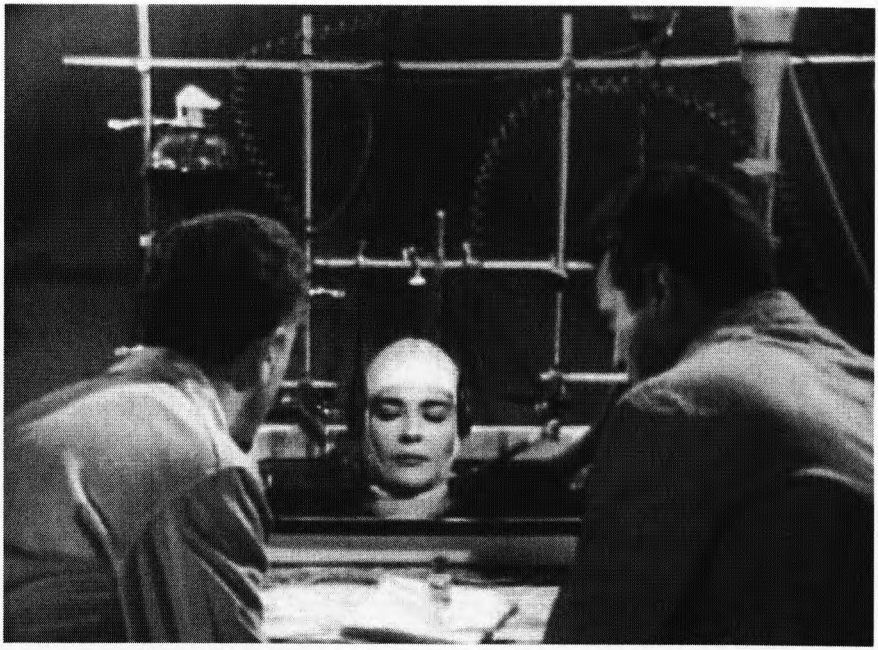

Figure 10.1. Kurt (left) and Dr. Bill Cortner (right) watch as Jan's head reanimates.
Screenshot from *The Brain That Wouldn't Die* (1962).

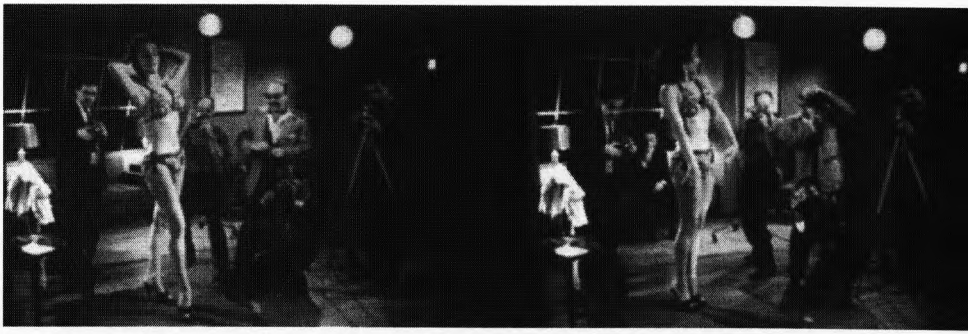

Figure 10.2. Dr. Bill Cortner arrives to Doris's modeling session, and sits down on the couch. (a) Before Cortner arrives. (b) After Cortner arrives, he sits in the background.
Screenshots from *The Brain That Wouldn't Die* (1962).

Knowing this to some degree, Doris has remained unnerved about her appearance, even as she has found success as a model. She and Cortner's conversation continues, with a subtext of dark humor:

> Doris: I'll do anything that'll help me get rid of this face!
>
> Cortner: Well, that's where I come in.

As the film moves towards its conclusion, Cortner succeeds in luring Doris back to his laboratory, where they kiss, and he drugs her and places her on his operating table in preparation for his final horrific surgery. The sequence of activity is essentially a depiction of date rape. The rogue physician is unaware, however, that Jan has been vocalizing her disgust in his absence. Psychic abilities endowed through her reanimation have made her aware of his intent "to kill somebody, and rob them of their body," and she has teamed up with Cortner's earlier test subject to stop him—one she refers to as "the monster," a pieced-together creature who, like Frankenstein's monster, escapes from his laboratory confines. First, Jan and the monster precipitate Kurt's demise, with their juxtaposition, communication, and collaboration, from one monster to another, amplifying Jan's transformation into a nonhuman animal. Cortner is shocked by their monstrous collaboration, but remains undeterred, instead doubling down on his view that women with conscious minds are ontologically incomplete without possession of a desirable body:

> Cortner: I told you I'd bring you a body, a beautiful one. And soon it will be yours . . . I want you as a complete woman, not part of one. [. . .] When she [Doris] does come to, it'll be your head consciously awakening for her.

In the end, Cortner is taken down by the creature at Jan's urging, and their struggle overturns chemicals and a Bunsen burner, sparking flames. Though Cortner, as Modern Prometheus, dies fairly slowly, he makes no moves to repent for his multiple misdeeds. The monster then rescues Doris, leaving Jan to cackle hauntingly, "I told you, you should've let me die!" While these final moments of *The Brain That Wouldn't Die* show Jan acting against Cortner's injustice in a way that Frankenstein's monster wasn't allowed, it still leaves audiences with the impression she would have been better off dead.

Before her car accident, Jan was the nurse assisting Cortner and his father in the hospital. Afterwards, however, her disembodiment (like Doris's disfigurement) effected a state of disability, which constructed her as less than a woman, and more akin to a nonhuman animal that can be experimented upon without its consent. Regarding discourses on human, nonhuman, and inhuman distinctions, linguist Mel Y. Chen finds objectification and dehumanization

to "exist within overlapping spheres of meaning," where "dehumanization involves the more active *making* of an object."[38] This is what Jan's fiancée has done to her; by robbing her of her death and reanimating her in his laboratory, Cortner has transformed her into a sexual object of his own making, using science as his covert justification. Cortner's laboratory is effectively a site for the making of able humans into disabled, nonhuman animals and monsters. Jan's diminished capacity amplifies Cortner's human capacity. This disabling of Jan and the notion that she would be "better off dead," as Chen might observe, signals discourses that base a woman's worth on her status as able-bodied, and often heterosexually compliant, dismissing other female bodies as unacceptably disabled, or deserving of euthanasia.[39]

WOMAN, INTERRUPTED: AN ENGINEER COMMITS FEMICIDE IN *PASSENGERS*

Reanimation science manifests in *Passengers* (2016) as a meditation on the nature of future space travel, during a journey that continues past an actual named star, Arcturus, which is located 36.66 light-years away from Earth. Comprehending such immense distance is challenging, but consider that Alpha Centauri, the star nearest to Earth, is already a distance of 4.3 light-years,[40] or 25 trillion miles away, which is about 300,000 times the distance between Earth and the sun. Our fastest known spacecraft would need about 78,000 years to reach Alpha Centauri, and maybe as many as 664,995 years to reach Arcturus.[41]

Needless to say, outer space is so expansive (and ever-expanding) that long-distance space travel remains science fiction. Current thinking is that if we are to survive journeys longer than the average human lifetime, passengers will need a type of medicalized freezing or stasis to suspend all aging or progression of disease—even with a spacecraft traveling close to the speed of light. Although this suspension of life, known as "suspended animation," is yet to be devised as a longevity technology, it has long been figured into outer space science fiction with descriptors such as "cryostasis" or "cryosleep" or "stasis pod" or "hypersleep." Each of these imagined technologies build upon existing cryogenic technologies already used for the freezing and thawing of human, animal, and plant embryos.[42] To be awakened from this suspension can be interpreted as a form of reanimation. *Passengers* centers upon this very kind of reanimation, exploring what happens when a spacefarer is awakened with eighty-nine years remaining before reaching his new planetary home. Faced with the enormity of his unplanned isolation on a spacecraft sized to house thousands of others, he

uses his engineering background to interrupt another passenger's suspension, thereby reanimating her against her will.

The film opens with a panorama of the vast cosmos, and a transporter hurtling forward through a loose asteroid belt, rotating in maintenance of its internal gravity. The ship's interior appears empty, save for the thousands of people laying silently in individual "hibernation pods." In this way, future space travel is portrayed in the film as a largely unconscious journey for the 5,000 passengers and 258 crew aboard the starship *Avalon*. All is well, until the luxury "starliner" encounters a massive asteroid that overwhelms its self-repair mechanisms and disrupts its fuel reactor. This catastrophic damage causes the hibernation pod holding Jim Preston (played by Chris Pratt) in suspension to malfunction, and the thirty-something White male is suddenly awakened as the machine begins its automated reanimation protocol: medical injections followed by an electric shock to stimulate his system.

Next, Jim is greeted by a 3D hologram in the likeness of an ambiguously Brown female flight attendant, who reassures him with her rehearsed speech, "It's perfectly normal to feel confused. You just spent 120 years in suspended animation." While checking his vitals, the computerized avatar continues, "We have nearly completed the journey from Earth to your new home, the colony world of Homestead II. A new world, a fresh start. Room to grow."

After recovering and rehydrating, Jim attends a seminar on "colonial living," where a hologram of yet another, ambiguously mixed-raced female flight attendant begins by remarking, "Earth is the cradle of civilization, but for many, it is overpriced, overpopulated, overrated." By omitting any mention of "human" in its description of civilization, the hologram's speech supports a reality within the film, wherein humans are by default the only species of consequence; humans are superior life-forms entitled to select new planets to make over in their own image. Without explicitly stating it, the hologram relays discourses currently circulating throughout popular culture (on Earth) that present space colonization as a solution or "technofix," as theorist Donna Haraway might put it, for a select few to escape the increasing pollution and social inequality caused by the warmongering and environmental degradation we are now experiencing.[43]

As a capitalist enterprise, the Homestead Corporation facilitates this migration and colonization effort by discounting travel fares for humans deemed especially desirable for the new colony. For example, we eventually learn this is how Jim has been able to afford the journey—his skills as a mechanical engineer have earned him a ticket, but only in exchange for giving the corporation a percentage of his lifetime pay on the new planet. This pending work responsibility brings Jim to the seminar room for orientation, where he realizes he is utterly and completely alone; the persistent absence of any other

passengers becomes proof that he is the only one to have been awakened, and that there is no way to return to his former state of "hibernation."

As *Passengers* further unfolds, it reveals a posthuman, post-Earth future (the year is never specified) that is both highly gendered and corporatized. When Jim races around the ship in frantic search of someone to talk to, someone who can answer his questions and reverse his reanimation, he encounters disembodied feminine voices in the computers and programs that can be queried with requests for service or commanded with instructions. It is by way of responses from masculine voices, however, emanating from androids and other computers, that he finds out new information, including the number of years he has left in his interstellar journey. Interactions with these predestined, gendered machines craft the linguistic landscape of outer space; maleness is predictably rational, reasoned, and positioned for scientific inquiry, while femaleness is situated as nurturing and obedient.

The linguistic landscape is further compounded by a class dimension that manifests as a scheme of costs, ranks, and privileges aboard the starship. Jim's relative class status prevents him from accessing premium coffee and breakfasts, and his long-distance video call to customer service receives a response that dials up the irony with its feminine computer voice: "Message will arrive in nineteen years, with earliest reply in fifty-six years. We apologize for the delay. That will be $6,012." Needless to say, the mechanical engineer from Denver, Colorado, is despondent, and becomes increasingly overwhelmed by the absence of human contact. For more than a year, his growing facial hair registers the enormous solitude and growing madness of his hopeless situation. Suicide begins to look attractive until he stumbles across the hibernation pod of Aurora Lane (played by Jennifer Lawrence), whom he views in repose through her pod's transparent exterior.

This marks a turning point for Jim, and he becomes obsessed with Aurora, learning more about her career as a New York–based writer by reading her publications and video interviews stored in the ship's systems. He studies the ship's manuals in an attempt to engineer a way of interrupting her hibernation, actions he knows will be irreversible should he succeed. Yet, he divulges his thoughts aloud with the male android bartender.

> Jim: You know, I'm not saying the universe is evil, but it sure has a nasty sense of humor. You get to fly to another planet, but you'll die along the way. And you find the perfect woman, right in front of you. Yet she's completely out of reach. [. . .] I'd be stranding her on this ship for the rest of her life.

Though Jim's obsession has graduated from infatuation to stalking, coupled with a sense of growing entitlement to Aurora's companionship and beauty, his words strike a tone of romance, as if he stands to miss out on the one great

love of his life. This is a one-way romance, however, as being unconscious, Aurora is unable to share his feelings. Still, Jim feels himself justified as he takes Zeus's fire into his own hands, so to speak, and assumes the role of Prometheus and Mad Scientist in sabotaging Aurora's hibernation pod—he shorts the wiring, causing sparks to emanate. When the pod yields to his intervention and shocks her back to life, she begins to breathe more deeply, waking to a facsimile of the speech Jim received upon his own reanimation: "It's perfectly normal to feel confused . . ."

In order to maintain the secrecy of his experimentation, Jim ducks out of view as Aurora comes into consciousness, ultimately allowing her to believe that, like his, her reanimation was a random result of the ship's malfunctioning. Curiously however, Aurora's restoration to life bears striking resemblance to yet another influential ancient myth of the Western classical tradition—that of Pygmalion and his beloved Galatea, as described by the Ancient Roman poet Ovid (43 BC–18 AD) in his narrative poem *Metamorphoses.* Embracing the inanimate marble he has carved into an embodiment of his feminine ideal, Pygmalion showers it in gifts, marrying it, and even sleeping with it. He prays to Aphrodite (Venus), the goddess of love, beauty, sexual pleasure, and procreation, and his wish is granted by a sign of fire and flame:

> Give me the likeness of my iv'ry maid.
> The golden Goddess, present at the pray'r,
> Well knew he meant th' inanimated fair,
> And gave the sign of granting his desire;
> For thrice in cheerful flames ascends the fire.[44]

Emboldened, Pygmalion then kisses his "ivory maid," and the statue animates and responds to his nonconsensual overture.[45] By Pygmalion's hands, Galatea has been shaped as an object of his desire, and there is no room in the mythos for her to reject her role as his fantasy-come-to-life.

Aurora has been similarly constructed within the narrative of *Passengers,* through a visual and linguistic discourse that carves her into the "perfect woman" across repeated descriptions of her beauty and virtue as a blonde-haired White woman, and promise as a mate. This flattens her embodiment, so much so, that she becomes a zombie—a hollow analog of the ship's servile flight attendants. Moreover, the very reason of Aurora's[46] reanimation and existence (in the film's plot) is circumscribed by her predetermined role as Jim's heteronormative complement, though differently from Pygmalion's object, Aurora is allowed to display anger toward her "creator." She yells at Jim, "I don't care! I don't care why you woke me up! You took my life!" Her words display a vulnerability that constructs her in structural opposition to Jim. He has "given" her life by taking it, and his silence has perpetuated the

allusion that she ever had a choice in their romance. She has been powerless from the very start.

Her displeasure with Jim continues until she must collaborate with him (and a lone crew member randomly awoken from hibernation) in order to stop further catastrophic malfunctions on the ship. When Jim makes a necessary spacewalk to combat these mechanical failures, the risk leads to his death. But Aurora is unwilling to accept him as dead, and drags and lifts his unconscious body toward the ship's infirmary and into its one automated robotic health care machine, or medical pod, called "AutoDoc." "Jim, come back to me," she urges, expressing renewed love for the man she previously regarded as her murderer, "I can't live on the ship without you."

The AutoDoc communicates in a masculine voice as it assesses Jim's injuries with lightning speed, determining them to be all but permanently fatal without immediate medical attention. Aurora frantically taps the touchscreen but is told the crucial postmortem procedures will require additional medical supervision. Remembering that she has in her possession the deck chief's identification bracelet, she scans this into the computer and utters his authorization code, and this sets the medical robots to working. As Jim sputters back to life, reanimated yet again, the scene intensely depicts female subordination to male scientific know-how, as with even the most sophisticated medical equipment at her fingertips, Aurora needs male assistance to save (animate) a life.

Passengers ends with allusions to Jim and Aurora's continued courtship and their eventual deaths aboard the *Avalon.* Aurora speaks exaltingly in a voiceover, describing how the two of them lived as they chose to live. Her words reflect her predetermined destiny as the object of her captor's desire; it is a creepy kind of Stockholm syndrome and sci-fi femicide (killing of a woman by a man) that she was never designed to escape. The discursive impact of the movie, from its references to overpopulation on Earth, to its centering of two White spacefarers, and mention of the actual star Arcturus, marks a communication strategy intent on conveying a somewhat plausible future, perhaps made more convincing through its subjugation of the one woman it includes.

BECOMING MOTHER TO DORMANT ALIEN LIFE IN *PROMETHEUS* (2012)

Human, android, and alien cross paths in the 2012 film *Prometheus,* the highly anticipated first prequel and fifth film of the beloved *Alien* science fiction horror franchise (1979–2017). Differently from *Alien,* which famously starred actress Sigourney Weaver as Ellen Ripley, the sole survivor of an

unexplainably horrific alien attack on her crew of terraformers, its prequel *Prometheus* forays into the origins of this extraterrestrial predator, in an exploration of reproductive power and multispecies cohabitation. In the film, a mostly White crew of seventeen journey from Earth into deep space, preserved in cryostasis for a period of about two years, as their spaceship *Prometheus* covers a distance of 203 trillion miles. Their destination is the moon of an undisclosed planet, and as they near it, the ship's computer calls out a repeating alert in a masculine voice: "Attention, destination threshold." The crew is then awakened by android crew member David (played by Michael Fassbender) in the year 2093, and encouraged to drink fluids and rehydrate themselves. Speaking in a steady, masculine monotone, David reassures a coughing, vomiting scientist among them, "Your mind and body are in a state of shock, as a result of the stasis. Alright. Perfectly normal."

Reanimation science is therefore implicated early on in *Prometheus* through the "stasis" pods the crew emerge from, which have enabled them to traverse outer space in continuous health. The description of stasis as "perfectly normal" contextualizes this futuristic biotechnology as well-known, signaling that it is both typical of the time period and space travel setting. However, the majority of *Prometheus* takes place not on the spaceship, as it does in *Passengers,* but on the moon's surface. Before the crew of scientists and technicians lands, their encounter with the exoplanetary moon is constructed through worlding language marked by a visual sequence of stark, barren landscapes (captured during filming in Iceland), and words curated to analogize with earthlike features. The ship's captain, Janek, the only Black crew member, addresses copilots Chance and Ravel (the only Asian crew member), who analyzes the moon's surface atmosphere, and they are joined by two others, Holloway and Ford (both White):

> Janek: What is the atmosphere?
>
> Chance: The atmosphere is 71 percent nitrogen, 21 percent oxygen, traces of argon gas.
>
> ((visible lightning strike from beyond the ship))
>
> Janek: Whoa, now that's weather!
>
> Holloway: Just like home!
>
> Ford: Only if you're breathing through an exhaust pipe. CO_2 [carbon dioxide] is over 3 percent. Two minutes without a suit, you're dead.

This sequence of interaction encourages audiences to feel as though they join the crew in encountering the moon world for the first time. Details unfolding through the dialogue's assortment of relatable but authoritative voices

inform, and transform the unnamed alien surface into a place familiar for its similarities and contrasts with "home," a metaphor for Earth. This discourse is consistent with what theorist Lessl has explored of the language of actual astronomers, astrobiologists, and other planetary scientists, who excite amateur publics with a "sense of coaction, a salient awareness of participation and thus of responsibility to science," even as their activity can only be performed by a specialized few.[47]

Once landed on the moon's surface, principal scientists Dr. Elizabeth Shaw (Noomi Rapace) and Dr. Charlie Holloway (Logan Marshall-Green) disclose to the crew that the *Prometheus* has journeyed to this star system because of their archaeological findings on Earth. The star system was depicted in devotional paintings and stelae of multiple ancient Earth civilizations, including Egypt and Mesopotamia, with the earliest dated finding as old as 35,000 years. Shaw and Holloway's presentation has been announced by Marilyn Vickers, the mission's manager and corporate envoy, who earlier instructed David to initiate a 3D hologram flashing the corporate logo (with masculine voiceover) in posthumous tribute to Peter Weyland, namesake and progenitor of Weyland Corporation.

"WEYLAND CORPORATION. BUILDING BETTER WORLDS."

Though Shaw's sense of scientific wonder contrasts with the Weyland Corporation's unapologetic profiteering, it is clear that her and Holloway's mission has been funded with revenues made from the corporation's ventures in space colonization. The visibly excited Shaw continues to speak with the crew, including the geologist Fifield, and refers to humans' ancient paintings of the star system as the "invitation" that has incited this cosmic adventure.

> Shaw: Not a map, an invitation.
>
> Fifield (geologist): From who?
>
> Shaw: We call them "Engineers."
>
> Fifield: "Engineers"? You mind telling us what they engineered?
>
> Shaw: They engineered us.

This discourse sets up a frame through which the remainder of the film's complex story line can be interpreted. Future humans who have engineered their ideal servant and caretaker in the humanoid android David have come in search of those who originally engineered *them.* While on the moon's

surface, they encounter evidence of ancient nonhuman civilization, as well as hostile, sentient life. The killer life-form has arisen through mutations due to contamination from a bioweapon created by the very Engineers the humans have come in search of.

The core sequence of events that exposes humans to the bioweapon begins with David, who proceeds without authorization to open a mysterious, sealed chamber the crew have located inside a massive 2,000-year-old pyramid-esque structure on the moon's surface.

> David: I'm attempting to open the door.
>
> Shaw: Wait. We don't know what's on the other side.
>
> ((door to chamber opens))
>
> David: ((smirks)) Oops. Sorry.

David's hasty entry into the chamber ahead of his human counterparts patterns with the "forethought" ascribed to Prometheus in the ancient myth the film derives its name from. However, David's smirk is not the first indication that his artificial intelligence has developed human-like proclivities for vanity, secretiveness, and dominance: while everyone was previously in cryostasis, he dyed his hair blonde, and established a "neurolink" with Dr. Shaw's comatose body, enabling his voyeuristic observation of her dreamstate.

Inside the pyramid structure, David unlocks the chamber by tracing his fingers along carved symbols resembling cuneiform; his ability to decipher this writing system presumably comes from earlier intensive study of Proto-Indo-European during the journey from Earth. Where the film makes the nonhuman language of the Engineers decipherable through the vocabulary and grammar of a linguistically reconstructed ancestor to human languages like Ancient Greek, Latin, and modern English, rather than in concert with even older Proto-Afroasiatic, for example, it constructs a discourse that features Proto-Indo-European as a stand-in, or symbol, of humanity.

This symbolism forms a kind of subtle and covert synecdoche (part standing in for the whole) that foreshadows the physical appearance of the Engineers, whose whitish, translucent skin, monumental stature, aquiline masculine faces, and aggressive strength resemble the fabled giants or Titans of Greece (Prometheus was among these), or the legendary Colossus of Rhodes. With Proto-Indo-European symbolic of human cultural foundations in *Prometheus*, the Engineers reflect this alternative reality, bearing resemblance to the Europeans with whom they are to have most closely interacted—the cave dwellers on the Isle of Skye (Scotland) who peopled the site where Shaw and colleagues located their oldest archaeological evidence. This origin myth would

easily connect with the Curse of Ham and other biblical stories interpreted as allegories of the inherent inferiority of Blacks, who, like all other humans, descended from Whites, but were punished with an enduring sunburn that positioned them well for enslavement under the harshest of conditions. These biblically based theories were in fact seminal to the practice of linguistics, philology, and comparative anatomy in the nineteenth and early twentieth centuries on Earth (see, for example, chapter 4 of this volume, in which authors Mitchell and Michael discuss the comingling of Christianity and science).[48]

These linguistic details notwithstanding, it is inside the pyramid's dark, stadium-sized chamber that the crew of the *Prometheus* encounter hundreds of carefully arranged urns spontaneously oozing an unknown black substance later understood to be the Engineers' bioweapon. Upon the crew's return to the spaceship, David opens an urn he has secreted away from the chamber and initiates an experiment of his own. During a conversation with Holloway, David inoculates an alcoholic beverage with a drop of the black substance and passes it to the already drunk scientist, who guzzles it down, oblivious to its potential danger. This premeditated act of stealth, again by David, further recalls the notion of "forethought" to position him as a futuristic interpretation of Prometheus. Holloway later retires to the ship's quarters he shares with Shaw, initiating sexual intercourse with her, but not before their conversation concerns questions of reproduction, creation, and power.

Their conversation comes on the heels of experimentation performed earlier by Shaw and Ford, who returned to the ship with the severed head of one of the ancient Engineers. The head was apparently severed through contact with the descending chamber door all those years ago, and preserved by being sealed within the airtight room. In the ship's laboratory, Shaw suggested they might electrically stimulate a specific area of the brain stem (the locus coeruleus, which is found in the human brain), thereby reanimating the head. The experiment was observed by David, Vickers, and Holloway.

> Shaw: Can you run a stem line into the locus coeruleus? I—I think we can trick the nervous system into thinking that it's still alive. ((smiles))
>
> Ford: ((takes out the Synapse Reestablisher, and inserts the probe deeply behind the Engineer's right ear))
>
> Shaw: Thirty amps, no more.

The ensuing scene bears resemblance to Jan's ethically questionable reanimation in *The Brain That Wouldn't Die,* except that this nonhuman head never regains consciousness, and instead writhes in increasing pain. After its eyes blink open, the facial muscles twitch, giving way to grotesque contortions and a pulsating scalp. Shaw demands they lower the electrical stimula-

tion, but it is too little, too late, and the head explodes only seconds after they contain it behind glass in the lab. David's immediate response is one of blunt, unemotional fascination with the nature of the Engineer's re-death; his demeanor is creepy and sociopathic.

David: ((expressionless)) Mortal after all.

Shaw: Take a sample. Let's have a look.

Though shocked, Shaw decides they should still run tests on the head's genetic material, and it is these lab results she shares with Holloway when he returns to their quarters that evening after his interaction with David.

Shaw: Their genetic material predates ours; we come from them.

Holloway: Guess you can take your father's [Christian] cross off now.

Shaw: Why would I want to do that?

Holloway: Because they made us. ((gestures to data of matching DNA samples she has shared with him))

Shaw: And who made them?

Holloway: ((laughs a bit)) Well, exactly. We'll never know. But here's what we do know. Is that there is nothing special about the creation of life. I mean, anybody can do it. All you need is a dash of DNA and half a brain, right?

Shaw: ((teary-eyed)) I can't. ((shakes head)) I can't create life. What . . . does that say about me?

In this scene, Shaw's interaction with Holloway frames her infertility as a disability that detracts from her White womanhood. Beginning with imagery of the masculine Engineers as progenitors of humans, the revelation of Shaw's infertility effectively lowers her status, because as Holloway says, there's "nothing special" about being a woman, because "anybody can do it"—a reference to a man acting independently. But after Shaw reveals her insecurity, Holloway somewhat backs off his rhetoric to assuage her concerns and in so doing, enters into sexual relations with her. Their intimate activity unwittingly instigates the next stage of David's experiment, and little more than ten hours later, Holloway dies a horrifically painful death from the alien infection. Deeply distressed by his demise, Shaw passes out, and later wakes in the ship's med bay to David informing her that she appears to be three months pregnant with what is "not exactly a traditional fetus."

The news leaves Shaw stunned, bewildered, and scared, but David is unaffected. She asks to see the medical scan of the fetus and expresses a desire to terminate the pregnancy, but her concerns are dismissed by him. Instead, he

explains his plan to have her put back into cryostasis, where she will remain in suspended animation, thus preserving both her and the fetus for the duration of his experimentation and the ship's return journey.

> Shaw: David, I want to see it. ((gets up from the examination table))
>
> David: Now, Doctor . . .
>
> Shaw: I want to see it. ((frantically tries to cue up the medical computer screen)) I want to know if we—
>
> David: —I'm afraid we don't have the personnel to perform a procedure like that. Our best option—
>
> Shaw: I want it out.
>
> David: —Is to put you back in cryostasis, until we return to Earth.
>
> Shaw: Please. ((clutching at David in desperation)) Get it out of me. Get it out of me! Please! ((begins to cry out with abdominal pain, and collapses to the floor))

There is a lot about this turn of events that is strategically designed to reduce Shaw to an indigent, powerless state of being through a shifting of the animacies of her body, including the dramatic denial of an abortion to her by a White masculine android. For one, David's intention to put her back into cryostasis will render her comatose and therefore inanimate. Secondly, through his experimentation she has unknowingly become a gestational surrogate, conceiving a fetus to which she cannot have possibly contributed genetic material as an infertile woman. This discourse recalls Aristotle's actual theories of female passivity in reproduction, which beheld male semen as the only active agent in the creation of life. Such theories survived into sixteenth- and seventeenth-century Europe, as feminist historian Carolyn Merchant has attested, with "man as parent and the woman as incubator."[49] Having been thus transformed into an incubator, through the resurrection, or reanimation, of these old discourses as part of her character's narrative, Shaw is further reduced through her implied consanguinity with the alien fetus developing within her, much as might a parasitic tapeworm. This comingling of her blood with that of the alien animal insinuates a contamination of her femininity through copulation with the alien DNA. In this way, her earlier sexual intercourse becomes somewhat symbolic of the deviant act of bestiality, albeit with a human man infected with alien DNA, suggesting an animality about her that is neither appropriate to the "civilized" human condition, nor her previous status as a learned scientist.

Not only is Shaw an experimental test subject, but she is also a sexual deviant. This effects a combination of objectification and dehumanization that

nullifies her identity as a scientist, and marks a turning point in how David addresses her for the remainder of the film. Poignantly, David no longer addresses her as "Doctor" or "Dr. Shaw" after these moments in the med bay. Thereafter, he refers to her by first name only; having lost her preeminent status, she is accordingly called "Elizabeth," a name to which she responds without hesitation. This sly denaming accomplishes a further discursive act of dehumanization, and likely goes unnoticed by audiences because the moniker *is* her name and not an abrasive epithet or flamboyant misnaming of the sort that the teacher character in the popular *Key & Peele* comedic skit performs, transforming students' Western names like Denise and Aaron into "Dee-nice" or "Eh-eh-rawn."[50] The manipulation of Shaw's naming bears loose resemblance to the type of ethnoracial subordination sociocultural linguist Mary Bucholtz observes in American classrooms, where some teachers repeatedly anglicize and alter the pronunciation of their Latinx students' names as a way of intentionally disempowering and marginalizing these students.[51]

Later, when Shaw successfully fights off the attempt to reinstall her body in cryostasis, and stumbles with increasing pain to the automated robotic health care machine located in Vickers's living quarters, she faces yet another revelation of her superfluous status as a woman. The Pauling MedPod responds to her inquiry in its feminine monotone:

> MedPod: Emergency procedures initiated. Verbally state the nature of your injury.
>
> Shaw: ((gasping)) I—need—Cesarean.
>
> MedPod: Error. This MedPod is calibrated for male patients only. It does not stock the procedure you have requested. Please seek critical assistance elsewh—

Faced with the machine's hostile, sexist configuration, Shaw begins to input manual commands on its touchscreen map of the male anatomical body in an effort to save her own life.

> Shaw: ((tapping touchscreen)) Abdominal. Penetrating injuries. Foreign body. Initiate.
>
> MedPod: Surgical procedure to begin.

As the MedPod's surgical lasers and tooled arms remove from Shaw's abdomen a large squid-like creature with writhing tentacles, its lingering umbilical cord and dripping blood visibilize her consanguinity with this alien life-form that has taken her body as its host. This completes the film's extended metaphor of reanimation, where the science, through its manifestations in male-controlled cryostasis and sexual reproduction, has enabled both the colonization of deep space and the awakening of dormant alien life. The film concludes by revealing

that the mission's 103-year-old corporate benefactor is not dead as was previously claimed. Still alive, and on the spaceship, Peter Weyland (Guy Pearce) has sponsored the scientific expedition hoping that the Engineers might provide the key to human immortality, thereby allowing him to run the Weyland Corporation indefinitely, and keep it out of the hands of his logical successor, his daughter Marilyn Vickers. In this sense, the corporation's own profile as a pioneer of biotech and space exploration research becomes a "body of scientific knowledge" that, like Victor Frankenstein, Peter Weyland is unwilling to cede to a female embodiment. In the end, everyone is dead except for Shaw (and a disembodied David, who is immortal), for the alien she has birthed proceeded to grow exponentially and attack what remained of the *Prometheus*. Though there were multiple clues to David's treachery, the film ends with her never suspecting him as the cause of her misery. "My name is Elizabeth Shaw," her voiceover sounds in a final demotion of her scientific prowess, "last survivor of the *Prometheus*. And I am still searching."

CONCLUSION: A SPECULATIVE OUTLOOK ON FEMALE FUTURES

This chapter has examined the futurisms presented in modern science fiction film, with attention to reanimation science, language, and the female body as sites of unequal power relations. Building upon a review of key themes in the original *Frankenstein* novel, I have explored how films *The Brain That Wouldn't Die, Passengers,* and *Prometheus* develop individual, Eurocentric sci-fi mythologies that rely heavily on Greco-Roman myth and ideologies of White male supremacy. The Ancient Greek myth of Prometheus is the backbone of these films, along with the archetypal male mad scientist who performs his tasks with a veil of secrecy, aiming to author a pathway to the awakening of life. Not only must the male scientist and engineer remain in control of scientific knowledge as embodied by the female form, but he must be seen to be righteous in doing it.

With righteousness as his reward, the Modern Prometheus, as mortal man, is allowed to die confidently secure in his own scientific achievement—or never dies, because he was a nonhuman (android) to begin with. This rescue and celebration of the mad scientist's male dignity is a core discourse of the reanimation science fiction subgenre.[52] The futuristic allure of reanimation science, with its visioning of the female body and the cosmos in ways that attempt to presage technological development, demands critical examination of these sexist undertones, for science fiction film remains a powerful catalyst of public discourse and imagination. The covert ways these modern films use

language to imagine the dehumanization and objectification of their central female characters may therefore be shocking, given that women have become increasingly more visible in recent decades as self-determined college graduates, scientists, engineers, surgeons, astronauts, senators, Supreme Court Justices, and others. The seductive discourse of these films nevertheless provides evidence that the ancient arc of Western male domination lives on, and is constructing its longevity through projections into popular futurisms concerning reproductive immortality, that undermine and *alien*ate women, while excluding people of color—notably, women of color.

The gendered and racialized outlooks on women and people of color that proliferate in science fiction film are mirrored in other aspects of the public sphere. Famously, Dr. Mae Jemison has reflected that her path as an undergraduate engineering major was challenged by professors who would "just pretend I wasn't there," but were apt to respond positively if a White male student asked her same question.[53] Unfortunately, countless women students and others continue to experience discrimination through exclusion, criminalization of access to contraception and abortion, gendered and sex-based differences in pay, and sexual assault in ways that #MeToo and other contemporary social movements aim to expose and redress. A recent issue of *Science* magazine features an essay by tenured psychology professor and mother of three Sharon Ramos Goyette, who describes how a university administrator encouraged her to leave her job, saying "It's time to be home with your children."[54] These are issues that longtime feminist icon Ruth Bader Ginsburg, U.S. Supreme Court Justice, has continued to relate to women's control of their reproductive capabilities and workplace protections, all of which concern equality under the law. As one of Ginsburg's apprentices has summed of her legal philosophy: "Practices that constrain women's liberty deny women equality."[55] Within this view, it is apparent that the films examined in this chapter represent an effort to impose traditional sex roles on women in ways that intentionally obscure other possibilities.

In addition, fresh verbal attacks by U.S. President Trump, who himself has been accused of sexual misconduct by at least twelve women, also serve to undermine women through a comingling of discourses of popular science and racialized difference. Speaking at a 2018 political rally in Montana, Trump used his presidency as a bully pulpit to deride Senator Elizabeth Warren, calling her "fake Pocahontas" and challenging her to perform genetic testing to verify her Native American heritage:

> We're in the #MeToo generation, so I have to be very gentle. And we will very gently take that [DNA testing] kit and we will slowly toss it, hoping it doesn't hit her and injure her arm, even though it only weighs probably two ounces.[56]

Senator Warren subsequently responded via Twitter, making mention of how the Trump administration was currently having to resort to genetic testing in order to comply with court orders to reunite children, largely of Latin American descent, with their long-detained, immigrant parents. These detainees were recent arrivals to the United States, some of whom Trump had earlier loosely referred to as "animals"[57]:

> Hey, @realDonaldTrump: While you obsess over my genes, your Admin (*sic*) is conducting DNA tests on little kids because you ripped them from their mamas & you are too incompetent to reunite them in time to meet a court order. Maybe you should focus on fixing the lives you're destroying.

Just as the science fiction narratives discussed in this chapter can be understood as more than simple cult classics, the trading of these political barbs implicates more than innocuous banter. Rather, this public discourse demonstrates that women's bodies remain a centerpiece of patriarchal power, with "science" as an excuse or justification for regulating female embodiments through sexual assault, scientific experimentation, forced procreation, and name-calling. And when it comes to the persistent imagining of patriarchal power in the speculative future, we must ask why, as theorist Judith Butler has underscored, this power insists on a fixity of sex, gender, and related social roles, in ways that ontologically and linguistically conspire to "preempt the possibilities of imaginable and realizable gender configurations within culture."[58]

At a time when Donald Trump, Mike Pence, and the Republican Party are also making headlines for ordering the Pentagon to organize a so-called militaristic "Space Force,"[59] we must be vigilant that the type of outer space fictions we entertain ourselves with are not normalizing a future that endangers our present. This includes, as science and technology studies scholars Andrew Russell and Lee Vinsel have warned, the seemingly prophetic thrust of entrepreneur Elon Musk's efforts towards human settlement on Mars, which are a "distraction from the severe problems facing human societies" here on Earth.[60] It is in this sense that Russell and Vinsel reference in their essay the 1970 social justice anthem "Whitey on the Moon" as authored by poet Gil Scott-Heron, to amplify how decades ago, African American activists were already stressing how repurposing the public funds used to send White men (critically termed "Whitey") into space could help alleviate the crippling inequality plaguing the United States:

> I can't pay no doctor bills.
> (But Whitey's on the moon)
> Ten years from now I'll be payin' still.
> (While Whitey's on the moon)[61]

Bearing this in mind, it remains increasingly important for us to work toward "visionary fiction,"[62] as poet Walidah Imarisha has remarked of legendary science fiction author Octavia Butler's stellar imaginings. In my view, this entails going beyond metaphors derived from the Eurocentric mythologies that have propped up Western societies since the times of Ancient Greece. In her introduction to the anthology *Octavia's Brood: Science Fiction Stories from Social Justice Movements,* Imarisha defines visionary fiction as a descriptor of "science fiction that has relevance toward building new, freer worlds [. . .] with the arc always bending towards justice."[63] In a related way, this has been my goal here in this chapter, to identify how some of our newest science fiction narratives disappoint in their reconfiguration of Prometheus into a kind of *Brometheus*. The key to a visionary future undoubtedly lies in crafting new voices in the minds of more diverse storytellers and bold science fiction practitioners, who will imagine prospects beyond our wildest dreams. No need to wait until the year 2233 for Lt. Uhura and colleagues to come on the scene.

NOTES

1. FoundationINTERVIEWS, "Nichelle Nichols on how Dr. MLK, Jr. dissuaded her from quitting Star Trek," January 7, 2013, EmmyTVLegends.org, https://www.youtube.com/watch?v=pSq_UIuxba8. Accessed July 7, 2018.

2. Lisa Messeri, *Placing Outer Space,* 141.

3. Lisa Messeri, *Placing Outer Space,* 145.

4. This chapter has benefitted tremendously from the close reading of earlier drafts by generous friends, family, and colleagues. In particular, I acknowledge input from Adia Benton, who encouraged me to rethink the political entanglement of biotechnologies in speculative narratives; Debi Thomas shared her perspective as a practicing surgeon and biomedical scientist; Charissa Dechéne commented on the vulnerability of prisoner bodies; Natasha Bissonauth brought to my attention the myth of Pygmalion and Galatea; and thanks to Ute Bettray for our meaningful discussion of feminist ontologies; and my thanks to Lisa Messeri for her anthropological perspective. I also thank Jack Halberstam, who encouraged me to attend a Columbia University conference on haptics and embodiment in 2017 that introduced me to many works including Chen's *Animacies*. Any and all shortcomings are, of course, my own.

5. Donna J. Haraway, *Staying With the Trouble.*

6. Mumia Abu-Jamal, "Star Wars and the American Imagination."

7. Mumia Abu-Jamal, "Star Wars and the American Imagination," 257. This very same notion of the colonized subject attempting fated rebellion surfaces in *The Matrix* film trilogy (1999–2003) in which all of humanity lives a lie of freedom imparted through virtual reality. Ultimately, audiences of the films learn that the oppressive Machines who operate the Matrix do, in fact, expect a periodic human resistance effort, and as a further mind-numbing bend of reality, have regularly allowed the

resistance long enough to crush it, root out insurgents, and renew their psychological and physical exploitation of humanity.

8. Zeynep Yenisey, "The New 'Doctor Who' is a Woman, and Some of the Show's Fans Just Can't Handle It," *Maxim.*

9. Ibid.

10. Jon Marcus, "Why Men Are the New College Minority," *The Atlantic.*

11. Jocelyn Steinke, Marilee Long, Marne J. Johnson, and Sayani Ghosh, "Gender Stereotypes of Scientist Characters in Television Programs Popular Among Middle School–Aged Children."

12. Catherine Hill, Christianne Corbett, and Andresse St. Rose, "Why So Few? Women in Science, Technology, Engineering, and Mathematics."

13. Peter Weingart, Claudia Muhl, and Petra Pansegrau, "Of Power Maniacs and Unethical Geniuses: Science and Scientists in Fiction Film."

14. Thomas Lessl, "The Priestly Voice."

15. Kurt W. Back, "Frankenstein and Brave New World: Two Cautionary Myths on the Boundaries of Science," 281.

16. Emily Martin, *Women and the Body: A Cultural Analysis of Reproduction*, p. 21.

17. Mel Y. Chen, "Language and Mattering in Humans," in *Animacies,* 42.

18. Peter Weingart, Claudia Muhl, and Petra Pansegrau, "Of Power Maniacs and Unethical Geniuses: Science and Scientists in Fiction Film."

19. Mary Shelley, *Frankenstein* (2nd Norton Critical Edition), 160.

20. David Machin and Andrea Mayr, *How to Do Critical Discourse Analysis,* 11.

21. Mary Bucholtz, *White Kids: Language, Race, and Styles of Youth Identity.*

22. Dell Hymes, *Ethnography, Linguistics, Narrative Inequality.* See also, Mary Bucholtz and Kira Hall, "All of the above: New coalitions in sociocultural linguistics." *Journal of Sociolinguistics* 12(4), 401–431.

23. Alastair Pennycook, *Critical Applied Linguistics.*

24. For lively and somewhat historically accurate representation of public and legislative debate concerning the Anatomy Act of 1832, see early episodes of the television drama *The Frankenstein Chronicles* (2015–).

25. Moira Ferguson, "Mary Wollstonecraft and the Problematic of Slavery."

26. See, for example, the study detailed by Benjamin W. Richardson in his 1879 article in *Scientific American* entitled, "Suspended Animation."

27. Alan Rauch, "The Monstrous Body of Knowledge in Mary Shelley's 'Frankenstein.'"

28. Mary Shelley, *Frankenstein* (2nd Norton Critical Edition), p. 119.

29. Ibid.

30. Emphasis in original. Alan Rauch, "The Monstrous Body of Knowledge in Mary Shelley's 'Frankenstein,'" 232.

31. Lahle Wolfe, "Statistics on the number of women surgeons in the United States."

32. Mary Shelley, *Frankenstein* (2nd Norton Critical Edition), 152.

33. David Machin and Andrea Mayr, *How to Do Critical Discourse Analysis*, 11.

34. Carl Power and John E. J. Rasko, "Whither Prometheus' Liver? Greek Myth and the Science of Regeneration."

35. Ibid.

36. Rebecca Skloot, *The Immortal Life of Henrietta Lacks.*

37. Dorothy Roberts, *Killing the Black Body.* See also Laura Briggs, *Reproducing Empire.*

38. Mel Y. Chen, "Language and Mattering in Humans," in *Animacies,* 42–43.

39. Mel Y. Chen, "Queer Animality," in *Animacies,* 125.

40. A light-year is a unit of astronomical distance that describes the distance that light travels in one year, approximately six trillion miles. The speed of light is 299,792,458 meters per second.

41. Deborah Byrd, "How Long to Travel to Alpha Centauri?"

42. For example, the futuristic sci-fi television series *Dark Matter* (2015–2017) explores the stories of a spaceship crew who each awake from a state of cryogenic "stasis" without memory of who they are. The seventh episode of the series (originally airing July 24, 2015, on the Syfy network), in particular, describes cryogenic freezing of the body as a routine medical treatment when an adequate cure is unavailable. In that episode, a (White) woman is awakened and removed from a biotechnology known as a "stasis pod," only to emotionally reconnect with a crew member and explain her state of terminal, degenerative disease (as a result of exoplanet mining and pollution), before being frozen again, with the promise that a cure will be forthcoming. Unfortunately, a power outage on the ship causes the woman's stasis pod to lose function, killing her.

43. Donna Haraway, *Staying with the Trouble,* 3. These discourses are also circulating in a growing number of science fiction films focused on outer space exploration. Several people, including cultural anthropologist Lisa Messeri, have noted how the subtexts of this "colonization" terminology reproduces earlier sentiments captured within terrestrial histories of colonial expansion and exploitation of both peoples and nature as expendable resources. See, for example, Messeri's 2015 essay on *Slate.com*, "We Need to Stop Talking About Space as a 'Frontier.'"

44. From the 1717 English translation of Ovid's Latin verse, by Sir Samuel Garth, *Ovid's Metamorphoses in Fifteen Books.*

45. The myth of Pygmalion and Galatea is dramatically illustrated in an oil painting (c. 1890) of the same name by artist Jean-Léon Gérôme. The painting artfully depicts the sculptor embracing his creation as she transforms from inanimate material into flesh and blood.

46. "Aurora" also harbors further symbolism as the name of the Greco-Roman goddess of dawn, who (re)awakens daily to assist Apollo/Sol, the masculine god of sun and light.

47. Thomas Lessl, "The Priestly Voice," 191.

48. There are several works that discuss the Curse of Ham and its impact on early linguistic theory and the work of European historical linguists. Among these, the study by Sara Pugach, *Africa in Translation,* is a phenomenal resource that outlines how German scholars influenced by these biblical interpretations worked hard to ensure that European languages were placed at the top of emerging hierarchies and histories of language, even as they encountered African and Asian languages that provided evidence to the contrary.

49. Carolyn Merchant, *The Death of Nature,* 157.

50. Key and Peele, "Substitute Teacher," October 17, 2012, Comedy Central.

51. Mary Bucholtz, "On Being Called Out of One's Name: Indexical Bleaching as a Technique of Deracialization."

52. The one example I have been able to find of a female scientist reanimating a man is in a season 3 episode of the 1990s science fiction television series *Sliders* (episode 14), in which recurring character and amateur scientist Quinn Mallory is medically drained of his blood by Dr. Deera Mubaric, who is investigating her patients' afterlife experiences (albeit while scantily clad). However, once Quinn is revived, he refuses to cooperate with Dr. Mubaric, continuing to call her "Deera" even as she ultimately complies with his demands, gives him the keys to her car, and helps him rescue his friends. In the end, the episode's entire story line depicts a woman repeatedly undermined by male characters venerated as default scientists, leaders, and professors.

53. Amy Finnerty, "Outnumbered: Standing Out at Work: Dr. Mae C. Jemison," *New York Times.*

54. Sharon Ramos Goyette, "Hitting the Wall," *Science.*

55. Reva B. Siegel, "Equality and Choice: Sex Equality Perspectives on Reproductive Rights in the Work of Ruth Bader Ginsburg."

56. Karen Tumulty, "To the President, #MeToo is Little More Than a Punchline," *The Washington Post.*

57. Julie Hirschfeld Davis, "Trump Calls Some Unauthorized Immigrants 'Animals' in Rant," *New York Times.*

58. Judith Butler, *Gender Trouble*, 13.

59. Jacqueline Klimas, "Trump Orders Creation of a Stand-Alone Space Force," *Politico.*

60. Andrew Russell and Lee Vinsel, "Whitey on Mars: Elon Musk and the Rise of Silicon Valley's Strange Trickle-down Science," *Aeon.*

61. Gil Scott-Heron, "Whitey on the Moon."

62. Walidah Imarisha, "Introduction," *Octavia's Brood,* 4.

63. Ibid.

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Ideas About Race, edited by H. Samy Alim, John R. Rickford, and Arnetha F. Ball, 273–289. New York: Oxford University Press, 2016.

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