THE AMERICAN ROBOT

A Cultural History

DUSTIN A. ABNET

The University of Chicago Press
Chicago and London

The University of Chicago Press, Chicago 60637
The University of Chicago Press, Ltd., London

Published 2020
Printed in the United States of America

29 28 27 26 25 24 23 22 21 20 1 2 3 4 5

ISBN-13: 978-0-226-69271-5 (cloth)
ISBN-13: 978-0-226-69285-2 (e-book)
DOI: https://doi.org/10.7208/chicago/9780226692852.001.0001

Library of Congress Cataloging-in-Publication Data

Names: Abnet, Dustin A., author.
Title: The American robot : a cultural history / Dustin A. Abnet.
Description: Chicago : University of Chicago Press, 2020. | Includes bibliographical references and index.
Identifiers: LCCN 2019037835 | ISBN 9780226692715 (cloth) | ISBN 9780226692852 (ebook)
Subjects: LCSH: Robots—Social aspects. | Robotics—Social aspects.
Classification: LCC TJ211 .A34 2020 | DDC 303.48/3—dc23
LC record available at https://lccn.loc.gov/2019037835

♾ This paper meets the requirements of ANSI/NISO Z39.48-1992 (Permanence of Paper).

Introduction

An Intimate and Distant Machine

In March 1999, Matt Groening's animated sitcom *Futurama* introduced audiences to Philip J. Fry, an idiot who falls into a cryogenic tube on December 31, 1999, and awakens exactly one thousand years later. In the interim, humans have traveled through space and met hundreds of alien species. They have invented fantastic and horrifying new technologies. Earth has been invaded, destroyed, and rebuilt multiple times. Yet, this future maintains a curious nostalgia for elements of twentieth-century culture, including the Harlem Globetrotters, Richard Nixon, and 1950s-style hygiene films. When, in a season 3 episode, Fry dates a robot that physically and vocally duplicates the actress Lucy Liu while poorly performing a "personality mathematically derived" from her movies, his disgusted friends show him one of those hygiene films, *I Dated a Robot!*[1]

As a teenage boy and girl sit at a diner, a middle-aged white male narrator walks to their table and lectures, "Ordinary human dating. It's enjoyable and it serves an important purpose," before flipping their table over to reveal a screaming baby. "But when a human dates an artificial mate, there is no purpose. Only enjoyment. And that leads to tragedy." As "Billy Everyteen" succumbs to the temptations of his "Marilyn Monroebot," he grows too lazy to walk his dog, deliver newspapers, or make out with a girl from across the street. "In

Fig. I.1. "Billy Everyteen" making out with his "Marilyn Monroebot" instead of walking his dog, finishing his paper route, or even making out with a human girl in the *Futurama* episode "I Dated a Robot." Animators added a (barely visible) aura around the robot to reinforce the distinction between authentic and inauthentic that the episode satirizes.

a world where teens can date robots," the narrator asks, "why should he bother? Why should anyone bother?" Skipping eighty years into the future, viewers see Billy die alone with his robot just before Earth suffers the consequences of his unrestrained pursuit of pleasure: annihilation.

Despite its satire, the episode raises numerous questions of increasing importance in an era of advanced automation, artificial intelligence, and digital personas. If a technology can simulate human affection and fulfill individual desires on command, what is the point of risking rejection or laboring to build relationships? Do we lose a sense of purpose by devoting ourselves to easy pleasures offered by technology rather than more difficult tasks? Are we, like the episode's robots, mere algorithms of the data we present to the public, or is there something deeper that defines us that no machine can duplicate? Will the technologies of the twenty-first century enable people to experience the bliss of individual fulfillment, or will the pursuit of our desires destroy society and, with it, ourselves? The episode an-

swers none of these questions; it treats them as jokes because they are as unanswerable as they are fundamental to life in the digital age. Collectively, the questions raised by technology in the twenty-first century are overwhelming; but our culture, like the *Futurama* episode, has a way of grounding them in an icon that is simultaneously literary and technological, humorous and horrifying, intimate and distant: the robot. A concrete yet symbolic anchor in this maelstrom of questions, the robot tethers our conversations about science, technology, identity, purpose, and power like few other icons or devices—and it has done so, at least in some form, for hundreds of years.

The American Robot is a history of the idea of the robot in American culture. It explores how robots and their kin—automatons, mechanical men and women, androids, artificial intelligence, and cyborgs—have embodied and conceptually linked some of the most critical questions of modern culture: What is a human and what is a machine? Does free will exist, or are people merely programmed by internal or external forces? Is the machine a model of human identity and behavior, or its antithesis? What in modern life might make certain people appear machinelike, and what might enable them to maintain their humanity? Which tasks in the home, workplace, or military should be mechanized, and which should be left for people to perform? Does the pursuit of science and technology need to be controlled, and if so, who should have that power? The answers people have given to these and similar questions have rarely been absolute or universal; frequently, they have not even been completely coherent. But in the struggle to answer them, people have imagined, depicted, viewed, and, occasionally, built robots. Robots have been important not just because they have raised questions but because they have spawned fantasies that people have tried to make real.[2] A creature of both fiction and fact, the robot has been a particularly potent force in the cultural history of the United States.

Of course, the robot is neither exclusively American nor modern. The term itself is Czech. Clockwork, steam, and water-powered automatons date to the ancient world, as do stories of robotlike creatures, such as golems and the statue come to life in *Pygmalion*. In medieval and early modern Europe, automatons were a fixture of both religious and monarchical life, and the devices would remain predominantly European through the nineteenth century.[3] The classic story

of robot rebellion duplicates much of the British writer Mary Shelley's *Frankenstein*. The most significant American writer of robot fiction, Isaac Asimov, emigrated from Russia. Since the proliferation of robotic toys in the 1950s, the figure has been associated with Japanese culture. An ancient and global icon, the robot apparently transcends both geographic and temporal boundaries to address a question that seems universal: what does it mean to be human?

But the deceptively universal nature of the robot obscures the ways that its meanings are shaped by context, that different times and places inspire different visions, interpretations, and, ultimately, consequences. The earliest American device discussed in this book is an automaton Indian from the late eighteenth century; the most recent is the indigenous "host" Akecheta from HBO's twenty-first-century television show *Westworld*. Though each would appear in the form of a Native warrior, their vastly different contexts give them distinct meanings. Appearing in Philadelphia near the dawn of efforts to expand a new nation and construct new racial hierarchies, the automaton Indian offered a fantasy of control that reduced its Native subject to a mindless body that needed to be tamed by the audience. Appearing during an era far more critical of racial stereotyping and the violence associated with imperial expansion, Akecheta challenges audiences to empathize with the device, question the stereotypes that shaped its creation, and root for its efforts to escape to a digital space that is truly—unlike the myths that white settlers told of the real West—untouched by any, save its creator.[4] The robot might be universal, but its meanings shift to fit particular beliefs, ideals, hopes, fears, and longings.

In imagining robots, Americans have adjusted ideas and iconography created abroad to fit the specific cultural concerns and tensions of their society. Since the eighteenth century, their visions of robots have developed in conversation with the violence of slavery and Western expansion; the theology of Puritanism and evangelical Protestantism; the individualism of republican, liberal, and democratic traditions; the expansion of an industrialized and commercialized economy; and the continual efforts of marginalized groups to secure freedom and equality. None of these aspects has been unique to American history, but the combination has created a distinct cultural environment that has shaped how people have understood the robot's meaning. The ten-

dency to see the robot as a universal phenomenon across both time and space ignores such particularities and thereby conceals the degree to which its primary technology is not electromechanical but ideological; that, rather than a piece of machinery, it is a flexible concept deeply rooted in the power relations of a society.[5]

The robot's enduring ideological power comes from its ambiguity. People never have agreed on a single meaning for the term. A derivative of the Czech word *robota* meaning "drudgery" or "servitude," *robot* comes from Karel Čapek's 1921 play *R.U.R. (Rossum's Universal Robots)*, which depicts the devices as biological but artificial humans rather than as metallic inventions. In the context of the Russian Revolution, people initially understood Čapek's rebellious robot as a metaphor for alienated workers, particularly those who toiled along Henry Ford's assembly line. Yet, others soon connected the term to the emergence of automated machinery in the same automobile industry.[6] From nearly the moment the term arrived on American shores, *robot* referred to both workers and the machines that could replace them, a duality that has persisted even as it has been transformed. In World War II, people applied the term both to fascist soldiers who seemed to lack willpower and to remotely-guided technologies such as the V1 and V2 rockets. During the Cold War, sociologist C. Wright Mills critiqued white-collar workers as "cheerful robots" because they seemed to lack independence, while others used the term to explain electronic computers and automation technologies that enabled machinery to operate more independently. Even the *Futurama* episode's use of celebrity robots satirized both technology and the commodification of actresses' identities. Understood as both a *humanized machine* and a *mechanized human*, the robot has linked two core themes of modern life: the actual replacement of people with machines and the metaphorical transformation of people into machines. Its significance, historically and today, derives from the relationships that its creators and consumers have posited between those two trends—how it has symbolically linked the advances of science, technology, and industrial capitalism with the transformation of the individual soul.

As a *humanized machine*, the robot has helped Americans understand and relate to powers and processes that seem beyond the control of any individual. While not entirely linear, interest in robots and related devices has grown steadily in American culture since the

end of the eighteenth century, largely due to the industrialization, commercialization, rationalization, bureaucratization, and democratization of the nation. Seemingly possessing an energy independent of human actors, these interrelated processes have had concrete effects on the lives of Americans that few could control and none could stop. In the nineteenth century, critics such as British writer Thomas Carlyle employed the metaphor of "the machine" to describe this apparent loss of human agency.[7] By anthropomorphizing the machine, people who have imagined robots brought such large-scale developments into the more intimate space of human identity, where people could understand and relate to them. Through humanization, people could talk, fantasize, and even joke about processes and powers beyond their control in a much more relatable and concrete fashion. Sometimes such humanization resulted in nightmares of machines stealing jobs, enslaving individuals, or exterminating humanity. More frequently, though, they satirized such fears, offered fantasies of reclaiming power over machinery, and spread dreams of a postindustrial world free of degrading work where each person could possess all that he or she desired without any cost. Deeply tied to the longings of an individualized, commercial society, the humanized machine has been an important ideological weapon for the legitimization of industrial capitalism.[8]

As a *mechanized human*, the robot has symbolized both the inherently mechanical nature of all people and the supposedly mechanical nature of specific types of people. Numerous intellectuals, in denying the existence of a supernatural soul and occasionally free will, have thought that people are machines crafted by comprehensible processes rather than divine or metaphysical energies. In such an interpretation, people are like automatons or robots because they follow predictable and potentially controllable patterns. The scientist and inventor Nicola Tesla wrote in 1900, "I am an automaton endowed with power of movement, which merely responds to external stimuli beating upon my sense organs, and thinks and acts and moves accordingly." Yet, most forms of American culture have professed the exceptional, spiritual, and vitalist nature of humanity. Few myths have been more potent in American cultural history than the assumption that people—especially the powerful—should be more than "mere machinery," that they should possess qualities that machines, made

entirely of matter, seem to lack: reason, sentiment, consciousness, and, above all, willpower and agency.[9]

Though unwilling to acknowledge that they themselves might be machines, many American elites have been willing to accept that others might or should be. The most common forms mimicked by performing automatons in the nineteenth century were nonwhites, women, and children—precisely the groups whom powerful men deemed to lack the qualities they believed necessary to exercise self-control and the rights of citizenship. While stage automatons satirically insinuated that such people were nothing more than machinery, metaphorical uses of the word *automaton* indicated that even people born fully human could acquire a mechanical nature by losing self-control. In the nineteenth century, writers applied *automaton* to gamblers, fashion devotees, and rival politicians who seemed particularly beholden to party. Soon, critics of the emerging factory system adopted the term to explain the destructive effects of the deskilling and repetitive motions of industrial labor. During and after the Civil War, however, Americans applied the term to soldiers to both critique and praise military discipline. Though the central term shifted to *robot* in the 1920s, the metaphor has remained consistent: the mechanized human is one who seems to lack a unique, independent soul capable of demonstrating willpower. In their more self-conscious moments, people have applied these terms to themselves to signify how modern life turns all people into machines; but more commonly they have applied them to others—especially those they deem inherently inferior or who seem to have had their individuality crushed by the modern workplace, totalitarian governments, or mass culture. Never self-made, the robot has been a metaphor for a person who lacks agency and authenticity, who is either intrinsically a machine, who has let himself or herself become a machine, or who has been forced to become one.

Such a theme has proven crucial within American cultural history because separating human from machinelike persons has been one of the key ways of rationalizing efforts to restrict the rights, freedoms, and powers of others. When attached to privileged individuals, robotic metaphors can pointedly and humorously critique power; when applied to entire groups, they dehumanize and delegitimize claims to basic rights. In the 2012 presidential election, opponents carica-

tured Mitt Romney as the "Romney-bot" because his carefully tailored campaign personality appeared to lack human authenticity. Barack Obama's opponents, however, caricatured the president's supporters as "Obamabots" because they seemed uncritically beholden to him.[10] Though each usage dehumanized opponents, one targeted the authenticity of a powerful politician while the other targeted the rationality of an entire group of people, many of whom came from communities whose rights (including the right to vote), remain threatened.[11] Such rhetoric may have little power today, but historically identifying groups as machinelike has often been used to justify discrimination and even violence.

It should come as no surprise, then, that the character of the robot has predominantly been the creation of a small subset of Americans: middle- and upper-class white men. In a mass consumer society, anyone can encounter a robot in a magazine, theater, or store, just as anyone can imagine one. Yet the subset of people who have publicly envisioned, displayed, and discussed robots is strikingly small. With only a few exceptions before the late twentieth century, robots have been the expressions of men of power and privilege. Part of this narrowness stems from the limited access other groups have had to engineering, intellectual, and even popular culture. But even within women's magazines or the black press, discussions of robots and automatons have rarely appeared.[12] While working-class publications used the term and iconography, they, unlike their middle- and upper-class brethren, defined it almost exclusively as a machine, not as the people who tended those machines.[13] Even ostensibly feminist stories criticizing men who lust after "female" androids generally have come from men such as Ira Levin, the author of *The Stepford Wives*, Joss Whedon, the producer of *Buffy the Vampire Slayer*, and the almost entirely male *Futurama* staff.[14] It is revealing that the most prominent female and African American writers of science fiction from the second half of the twentieth century—Ursula Le Guin, Octavia Butler, Samuel Delaney—rarely, if ever, depicted robots. Fundamentally slaves in both humanized machine and mechanized human form, robots have been primarily imagined and built by men whose gender, whiteness, training, or wealth has taught them that they were entitled to privilege.

But slaves, as Americans know well, might rebel. In the real world,

robots never revolt; they break down and make mistakes, but revolution requires consciousness of social position (something that, as far as I know, machines do not have—yet). But in fiction, the robot rebellion is so prevalent it has become cliché. In Čapek's original story of robotic revolution, the creatures win; but American stories of mechanical rebellion have typically resulted in human victory, usually through the strength, intelligence, violence, or virtue of white men. Fusing with one of the country's most prominent contributions to global culture—the Western—the American story of robotic revolt has offered a vision of reclaiming white, male authority from out-of-control peoples and technologies. Unlike its twenty-first century descendent, Michael Crichton's original *Westworld* film tells a story of the restoration of manhood through having sex with robotic prostitutes and killing rebellious robotic gunslingers. Linda Hamilton's Sarah Connor might have become an icon of empowered womanhood for facing down Arnold Schwarzenegger's murderous T-800 in *The Terminator*, but it is her son, John, who is destined to save humanity from the power of the artificial intelligence Skynet. The sexual allure of the enslaved Marilyn Monroebot threatens to destroy humanity in *Futurama*, but if men like Billy would just tame their own desires, then humanity might be saved. While real robots offer the possibility of slavery without risk of rebellion or moral guilt, fictional robots offer fantasies of control and empowerment.

Robots have remained potent fantasies for such men because they promise to resolve the fundamental tensions between American myths and American realties that have dominated the country's culture since the very beginning. Since the eighteenth century, American development has been shaped by tensions between freedom and slavery, equality and hierarchy, inclusion and exclusion, peace and violence, social responsibilities and individual desires. Existing both among people and within individual consciences, such tensions demand resolution, often because people dedicated to creating a more inclusive and just society demand it. As mechanized humans, robots rationalize efforts to control, exclude, and wage war against other groups of people; as humanized machines they offer a "techno-fix" that promises to quickly and permanently settle social issues without much difficulty.[15] It is no coincidence that dreams of automatons performing degrading labor emerged in the urban North prior to the

Civil War as an alternative to both slavery and wage labor, each of which challenged visions of America as a nation of relatively equal small farmers and craftsmen. Similarly, domestic robots were often promoted by men as an alternative not to housework itself but as a response to women's requests that men help with housework. The same has been true of military robots who were imagined as an alternative to jeopardizing the lives and moral innocence of human soldiers. To white upper- and middle-class men, robots offer the fantasy of maintaining the benefits of power and privilege without having to deal seriously with the demands of other people and any accompanying moral guilt.

When Philip Fry dates the Lucy Liubot, he joins a long history of white American men embracing the robot as an individualistic fantasy of power over the body of someone they could not control—in this case, an Asian American actress. Yet Fry does not start with sex but with an inane conversation that is, for him, surprisingly deep. Like many real and fictional users of sex robots, he wants communication and companionship, not simply control.[16] The power fantasy offered by the robot is not enough; after all, almost any machine can offer a fantasy of control. The robot is unique because it mixes control with a simulation of connection; it offers not just a means of distancing the self from the machine but the fantasy of connecting with it on the most intimate of levels. This is the source of the robot's power and its greatest limitation. At its most utopian, the robot offers the possibility that everyone can satisfy even the most intimate of desires without having to deal with the competing wishes of others. Robots will, according to their advocates, free us from degrading work, liberate us to be ourselves, and ensure equality (at least among the people who matter). But, as critics have always maintained, that vision of equality is not social, not rooted in community; it denigrates and jettisons the other to allow one to focus exclusively on the self. It is revealing that, in pursuing his relationships with the Liubot, Fry—much like Billy Everyteen—ignores the obvious jealousy of a woman he loves, Leela, who longs to be with him. Abandoning a chance for human connection, he becomes consumed with a machine that is merely a reflection of himself.

Like the fictional Fry, Americans in the twenty-first century stand in a world beset by robots. In popular culture, humanized machines

appear in novels, television shows, films, songs, video games, and YouTube videos. In the home, less-human-looking robots vacuum floors and pools and control lights and indoor climate; others entertain and provide companionship for adults, children, and even pets. In the factory, robots (often in the form of a mechanical arm) manufacture nearly everything with minimal aid from human laborers. In stores, robotic scanning machines replace the work of human cashiers in the name of efficiency for companies facing the nearly monopolistic power of Amazon.com and convenience for customers harried by the time constraints of modern life. Digital assistants—powered by artificial intelligence and given names such as Siri or Alexa, as if they were persons—gather, analyze, and redistribute data to create digital profiles of customers that ensure even greater convenience and efficiency in the pursuit of individualized desires.

Even as humanized machines dominate our lives, the plight of the mechanized human remains. On July 15 and 16, 2019, Amazon's "Prime Day" sales event, the company's workers went on strike to protest degrading and dehumanizing working conditions. As they protested, they held signs that echoed sentiments that unappreciated and dehumanized workers had articulated since the dawn of industrial capitalism in the nineteenth century: "We Are Humans, Not Robots!" On one level, the workers' actions were meant to pressure Amazon directly by hindering efforts to quickly distribute goods to demanding customers. But such actions also called on consumers to realize their complicity in a system that wrecks the bodies, minds, and maybe even souls of fellow human beings. In proclaiming themselves humans amid a system that treats them as robots, striking workers asked for empathy for those who suffer so that others might consume; they asked for human intimacy in an economic system that depends on creating distance, not just between workers and consumers but between everyone. Of course, while workers protested in the name of their humanity, Amazon's engineers were hard at work developing robotic carts, scanners, planes, and drones to replace them.[17] Such is the story of the American robot.

Notes

Introduction

1. See *Futurama*, season 3, episode 15, "I Dated a Robot," aired May 13, 2001, on Fox.

2. There is a growing interdisciplinary literature that analyzes the social and cultural meaning of robots predominantly in America. See, for instance, David Mindell, *Our Robots, Ourselves: Robotics and the Myths of Autonomy* (New York: Viking, 2015); Despina Kakoudaki, *Anatomy of a Robot: Literature, Cinema, and the Cultural Work of Artificial People* (New Brunswick, NJ: Rutgers University Press, 2014); John Markoff, *Machines of Loving Grace: The Quest for Common Ground between Humans and Robots* (New York: Harper Collins, 2015); and Julie Wosk, *My Fair Ladies: Female Robots, Androids, and Other Artificial Eves* (New Brunswick: NJ: Rutgers University Press, 2015).

3. There is an extensive literature on ancient and European automatons; see Adrienne Mayor, *Gods and Robots: Myths, Machines, and Ancient Dreams of Technology* (Princeton, NJ: Princeton University Press, 2018); E. R. Truitt, *Medieval Robots: Mechanism, Magic, Nature, and Art* (Philadelphia: University of Pennsylvania Press, 2015); Otto Mayr, *Authority, Liberty, and Automatic Machinery in Early Modern Europe* (Baltimore, MD: Johns Hopkins University Press, 1986); Adelheid Voskuhl, *Androids in the Enlightenment: Mechanics, Artisans, and Cultures of the Self* (Chicago: University of Chicago Press, 2013); and Minsoo Kang, *Sublime Dreams of Living Machines*: *The Automaton in the European Imagination* (Cambridge, MA: Harvard University Press, 2011).

4. For more on myths of the West and American identity, see Henry Nash

Smith, *Virgin Land* (Cambridge, MA: Harvard University Press, 1950); Richard Slotkin, *Gunfighter Nation: The Myth of the Frontier in Twentieth-Century America* (New York: Harper Perennial, 1992); and Greg Grandin, *The End of the Myth: From the Frontier to the Border Wall in the Mind of America,* (New York: Metropolitan Books, 2019).

5. I am heavily indebted to a large literature on cultural and intellectual attitudes toward technology in America, including Marx, *Machine in the Garden: Technology and the Pastoral Ideal in America* (New York: Oxford University Press, 1964); John Kasson, *Civilizing the Machine: Technology and Republican Values in American, 1776–1900* (New York: Grossman, 1976); David Nye, *American Technological Sublime* (New Bakersfield, MA: MIT Press, 1994); Daniel T. Rodgers, *The Work Ethic in Industrial America, 1850–1920* (Chicago: University of Chicago Press, 1978, 2009); Joel Dinerstein, *Swinging the Machine: Modernity, Technology, and African American Culture between the World Wars* (Amherst: University of Massachusetts Press, 2003); Amy Sue Bix, *Inventing Ourselves Out of Jobs? America's Debate over Technological Unemployment, 1929–1981* (Baltimore, MD: Johns Hopkins University Press, 2000); and Ronald R. Kline, *The Cybernetics Moment: Or Why We Call Our Age the Information Age* (Baltimore, MD: Johns Hopkins University Press, 2015).

6. On the etymology of robot, see Jessica Riskin, *The Restless Clock*: *A History of the Centuries-Long Argument over What Makes Living Things Tick* (Chicago: University of Chicago Press, 2016), 297. On the evolution of the term's meaning in America, see Tobias Higbie, "Why Do Robots Rebel? The Labor History of a Cultural Icon," *Labor: Studies in Working-Class History* 10, no. 1 (Spring 2013): 99–121.

7. Leo Marx, *The Machine in the Garden*, 170–90.

8. On the emergence of an individualized dream consumer culture, I am predominantly drawing on William Leach, *Land of Desire: Merchants, Power, and the Rise of a New American Culture* (New York: Vintage Books, 1993); and Jackson Lears, *Fables of Abundance: A Cultural History of Advertising in America* (New York: Basic Books, 1994).

9. For an extensive analysis of the development of the human/machine distinction and its relationship to automata, see Jessica Riskin, *The Restless Clock*: *A History of the Centuries-Long Argument over What Makes Living Things Tick* (Chicago: University of Chicago Press, 2016). Riskin convincingly argues that the agency distinction is an invention of early modern Protestant iconoclasts and some of the era's scientists. In the history she uncovers, one of the key areas where American culture differs from much of Europe's is that a Catholic tradition of seeing matter as animated is far less prominent (at least, in the dominant discourse). Similarly, scholars have claimed that the animism in Shintoism is part of the reason Japanese culture has been more receptive

to robots than American. On this point, see, Kathleen Richardson, "Technological Animism: The Uncanny Personhood of Humanoid Machines," *Social Analysis* 6, no. 1 (March 2016): 110–28. The importance of Protestantism to American hostility to animism is also visible in the hostility of elite Americans to divination rituals that suggest spiritual power could reside in material objects; see T. J. Jackson Lears, *Something for Nothing: Luck in America* (New York: Penguin Books, 2003), 32–54.

10. For the caricature of Rommey, see, for instance, Gay Kamiya, "Reboot the Romney-bot," *Salon*, May 3, 2012, https://www.salon.com/2012/05/02/reboot_the_romney_bot/. For Obamabots, the most interesting discussion comes from Urban Dictionary, where users have posted three definitions. The first, an "internet user paid to post pro-Obama articles," is the least problematic but also seems to be the least used colloquially. The other two, "a person who supports Obama and is willing to vote for him but doesn't know a thing about him," and "the type of voter who Obama is targeting when he bumps American Idol in order to give a prime time address to the nation," directly dismiss the rationality of Obama's supporters, the latter through ridiculing popular culture. "Obamabot, Urban Dictionary, https://www.urbandictionary.com/define.php?term=Obamabot.

11. For an analysis of recent voter suppression efforts in historical context, see Carol Anderson, *One Person, No Vote: How Voter Suppression Is Destroying Our Democracy* (New York: Bloomsbury, 2018).

12. Claim based on database searches for *robot*, *automaton*, *mechanical man* (and *woman*) and numerous related terms in *Ebony*, *Jet*, the *Chicago Defender*, Proquest's Historical African American Newspapers database, *Godey's Lady's Book*, *Good Housekeeping*, and similar magazines marketed to women. One major exception is the use of automaton imagery in Ralph Ellison's *Invisible Man*, which Scott Selisker has recently analyzed as part of a larger Cold War discourse of agency. See Scott Selisker, *Human Programming: Brainwashing, Automatons, and American Unfreedom* (Minneapolis: University of Minnesota Press, 2016), 74–90.

13. For a discussion of workers' use of robot metaphors during the Great Depression, see Bix, *Inventing Ourselves Out of Jobs?*, 80–113.

14. See Ira Levin, *The Stepford Wives* (New York: Random House, 1972); *Buffy the Vampire Slayer*, season 5, episode 15, "I Was Made to Love You," aired February 20, 2001, and season 5, episode 18, "Intervention," aired April 24, 2001, on WB Television Network. For more on the commodification and fetishization of the female body, see Jon Stratton, *The Desirable Body: Cultural Fetishism and the Erotics of Consumption* (New York: Manchester University Press, 1996), 208–35.

15. For more on this theme, see Howard P. Segal, "Practical Utopias:

America as Techno-Fix Nation," *Utopian Studies* 28, no. 2 (2017): 231–46; and Mikael Hard and Andrew Jamison, *Hubris and Hybrids: A Cultural History of Technology and Science* (New York: Routledge, 2005).

16. For one set of interviews with the owners of sex robots, see "The Real Side of Owning a RealDoll," CNET, August 10, 2017, https://www.cnet.com/pictures/realdolls-sex-doll-abyss-creations-owners-in-their-own-words/.

17. Nathaniel Meyersohn and Kate Trafecante, "Why Some Amazon Workers Are Going on Strike on Prime Day," CNN, https://www.cnn.com/2019/07/15/business/amazon-workers-strike-minnesota/index.html; Matt Simon, "Robots Alone Can't Solve Amazon's Labor Woes," *Wired*, July 15, 2019, https://www.wired.com/story/robots-alone-cant-solve-amazons-labor-woes/; Josh Eidelson and Spencer Soper, "Amazon Workers Plan Prime Day Strike at Minnesota Warehouse," Bloomberg, July 8, 2019, https://www.bloomberg.com/news/articles/2019-07-08/amazon-workers-plan-prime-day-strike-despite-15-an-hour-pledge. On the way industrial capitalism creates distance between consumers and workers, see Eric Loomis, *Out of Sight: The Long and Disturbing Story of Corporations Outsourcing Catastrophe* (New York: New Press, 2015).

Part 1

1. Julian Hawthorne, "The Mullenville Mystery," *Scribner's Monthly*, April 1872, 691–93.

2. Biographic details drawn from Gary Scharnhorst, *Julian Hawthorne: The Life of a Prodigal Son* (Urbana: University of Illinois Press, 2014); "Fairy Land," appears on 17. For his transition from engineering to literature, see 55–59. On Trancendentalism, see Philip F. Gura, *American Transcendentalism: A History* (New York: Hill and Wang, 2008); and Daniel Walker Howe, *Making the American Self*: *Jonathan Edwards to Abraham Lincoln* (Oxford: Oxford University Press, 1997).

3. J. Hawthorne, "Mullenville Mystery," 687–88.

4. J. Hawthorne, 689.

5. Nathaniel Hawthorne, "The Artist of the Beautiful," in *Hawthorne's Short Stories*, ed. Newton Arvin (New York: Vintage Classics, 2011), 331–56. On the connection between the story and transcendentalism, see Frederick Newberry, "'The Artist of the Beautiful': Crossing the Transcendent Divide in Hawthorne's Fiction," *Nineteenth Century Literature* (June 1995): 78–96. For more on Nathaniel Hawthorne's views of mechanization see Leo Marx, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (New York: Oxford University Press, 1964), 11–14.

6. In this, Nathaniel Hawthorne's story has much in common with the overlapping cultures described in John Tresch, *The Romantic Machine: Utopian Science and Technology after Napoleon* (Chicago: University of Chicago Press, 2012).