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July 16, 2014

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Date

From Mechanical Men to Cybernetic Skin-Jobs:  
A History of Robots in American Popular Culture

By

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Doctor of Philosophy

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A History of Robots in American Popular Culture

By

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M. A., Emory University, 2009

B. A., University of Iowa, 2002

Advisor: Cristine Levenduski, Ph.D.

An abstract of  
A dissertation submitted to the Faculty of the  
James T. Laney School of Graduate Studies of Emory University  
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## **Abstract**

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This dissertation consists of five chapters that track how robots evolve through different kinds of media and it offers some insight into the changing nature of what it means to be a robot in American popular culture between a ninety-year span from roughly the 1920s to the 2010s. The first chapter provides an early history of Westinghouse robots and representations of robots in American print media. The second chapter offers a star study of the Depression Era robot Elektro, the Westinghouse Moto-Man. The third chapter focuses on the character of Robby the Robot and how he fits into Cold War American suburbia. And, the last two chapters look at robots in the science fiction television series, *Battlestar Galactica*, first through the primary text and then through the fan-generated paratexts around the series.

The aim of this dissertation is to address how ideas about technological possibilities are packaged and sold to American audiences; and how, in turn, Americans interpret, interact, and even play with different representations of technology. It's important to understand that a technology is not just a specific device like a phonograph or toaster, but part of an ongoing social process. New technologies are born from, and informed by, distinct social contexts, and the ways people see technologies are largely informed by their social world. In these chapters, products of new technology go beyond the mechanics of the featured robot to inform the social landscape from which it was created.

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## TABLE OF CONTENTS

<b>Introduction</b>	<b>1</b>
<b>Chapter 1</b>	<b>30</b>
Westinghouse's Early Electrical Men	
<b>Chapter 2</b>	<b>96</b>
Elektro and Selling the World of Tomorrow	
<b>Chapter 3</b>	<b>164</b>
Robby and a Consumer Planet	
<b>Chapter 4</b>	<b>207</b>
<i>Battlestar Galactica</i> and Reimagining the Robot	
<b>Chapter 5</b>	<b>244</b>
<i>Battlestar Galactica</i> and Curated Fandoms	
<b>Bibliography</b>	<b>301</b>

## Introduction

### Robots and Worlds of the Past and Tomorrow

In spring 1939, Westinghouse revealed Elektro the Moto-Man, a seven-foot mechanical robot, at the New York World's Fair. Elektro could walk, count, smoke and say snappy one-liners like "I see a lot of hot numbers in the audience." Impressed with this myriad of motor functions, many visitors to the fair commented that Elektro was "just like a real man!" Elektro performed several shows daily for fairgoers, displaying the wonders of electrical control through its human-like actions. In addition to Elektro, Westinghouse displayed a myriad of other new technologies including a television camera, power loom, and an assortment of brave new household appliances. While these other Westinghouse products made their ways into homes and workplaces, Elektro did not. He was not designed for direct sale, but to represent the potential of Westinghouse innovation. In a sense, while Westinghouse sold dishwashers, Elektro sold Westinghouse. He did this not by delivering a company sales pitch, but by standing for "technology" in a more abstract sense. Elektro's performance of technology consisting of unseen gears neatly packaged under his shiny gold shell was the most popular performance in the Westinghouse Pavilion, and one of the most popular attractions at the fair. Fifty years after the fair's close, Elektro received top billing in the documentary *The World of Tomorrow*. Here again, now in celluloid, stands Elektro, talking, posing, and representing still the wonders of Westinghouse technology.

Elektro stands as one in a line of robots designed to show technological possibilities to a mass American audience. Prior to Elektro, the Westinghouse Electric Corporation created a series of show robots to demonstrate Westinghouse innovations across the United States. Each Westinghouse robot offered a representation of the company's current



technology, a marker in the company's evolution as a brand, and an important cultural object reflecting how Americans may have been thinking about new technologies at the time.

Elektro was the last and most intricate of the Westinghouse robots, but he certainly was not the last attempt to use the robot character to demonstrate innovation. As Elektro's popularity rises then wanes by the middle part of the 1950s, another robot emerges in the Cold War era: Robby the Robot from the 1956 MGM film *Forbidden Planet*, a robot character who offers a lens onto an ensuing widespread commodification through additional film and television appearances and several children's toys. The franchises built around Robby the Robot offer a useful study of how audiences, manufacturers and filmmakers create, modify and change the meaning of a robot, creating different representations of future technological capabilities.

Following Robby and the Cold War Era were a number of film and television robots. The *Star Wars* (George Lucas, 1977) franchise offered robots like R2D2, C3PO as well as numerous droids. The television show, *Star Trek: The Next Generation* (Gene Roddenberry, 1987-1994), had the android, Data. Movies like *West World* (Michael Crichton, 1973), *Alien* (Ridley Scott, 1979), *Blade Runner* (Ridley Scott, 1982), *Tron* (Steven Lisberger, 1982), *The Terminator* (James Cameron, 1984), *Rocky IV* (Sylvester Stallone, 1985), *Short Circuit* (John Badham, 1986), *Space Camp* (Harry Winer, 1986), *Spaceballs* (Mel Brooks, 1987), *Robocop* (Paul Verhoeven, 1987) and *Cherry 2000* (Steve De Jarnatt, 1988) also featured robots or androids. Around the same time, the American television program, *Small Wonder* (Howard Leeds, 1986-1989), also featured a robotic child as part of an American middle class family. While all of these offer useful representation of robots. I will focus on the long television franchise called *Battlestar Galactica* (Lorne Greene: 1978-1979; Ronald Moore, 2003-2009), which between 1978 and 2010 offered numerous, changing representations of robots that

complicated the robot's identity as a piece of technology by blurring lines between machine and human.

This dissertation consists of five chapters that track how robots evolve through different kinds of media and it offers some insight into the changing nature of what it means to be a robot in American popular culture between a ninety-year span from roughly the 1920s to the 2010s. The first chapter provides an early history of Westinghouse robots and representations of robots in American print media. The second chapter offers a star study of the Depression Era robot Elektro: The Westinghouse Moto-Man. The third chapter focuses on the character of Robby the Robot and how he fits into Cold War American suburbia. And, the last two chapters look at *Battlestar Galactica*, first through the primary text and then through the fan-generated paratexts around the series. I chose to study the humanoid robot because it provides a compelling image for discussing evolving understandings of technology and reflecting changing notions of what it is to be human. The robot, in itself, offers both an embodied humanness as well as a mechanical, non-human otherness where notions of gender, race, social class and sexual orientation can play out. Moreover, the robot provides a metaphor for where we as people are going: what our new technologies and we are potentially evolving into.

The aim of this dissertation is to address how ideas about technological possibilities are packaged and sold to American audiences; and how, in turn, Americans interpret, interact, and even play with different representations of technology. It's important to understand that a technology is not just a specific device like a phonograph or toaster, but part of an ongoing social process. New technologies are born from, and informed by, distinct social contexts, and the ways people see technologies are largely informed by their social

world. In these chapters, products of new technology go beyond the mechanics of the featured robot to inform the social landscape from which it was created. I also address how manufacturers market these technologies by tying them to dreams of social progress, mass leisure, and American utopianism. These enthusiastic visions of better tomorrows are also continually informed by an ongoing dialogue between the corporate sellers of technology and their audiences.

This focus on ideas about technology is strongly influenced by the work of David Nye, a historian of technology in American society. Nye studies the shifting ideas about technology to inform how technological developments influence and are influenced by American culture. In his works, Nye argues, “Machines are social constructions which Americans long have built into both their narratives and their sense of place. Technologies are central parts of American self-representation, tourism, narrative practice, and visual sensibilities.”<sup>1</sup> Nye addresses questions of how technology influences our interactions with one another, and with nature, how we learn and work, and how technology influences cultural uniformity or diversity. In short, technological history, in Nye’s cases, relates not to the specific act of developing a tool, but unpacking how culture influences and is influenced by technologies. In doing this, Nye resists the notion of technological determinism by asserting that a culture is not separate from its technology, and that technologies remain part of the broader social and cultural worlds from which they emerge.<sup>2</sup> In *Electrifying America*, for example, Nye argues that the way Americans came to use electricity was rooted in preexisting values and behaviors: “Electrification is a series of choices based only partly on technical considerations, and its meaning must be looked for in the many contexts in which

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<sup>1</sup> David E. Nye, *Narratives and Spaces: Technology and the Construction of American Culture* (New York:

<sup>2</sup> Technological determinism is the belief that technology is a guiding force in determining a society’s cultural values, history, and social structure. The term can be traced back to sociologist Thorstein Veblen.

Americans decided how to use it.”<sup>3</sup> In mapping the broader social terrain, Nye situates electrification within a broad series of social contexts in order to understand how people saw the technology, used the technology, and institutionalized the technology.

Nye’s work on changing ideas of technology helps take the study of technology beyond just considering mechanical possibilities, as he addresses how needs and uses for these technologies develop. My cases, however, differ from those of Nye because I deal with technologies that people do not use on a daily basis in the same way as they would flip on a light switch or drive over a bridge. While my approach possesses an aim similar to Nye in teasing out how technologies develop and are seen in a broader social context, my technological subjects, the robots, exist almost exclusively in imagined spaces. In bringing Nye’s approach to these imagined technologies, I show how technology can be designed to operate symbolically as a highly-constructed, politically-loaded archetype that sometimes seems to serve no actual utilitarian purpose.

To do this I evaluate how these mechanical figures promote the new products spawned by seemingly limitless technological innovation not by making a widget, but by entertaining American audiences across media platforms. Because the process of making meaning does not rest solely in the hands of the original producers, I also look at audience reception in order to better understand the shifting discourse happening between content producer, content (in this case robot), and audience. In addressing these issues, I illuminate the technological mysticism that turns these fictional characters into impervious mechanical beings whose inner-workings seem incomprehensible, if not wholly alien. I also evaluate underlying political assumptions relating to consumerism, capitalism and progress; and

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<sup>3</sup> David E. Nye, *Electrifying America: Social Meanings of a New Technology* (Cambridge, MA: MIT Press, 1990), x.

complicate the often blind faith in technology and the optimistic vision for alternative futures embodied in these figures. These cases of popularizing robots for a mass audience offer a prism that opens onto the configuration of sellers, consumers and the dynamic interactions between the two, all revolving around the changing character of the technology.

In relation to these dynamic interactions between audience and producer, these cases highlight issues regarding transmediation, the process of translating a thing into a different medium and examining that thing across multiple mediums to find a broader network of meaning, as these robots move from one media platform to another—print, film, object, website. Westinghouse built Elektro for live performance at the 1939 New York World’s Fair, but his performances were filmed by both Westinghouse for their film, *The Middleton Family at the New York World's Fair* and by fairgoers themselves.<sup>4</sup> Robby the Robot, a walking, talking mechanical butler initially designed for MGM’s 1956 *Forbidden Planet* made a number of appearances in 1950s and 1960s science fiction films. Capturing the imagination of numerous American children, Robby transcended film to become a popular children’s toy. The robotic Cylons of *Battlestar Galactica* or *BSG* moved not only from screen to print and back again, but from metal to flesh in two television versions: the metal Cylon Centurion soldiers from the 1978 series (resembling a cross between Robby and a Trojan warrior) were reimagined for the 2003 series as humanoid secret-agents, indistinguishable from their human enemy and occasionally unaware of their own robotic identity. Although poseable, collectible *BSG* action figures exist for the present series, fans have also found new ways to play with their beloved characters, creating illustrations, fan videos, and fiction that take the robot into a space of imagination, interactive play, and online distribution.

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<sup>4</sup> See the Medicus home movie collection, [http://www.archive.org/details/Medicusc1939\\_3](http://www.archive.org/details/Medicusc1939_3).

Each of these chapters also ultimately addresses a specific time period as these robot characters enter and depart the popular imagination. The first chapter on Westinghouse helps situate Elektro among a long line of corporate robots created for branding and demonstration purposes. The second chapter focuses on Elektro the most popular, most expensive and most long-lived of the Westinghouse robots: Elektro “lives” from 1938 to his last film appearance in 1960’s *Sex Kittens Go to College*. The third chapter offers a robot that overlaps with Elektro’s biography, but offers a distinctly Cold War take on the robot. Robby’s mainstream career begins with *Forbidden Planet* (1956) but moves into cult science fiction or SF communities by the 1970s. The fourth chapter provides a primer into the television series *Battlestar Galactica* and the evolution of robots—referred to in *BSG* as “Cylons”—over the franchise’s history. The fifth chapter then looks into audience responses to the series and the fan-created representations of Cylons to uncover not only audience reception but also how a culture of online participation plays into meaning making within the *BSG* universe beyond the show.

### **The Etymology of the Robot**

The word “robot” deserves an amount of attention before moving too much forward in the analysis. It’s a relatively new word to the English language introduced by translations of Czech playwright and novelist Karel Čapek’s play *R.U.R.* or *Rossum’s Universal Robots*. The original version was produced in Czech in 1920 and appeared in an English translation in New York in 1922.<sup>5</sup> The word is derived from the Czech words “robotnik” meaning

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<sup>5</sup> *Oxford English Dictionary* s.v. “robot” (accessed July 4, 2014)  
<http://www.oed.com.proxy.library.emory.edu/view/Entry/166641?isAdvanced=false&result=2&rskey=pu5IzJ&>

“serf” and “robota,” which means “forced labor, drudgery.”<sup>6</sup> Čapek’s play is about a company, Rossum’s Universal Robots, that uses unexplained biotechnology to mass-produce strong workers who look human but lack a soul. These perfect laborers lack feeling and because they lack feeling they can perform all the distasteful work humans would rather not take on. Rossum’s efficient, able-bodied robots become incredibly popular. Orders for them skyrocket and eventually the robots take over doing all labor and the army. From that point, they take over the world in a mass revolt that leaves all but one human dead. Realizing they lack the human knowledge to manufacture themselves, Rossum’s robots are destined for extinction until a male robot and a female robot develop human emotion by falling in love and set to remake the world as neither fully human or fully robot but a better, hybrid version of the two.

Following *R.U.R.*, the word “robot” became the standard name for a mechanical human or animal, eclipsing the former standard “automaton.”<sup>7</sup> Historian Adelheid Voskuhl notes that in the 1920s the distinction between robots and automata blurred and the idea of joining the human form with the mechanical started to appear in science fiction literature as early as 1923: “Leading science fiction writers picked up the automaton motif, in the new form of the robot, and profoundly shaped the productive period of the genre between the 1930s and the 1950s.”<sup>8</sup> She cites the internationally notable and prolific writers Isaac Asimov and Stanislaw Lem as two prime movers in popularizing the term in written science fiction.

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<sup>6</sup> Ibid, s.v. “robot” *Oxford English Dictionary* s.v. “robotnik” (accessed July 4, 2014) <http://www.oed.com.proxy.library.emory.edu/view/Entry/275315>

<sup>7</sup> Adelheid Voskuhl, *Androids in the Enlightenment: Mechanics, Artisans and Cultures of the Self* (Chicago: University of Chicago Press, 2013), 220.

<sup>8</sup> Ibid., 221

Beyond Čapek's play and literature, robots made it into popular American film by the 1930s. Based on a search of the AFI Film Catalog, the first occurrence of "robot" character in a Hollywood film is 1933's *Son of a Sailor* (Bacon), which features a robotic remote-controlled airplane. The first humanoid robot to appear in a Hollywood film occurs in *Cracked Nuts* (Cline, 1941). Here, the robot character "Ivan the Robot" is actually a man dressed in a mechanical suit participating in a scheme to dupe potential financiers into investing in robot technology. Two other films produced that year also had "robot" in their working titles: *Emergency Landing* (Beaudine, 1941) features a remote control airplane; its working title was "Robot Pilot;" *Man Made Monster* (Waggner, 1941) features a carnival performer turned super-electric charged man who becomes the inspiration for an electro-biologist bent on developing a race of superior men fed by electricity.

At its root, the word "robot" suggests several premises that were not present in earlier terms like "automaton." First, its etymology is implicitly tied to acts of drudgery and manual labor: its purpose in the world is to perform work that humans either cannot or do not want to do. Second, even in its first usage in *R.U.R.* there is a depiction of the robot as a humanoid being manufactured through an innovative combination of science and technology. Third, in many of these early instances the robot is not trustworthy and will bring harm in the long run rather than relief or salvation. Finally, the robot was first conceived in *R.U.R.* as an allegory for class exploitation and a warning of the potentially dehumanizing dangers of technology. *R.U.R.*'s dark vision of robots was quickly up-ended by Westinghouse only a few years later to represent utopian fantasies of a servile workforce.



## **A Literature Review: Robots in Film, Media Studies and Histories of Technology**

After reviewing where the term “robot” came from, it’s also useful to consider what has been previously written on robots in American culture and where these works live in the canon of American cultural and social scholarship in order to understand how some scholars have viewed robots in the past thirty years. Let’s start with a walk to the film studies department.

The growing canon of American science fiction films has not gone unnoticed by film scholars and cultural historians. The genre’s colorful characters and their fantastic milieu have been discussed in abundance. Select film scholars also contribute to the complex relationship between user/viewer and technology/mis-en-scene. In *Screening Science*, for example Errol Vieth analyzes the characterization of science and the scientist in 1950 science fiction B-movies. He uncovers ideological threads that carry from one film to another and relates key themes to the political environment of the Cold War Era. Vieth’s study shows how careful analysis of a particular trope can address the contemporary, political, and philosophical ideals associated with it. I turn Vieth’s approach onto analyses in order to tease out the ideological assumptions associated with these characters and address the effectiveness in communicating these ideas by looking at how people talked about these figures outside the exhibit hall or movie theater.

On the subject of robots, J.P. Telotte and Vivian Sobchack address robotics and technological representation by focusing on a handful of popular film robots and teasing out particular tropes and stylistic elements unique to the genre. Telotte argues that an understanding of the constructed self develops through the representation of the constructed other, the robot, and this dyad remains a prevailing theme in science fiction film. Vivian

Sobchack's *Screening Space* concentrates on the construction of science fiction films' formal stylistic aspects. By examining the "look" and the "sound" of popular sci-fi from the 1950s to the 1980s, Sobchack offers a deeper, formal analysis of science fiction than traditional film surveys. Sobchack notes in her analysis of the robot that fear in science-fiction films stems from a future possibility that we may lose contact with our own bodies. Both Telotte and Sobchack's work provides innovative analysis and compelling arguments for how robots, and technology more generally, have been portrayed by turning the lens away from the robot figure and back toward the flesh-and-blood humans behind the camera.

Being film studies scholars, Sobchack and Telotte focus on the representation of science only in film texts. These robots, however, live in our homes, on our computers, televisions and print magazines. My work moves beyond the discussion of film texts not only in addressing what Jonathan Gray calls "paratexts," but by bringing in the fan-focused scholarship coming out of cultural history and media studies.<sup>9</sup> The work of media scholar Henry Jenkins, in particular, informs my approach as Jenkins addresses media's role in the changing relationship between media producer and media consumer. In his 1993 book *Textual Poachers*, Jenkins argues that television fans create their own participatory cultures where they interact with television programs through viewing groups, fan-written fiction and even fan conventions. Jenkins suggests that the line between producer and consumer blurs as fans start producing their own unofficial versions of TV storylines and popular characters. In a more recent work, *Convergence Culture*, Jenkins takes this notion of the blurring between producer and consumer into the marketplace, arguing that a paradigm shift is occurring

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<sup>9</sup> Jonathan Gray, *Show Sold Separately: Promos, Spoilers and Other Media Paratexts* (New York: NYU Press, 2010).

whereby consumers working in a social dynamic actively participate with media producers, who now send out their content through a variety of channels.

Convergence ... is both a top-down corporate-driven process and a bottom up consumer-driven process. Corporate convergence coexists with grassroots convergence. Media companies are learning how to accelerate the flow of media content across delivery channels to expand revenue opportunities, broaden markets, and reinforce viewer commitments. Consumers are learning how to use these different media technologies to bring the flow of media more fully under their control and to interact with other consumers.<sup>10</sup>

The works of Jenkins and his followers in media studies prove tremendously informative for understanding contemporary fan cultures and consumer practices post-1975. By going back to periods earlier than Jenkins's studies, I can illuminate earlier fan cultures as well as the interactions between audience, object, and toy. In doing this, my cases will better inform how fan cultures developed before the network sci-fi television programs that Jenkins addresses, and my project will suggest that modes of interactivity existed pre-Internet, and even pre-VCR.

To tackle eras before Jenkins's fan studies, I turn to examples of American cultural histories of technology. Apart from Nye, many humanities and social science scholars have addressed the history of technology in America. To give some perspective as to how my project fits in with this particular historiography, it is helpful to consider the arguments and trajectories laid out in earlier studies. Lewis Mumford published the first substantial, multidisciplinary cultural history of Western technology, *Technics and Civilization*, in 1934. Here, Mumford links advances in Western technology with cultural change, arguing that the root of modern technology is not the Industrial Revolution but the Middle Ages, and that the political, moral and economic choices we make—not the machines we use— have produced

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<sup>10</sup> Henry Jenkins, *Convergence Culture: Where Old and New Media Collide* (New York: NYU Press, 2006), 18.

our current capitalist-driven, machine-oriented economy. Mumford's theoretical foundation, which challenges the idea of technological determinism by placing humans squarely at the root of technological innovation, remains pivotal for acknowledging the ever-present cultural foundation of emerging technologies. Mumford's history lays the seeds in thinking that innovation is always in dialogue with the people innovating, and while these three robots appear removed from mainstream America (appearing in an exhibition hall or sci-fi film set), they remain products of their eras, impossible to detach from the cultural contexts that fashioned them.

While Mumford's *Technics* offers an argument for understanding technology always in relation to the culture creating it, his sweeping overview of Western civilization offers less in the way of distinct, thorough historical examples. Mumford argues, for example, that certain occupations (miners, soldiers, and financiers) become "mechanized" by the tools of their trades (which suggests an irony regarding the human ability to create tools that they then use to mechanize their own identity). Mumford stops short, however, of offering a concrete example of this practice, leaving that to future cultural historians.

Carolyn Marvin's *When Old Technologies Were New* picks up where Mumford leaves off as she examines the cultural history of electricity. Marvin looks at how people transform new technologies into divisions of labor, which become codified markers of class. She points out that the invention of the electrician came simultaneously with the invention of electricity; and soon after both, class-based boundaries surfaced as the more distinguished "electrical engineer" position emerged, which led to a reevaluation of the "electrician" as a distinctly working-class occupation. *When Old Technologies Were New* proves quite helpful because Marvin deconstructs established boundaries in order to analyze how individuals

involved with technology (inventers, maintainers, and users) become reified into specific social categories. Marvin's notion of reification folds nicely into my own history of the robot, particularly as I explore how the robot archetype is reified through figures like Elektro. Marvin's organizational approach also influences my project in its use of electricity as the central organizing theme for teasing out the changing relationships between creators, sellers and users: just as Marvin organizes her study around electricity as both a technology and cultural object, I tackle the robot as symbol for social progress through emerging technologies.

As Carolyn Marvin follows electricity to argue that the politics of who owns, operates and uses technology develop alongside the product, Lisa Gitelman approaches Edison-era technology by shifting the focus from the object itself to how the object was authored, appropriated and put into use. Studying early transcription technologies in *Scripts, Grooves, and Writing Machines*, Gitelman weaves her history from popular photographic and written representations of Edison the Inventor and his transcription machine, to patent and branding processes, to advertisements depicting uses for these new technologies. Gitelman's argument moves beyond the thing she studies to specifically address how it was imagined in the popular press. She argues that even before people saw a specific technology, they had an idea of what it was, how to use it and who was supposed to use it. Gitelman also argues that new technologies, like the typewriter, became powerful political tools to justify colonization practices. Images of friendly Americans bringing "technology" to remote ethnic groups worked as propaganda, suggesting that in offering new tools the American government was educating the subaltern rather than exploiting. Like Marvin, Gitelman situates devices in a historical context, but her work more importantly informs my project in her teasing-out the

political ideologies associated with new technologies. Here, she argues that even a simple mechanical device can come packaged with a series of political values. In my analysis, I explore the political assumptions and ideologies tied to these figures and how they informed audiences' understandings of their contemporary culture. More broadly, Gitelman's work informs understandings of new media as she shows through her histories of emergent technologies that the introduction of new media is a continuous process, dating back far before the Internet. In bringing contemporary concepts of new media to a historical context, Gitelman argues that today's technology doesn't necessarily represent an extraordinary paradigm shift, but instead stands only as the most recent in series of pivotal moments in the history of technology. In going back to earlier examples of audiences interacting with fictional characters demonstrates that Gitelman's observations about continual emergence of new media also fits into fandoms. Contemporary fan practices may not be an entirely new phenomenon, but rather the latest of dialogues between producer and audience.

Each of the authors cited offers an informative approach to the questions, "How does culture influence technology?" or "How does culture influence the *representation* of technology?" To do so, these authors either 1. Choose to look at a specific period and genre in American film, 2. Analyze the representation of the machine and the inventor in popular history, or 3. Offer a broader history of invention, technology and social outcomes. I find these helpful counterpoints to my own project because each takes a social phenomenon (like electricity or the phonograph) and shifts the focus beyond the object itself. My intention is to bring these authors' techniques to a corner of American cultural and technological history that has not been explored in this way. In doing so, my approach will offer a fresh understanding of emerging technologies as I trace these specific figures through media

environments. Researching and writing on every robot-like character that has graced a magazine, film screen or television set would prove to be a daunting task so I employ George Marcus's metaphor of following the thing as a useful way-finder. Marcus suggests that to do multi-sited research (research across multiple spatial and temporal boundaries), one must choose a mode of approach. He uses the verb "follow" to define these approaches that help researchers address questions potentially difficult to otherwise tease out. Because Elektro and Robby, among others, exist both on stages, in films and as toys, George Marcus's "follow the thing" and "follow the metaphor" are particularly helpful for tracking something through differing and shifting social contexts.

Follow the thing. This mode of constructing the multi-sited space of research involves tracing the circulation through different contexts of a manifestly material object of study. ... This is perhaps the most common approach to the ethnographic study of processes in the capitalist world system.<sup>11</sup>

While Marcus considers "the thing" as a single material object, my approach goes beyond the robot in material form, through its transformation from object to discursive tool in a consumer society. This approach to critical analysis also stems from traditions in media studies. Media theorist Donna Haraway has been "following" cyborgs since the early 1980s and film historian Lynn Spiegel follows the television set through 1950s print ads. My multi-site study will follow the robot from the site(s) of physical display to larger media circulation sites.

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<sup>11</sup>George E. Marcus, "Ethnography in/of the World System: The Emergence of Multi-Sited Ethnography," *Annual Review of Anthropology* 24 (1995): 95–117.

## **Chapter 1: Westinghouse's Early Electrical Men**

I became enamored with the larger-than-life metal men performing in corporate pavilions at the Chicago and New York's World's Fairs while researching World's Fairs as a sophomore in college. Their shiny metal bodies awkwardly moved across the stage like giant wind-up toys walking across a kitchen table. And, much like a child looking at a wind-up car or doll for the first time, I was confounded and fascinated by what lay inside. What magic or technology animated this strange new creature? Unlike the toy, which I could disassemble and examine, these robots' inner workings were forbidden to me as well as contemporary spectators. They were off limits for close inspection by the companies that built them, only to be viewed from afar or mediated through text, photograph, film, drawing. The products these robots represented and promoted were easily accessible at your local appliance shop or department store for a price. I became interested in how these robots were produced by technology companies in order to promote their products and circulated through corporate media events and advertisements. These robots were never for sale as products in themselves no matter how popular they became, but were crafted to sell everyday products by representing, even embodying, technological innovation. Companies made audiences believe that underneath the robot's shining metal shells lingered the very same novel wiring and mechanics as what was inside their newest line of toasters or vacuum cleaners.

Notably in these fantastic representations of technologic possibility, these robots were not situated along the factory assembly line where robots turned out to be most useful, but operated and lived within the modern American home. Their placement within the domestic sphere opens up a host of questions about women's place in the home and



their interaction with new technologies. This chapter offers a detailed review of several Westinghouse robots, examining how they were portrayed across media and where they were situated in the American home. It goes on to explore what mores of domestic life and gendered labor practices they glorified. By looking at women's places within the home and contemporary theories of efficiency and rationalization impacting domestic life when Westinghouse created its line of "showbots," I gather some context for seeing how companies inserted the robot into this domestic mix.

Through transmediation many viewers and consumers only saw these figures through magazine advertisements for company products or the corporate pavilion at the World's Fair. I use advertising scholar Roland Marchand's *Advertising the American Dream* to provide a useful frame for understanding the changes in Westinghouse advertising and robotic innovation. His analysis indicates advertisers did not simply inject ideologies into a tabula-rasa audience of consumers, but rather participated in an ongoing discussion with the public that influenced their corporate message, brand and tactics.<sup>12</sup>

Thematically, this chapter illustrates these changing relationships, interrogates the corporate consumer fantasies these robots symbolized and sets up key themes for this dissertation: What do the intersections between household technology and fantasies of better living show in relation to how Americans live in their day-to-day lives? What avenues were and are available for mainstream consumer interaction with new technologies? How does transmediation relate and influence a perceived sense of continuous technological evolution? What do consumers and audiences do to join and influence the discourse around a cultural object?

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<sup>12</sup> Roland Marchand. *Advertising the American Dream: Making Way for Modernity, 1920-1940*. (Berkeley: University of California Press, 1986) xx.

## Chapter 2: Elektro and Selling the World of Tomorrow

The gleaming figure of Elektro the Westinghouse Moto-Man represented over fifteen years of Westinghouse robotic innovation, which started in 1924 with Televox, a robot who could vacuum and use the phone. Designed at Westinghouse's robotics factory in Mansfield, OH, Elektro stood 7 feet tall and weighed 265 pounds. He could walk, talk from a script, count and smoke—all activities designed for live performance at the fair. Not only was Elektro one of the most popular exhibits at the fair, but the robot lasted well beyond the Westinghouse Pavilion. Elektro appears in several films, including *The Middleton Family at the 1939 World's Fair* (1939), *Sex Kittens Go to College* (1960), the documentary *The World of Tomorrow* (1984), and the Medicus and Warthen collections of World's Fair footage. In addition to film, Elektro appeared in Westinghouse print ads and toured the United States in the WWII Era promoting the corporation and early robotics before going on display at Palisades Park in Oceanside, CA. This chapter offers a biography of Elektro The Westinghouse Moto-Man and his twenty-five-year history and on-going legacy both as Westinghouse spokes-robot and pop cultural icon.

Like robots in sci-fi film, Elektro and his fellow stage robots also have a place within the existing academic fields of inquiry. Elektro has been a staple in introductory American Studies classes—the place where I first encountered his picture over a decade ago. In a review of “Selling the World of Tomorrow,” a Museum of the City of New York exhibit commemorating the fiftieth anniversary of the 1939 New York Worlds Fair, Robert Rydell notes: “The next section of the exhibition...provided an overview of the fair that included drawings of proposed exhibits, magazine covers, a slide show, and

souvenirs (including pins showing the robot Moto-Man and the advertising symbol Mr. Peanut).” Rydell, author of *All the World’s a Fair*, *Fair America* and *World of Fairs*, mentions Elektro only one time in this review, despite a strong focus on the New York World’s Fair in much of his scholarship. Rydell is not alone in Elektro’s omission from fair history. Alfred Heller’s *World’s Fairs and the End of Progress* makes no mention of Elektro or his corporate creator, Westinghouse. Instead, Heller, like Rydell, focuses on General Motor’s Futurama exhibit. Science and technology historian Peter Kuznick lumps Elektro with other corporate novelties, including AT&T’s Vorder, a synthetic human-speech device, and Borden’s cow-milking Rotolactor. Steve Dixon mentions Elektro and other performing robots not quite as off-handedly, but refers to them as camp objects, suggesting that “robotic movement mimics and exaggerates but never achieves the human, just as camp movement mimics and exaggerates but never achieves womanhood.” His conclusion highlights not only a return to nature through the celebration of the eroticized sexuality of metal, but also refers to profound fears and camp fascinations regarding the humanization of machines and the dehumanization/machinization of humans. Elektro, in these texts, stands as a commodity, novelty or precursor to posthuman existential concerns.

I point to these texts to indicate that little investigation has been written about Elektro the Westinghouse Moto-Man beyond the robot’s quirky stage act. Rather, fair historians and media studies scholars mention him as a novelty: a footnote in the history of exhibits and display. However, Elektro’s conception helps illuminate larger questions involving the evolution of the robot figure in American society, allowing us to consider

not only what Elektro came to represent at the fair, but also why he was invented and how he became a powerful symbol of American technological possibilities.

At the time of Elektro's introduction, there were few models of robot in American popular culture. Pronunciation of the word "robot" (the word now only about sixteen years old) was unclear, oscillating between "rō-bāt" and "rō-büt." Through a star study of Elektro, I uncover ideas and assumptions and ideologies about robotics developed and displayed in the 1920s and 30s. Like other star studies, I look at Elektro's collected persona through a combination of the roles he plays mixed with the perception of audiences after watching his roles and the paratexts (print ads, flyers, Elektro souvenirs) that are created around him. I also uncover the commercial implications surrounding Elektro's presence at the fair and look at Elektro's transmediation from stage to film through the Westinghouse industrial feature *The Middleton Family at the New York World's Fair* and how Elektro fits into what Andrew Wood calls a "temporal heterotopia:" a space where multiple competing narratives can exist simultaneously. I then turn to the development and character of Elektro based on his "in-the-flesh" performances and place in the Westinghouse Pavilion, a site that not only offered Elektro but also an "electric playground," a special room of electric amusements for fairgoers to interact with. I then discuss Elektro and Westinghouse's impact on America's impression of the robot, charting Elektro's performances, print ads and film career beyond the fair into the Post-War Era. This examination will help address how one figure can help shift America's understanding of robotics and technology, as well as address questions regarding how technology can be packaged and distributed in order to sell corporate interests as well as household appliances. The discussion will also examine gendered

practices surrounding the display of technology in mainstream American society.

Elektro's scripted discussion for fairgoers included many corny lines directed toward women audience members like, "I see a lot of hot numbers here," and he ended sentences with "Toots." Images of Elektro frequently appeared with him standing next to women, which not only indicate Elektro's larger-than-life physical size but also suggest the looming Elektro to be a potential menace or, at the least, a comical ladies' man.<sup>13</sup>

### **Chapter 3: Robby and a Consumer Planet**

As Elektro's career fades away in the 1950s, newer robot models appear in popular science fiction films. Among these new mechanical men is *Forbidden Planet's* Robby the Robot. Like Elektro, Robby was built for show, in a Hollywood studio as opposed to a corporate factory. In the 1956 film *Forbidden Planet*, a space expedition crew is sent from Earth to the remote planet Altair-4 to discover the fate of an Earth colony after colonists stop transmitting messages back to Earth. They discover two survivors, Dr. Morbius and his grown daughter Altaira, who have not only survived a monster that roams the planet, but have managed to set up a comfortable household with the help of Dr. Mobius's robot invention, Robby. While Mobius works to discover the technological secrets of the Altair-4's long-vanished alien race, Robby dutifully cooks, cleans, and supervises Altaira as she plays on the family's well-kept grounds.

Robby simultaneously stands as a humble house servant and an ambassador of future technological possibilities. While working around Dr. Morbius's house, Robby

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<sup>13</sup> Even in the film, *Sex Kittens Go to College* (Allied Artists Pictures, 1960), Elektro, playing the college computer Thinko, continues his Westinghouse persona, selecting Dr. Mathilda West (Mamie Van Doren) as the new college dean and battling a horse-track addiction.

showcases the diverse products produced spur-of-the-moment in his barrel-chest replication unit, producing everything from jewel-encrusted dresses to bottles of whiskey. In their essay “From Apocalypse to Appliances: Postwar Anxiety and Modern Convenience in *Forbidden Planet*,” Worland and Slayden describe Robby as “a high-tech marvel” who “performs as an all-purpose servant/worker/homemaker and simultaneously as an inexhaustible manufacturing plant for both heavy industrial equipment and consumer goods. Steel Elektronics [sic], opulent housing, liquor, jewelry, and stylish clothing—none is beyond Robby’s productive capacity.”<sup>14</sup> The authors suggest that, in addition to Robby’s dry humor and ability to enliven a scene, “Robby is in fact a consumer society fantasy, a device that can synthesize any material one desires with instantaneous, automated efficiency between slavish personal attendance of his master.”<sup>15</sup> In fact, Robby stands as a walking, talking version of the *Star Trek* Replicator, thirty years before it was introduced in 1987’s *Star Trek: The Next Generation* television series.

Just as many historians see Elektro as little more than a comical, mechanical man at a popular World’s Fair, film studies scholars view Robby chiefly within the context of his two popular film appearances in *Forbidden Planet* (1956) and the lower-budget film, *The Invisible Boy* (MGM, 1958). Worland and Slayden prove informative in teasing out *Forbidden Planet*’s notions of capitalism, consumerism and colonization in their article, but they do not address Robby’s influence beyond the screen: as Robby stood as a perpetual-motion producer in *Forbidden Planet*, his character operated as a driver for toy sales in the 1950s-1960s marketplace. Robby entered the popular imagination and the

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<sup>14</sup> David Desser, ed. *Hollywood Goes Shopping*, (Minneapolis: University of Minnesota Press, 2000), 139-140.

<sup>15</sup> *Ibid.*, 144.

home through mid-century children's toys manufactured for the U.S., Japanese and even Russian markets.

I expand my discussion of Robby's impact from his filmic presence by also addressing the commodification of Robby and the robot toy in the Cold War era and asking whether Robby is packaged and sold to American audiences, not only by a Hollywood studio, but also by numerous toy producers. In addressing Robby's presence in material American culture as well as his film history, I tackle the impact of commercial production and distribution in relation to the act of play in popular understandings of fictive and emerging technologies. I also show how consumers played with Robby, developing their own systems of values around the figure. To do this, I intend to first discuss of Robby's film career by comparing Robby's role in *Forbidden Planet* (butler, bodyguard, mass-producer) and his second major film appearance in *The Invisible Boy* (child's playmate, computer-controlled villain). Then, I offer a detailed view of Robby's place in American toyshops and advertisements through an investigation of both late 1950s toy trade publications and present-day toy collector anthologies.<sup>16</sup> I examine these primary sources through the lenses of several secondary sources that also address the role of mass-produced toys on the politics of American consumption and play. Deborah Jaffe's *The History of Toys: From Spinning Tops to Robots*, offers a history of Western toys from nineteenth century to the mid-twentieth century. She concludes her popular

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<sup>16</sup> I have gathered images from online sources as well as collected anthologies and buyer's guides for robot toys, including Teruhisa Kitahara, *Robots, Spaceships and Other Tin Toys* (New York: Taschen, 2006); Tim Brisko, Matt Alt, Robert Duban, *Super #1 Robot: Japanese Robot Toys, 1972-1982* (New York: Chronicle Books, 2005); Alan Bunkum, *Toy Robots from Japan: Techno Fantasies* (Atglen, PA: Schiffer Pub Ltd, 2005); S. Mark Young, Steve Duin, Mike Richardson, Harlan Ellison, *Blast Off! Rockets, Robots, Ray Guns, and Rarities from the Golden Age of Space Toys* (New York: Dark Horse Books, 2001); Jim Bunte, Heinz Mueller, Dave Hallman, *Vintage Toys: Robots and Space Toys* (Iola, WI: Krause Publications, 2000); Antoni Emchowicz, Paul Nunnely, *Future Toys: Robots, Astronauts, Spaceships, Ray Guns; TV and Film Toys* (London: New Cavendish Books, 2000); Deborah Jaffe, *The History of Toys: From Spinning Tops to Robots* (London: The History Press, 2006).

history of toys where I begin mine, but she gives a helpful backdrop for the American toy industry generally that will better indicate the place of the toy robot in a long evolution of playthings. To better illustrate 1950s American consumerism, I use Gary Cross's *An All-Consuming Century* and Lizabeth Cohen's *Consumers' Republic* as both studies offer historical analyses of major shifts in America's economy by focusing on consumer-producer relationships as well as American consumers' changing political roles.<sup>17</sup>

After Robby's emergence as film star and children's plaything, he developed a sort of cult following. The third part of this case study will focus on Robby's reemergence as a cult figure in the late 1960s and 70s as I hope to better understand his cultural capital. At this point in his career, bringing Robby into a film, even for a cameo, or including a picture of Robby in a picture, seems to have offered a sort of sci-fi mystique that led Robby to appear in the background of many television shows and sci-fi movies for over fifty years. In fact, as boys and girls grew out of their tiny tin Robby toys, gadget and novelty companies started making "grown up" Robby Robots, considerably taller than four inches and much more expensive. "The Genuine 7-Foot Robby the Robot," for example, sells in the Hammacher Schlemmer catalog for just under fifty-thousand dollars. In addition, the original tin Robby toys themselves have become sought-after collectors' items: rare versions fetch thousands of dollars at toy shows and online auction sites. This niche market has turned Robby into big business and inspired other cultural producers to figure out ways to cash in on Robby's cult.

This chapter offers an exploration of Robby's character and legacy illuminating three key themes. As seen in the previous chapter, practices of transmediation are

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<sup>17</sup> Lizabeth Cohen includes a chapter on late 1950s children's toys and their relationship to gender and consumption. Lizabeth Cohen, *A Consumer's Republic: The Politics of Mass Consumption in Postwar America* (New York: Vintage Books, 2003)



addressed as participants select and translate a piece of information and represent it in other media forms. In addition, the theme of globalization appears as I examine the growth of a transnational dialogue between the US and Japan through the manufacture, sale and purchase of robot toys. The third concept I explore is a transition to the domestication of technology and the rise of consumer culture. At the end of the chapter I turn to the concept of nostalgia as consumers interact and play with Robby's identity decades after his movie debut to make meaning through practices looking back at a "retro" Robby.

#### **Chapter 4: *Battlestar Galactica* and Reimagining the Robot**

*Battlestar Galactica* (abbreviated as *BSG*) was a highly-rated television show both in the late 1970s and in a "rebooted" version in the early 2000s. The show creates a unique opportunity to chart the evolution of popular understandings of technology over the course of three decades through a single text distributed across multiple media. In addition, because earlier sci-fi narratives, television ratings, and a diehard fandom have influenced the *BSG* universe, the series presents an opportunity to chart the influence of popular film, the impact of audiences, and the interest of television networks in a single franchise.

In reviewing *BSG*, it becomes apparent that the place of technology in this fictive universe has evolved dramatically in the franchise's course. The representation of technological possibility through the Cylon enemy, in particular, has undergone a major shift as production budgets change and certain characters become potential spin-offs for the *BSG* franchise in themselves. The changing face of robots in the 1980s and the rise of

popular computing in 1990s influenced the development of *BSG*'s robot enemy as Cylons transformed from mindless, metal soldiers to flesh-and-blood lovers and saboteurs.

Cylons, the key villains of the *BSG* universe, are robots set to destroy the human race. Originally portrayed only as metal humanoid machines, the new series brought the Cylons back as mechanical beings indistinguishable from humans. In the miniseries it was revealed that there were twelve models of humanoid Cylons, and as the series continued, Cylons were slowly revealed (often surprising the audience when popular characters turned out to be robots rather than flesh-and-blood good guys.)

This chapter starts with a brief definition and discussion of posthumanism to situate academic discussions around the intersection of the human and technologies because, through the humanoid Cylon, the line between person and machine becomes complicated and blurred. I will then introduce the original *Battlestar Galactica* and situate the Cylon in the original television show by examining how the original Cylon Centurian soldier changed to develop human behaviors in the first incarnation of the show. I will then transition to examine how Cylons were reimagined in the 2003 *Battlestar Galactica* under the influence of Ridley's Scott's *Bladerunner*. I end the chapter with a discussion of what it means for technology to pass as human in the reimagined *BSG* series as well as how concepts of human interconnectedness find their way into the last seasons of the television series.

## **Chapter 5: Reimagining Robots in Space: *BSG* and Curated Fandoms**

My final chapter extends my discussion of *Battlestar Galactica*, positing that *Battlestar Galactica* would never have been “reimagined” and reproduced for present-

day television audiences without a cult community of fan investment. The original television series, *Battlestar Galactica* was received enthusiastically by a broad American audience when it first aired in 1978-1979. However, high production costs quickly forced ABC to cancel the series after just a handful of episodes. Since then, fans of *BSG* have been some of the most loyal, ignored, and persecuted fans in the sci-fi world. In 2003, SciFi Channel and the British science-fiction channel, Sky One, began airing a remake of *Battlestar Galactica*, which, like the original, received marked attention and praise from the sci-fi community and mainstream press alike. While the new series offered a reimagined *BSG* universe, it also marked a divide in the fan community as fans flocked to the new series without necessarily being devotees of the old. This divide in fan communities coupled with second-generation Internet-based services encouraged new means of communication amongst fans of the reimagined series.

Because the series combines classic space sci-fi with a military context, and showcases both male bravado and strong female figures, *BSG* has attracted a diverse audience. In the context of fan communities, the diverse *Battlestar Galactica* fandom provides a unique opportunity to examine how groups have used differing online formats to establish themselves in cyberspace. Here, you have fans of the old 1978 series, fans of the 2003 reboot, and large groups of both male and female devotees of various ages, interests, and political perspectives. Not only has there been a contingent of *Battlestar Galactica* fans online since the popular rise of the internet, but the new *Battlestar Galactica* series has given rise to a diverse audience of fans operating on message boards, wikis, and blogs.

Through the analysis of three case studies, The Battlestar Webring, The *BSG* Wiki and the *BSG* Creative, I will focus on three different kinds of online fan communities, explore the output of these fandoms and discuss how concepts of technophilia and hypertextuality play into an evolving discourse around the series years after the last episode airs.

This chapter will take notions of technology and play introduced in the Robby study and tie them to issues of consumerism relating to fan production. Here, *BSG* characters not only become celluloid toys for video artists to play with, but they become instruments in a producer-fan system whereby fans turn into creative laborers themselves, making products traded with one another and making products in Sci-Fi Channel contests to be broadcast along with the series. Building from Marshall McLuhan's popular remark that "the medium is the message," I argue that not only do particular web formats offer spaces to construct certain messages, but also that individuals use the medium as a critical tool in the formation of group identity.<sup>18</sup>

Through this history of robots, I show not only how representations of technology change as part of an ongoing social process, but also how people situate themselves as participants with new technologies. Furthermore, I explore how ideals and values around what it means to be technologically "modern" or "cutting edge" change over time, morphing from techno-fantasies into dystopian nightmares and back again. In addition, by following the robot through several media forms, I show how media producers and consumers use and play with the robot's image in an ongoing dialog that changes understandings of where people stand in relation to the machines they produce.

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<sup>18</sup> Marshall McLuhan. *Understanding Media: The Extensions of Man* (New York: McGraw-Hill, 1964)

## Chapter 1

### Westinghouse's Early Electrical Men

In the late 1920s the Westinghouse Electric Corporation began manufacturing a series of robots for live audiences. These analog robots, sometimes referred to as “Showbots,” offered fantasies of a future tied to modern technology and consumerism as they advertised the Westinghouse company by showcasing its research prowess and innovation. Westinghouse exhibited its robots across the U.S., providing a human face to technological advances. Taking commands by voice, the robots executed simple tasks and entertaining tricks to the amusement of American audiences. As Westinghouse robots vacuumed and sang, the company put forth its sales pitch: buy our products and buy a better future, as evidenced by the mechanical men. This chapter focuses on the Westinghouse Electric Corporation's early Westinghouse robots, looking at their development, changes in their technical capabilities, relationship with the Westinghouse brand as well as their connection to the domestic space and household labor.

While researching robots and other representations of technology, I became interested in robots technology companies produced and circulated through corporate media events and advertisements in order to promote their products. I noticed that these robots were not for sale as products, but were designed to sell everyday products through the metaphor of the robot. Notably, these robots were not situated along the factory assembly line, but operated and lived within the modern American home. The General Motors' sponsored film *Leave It to Roll-Oh* depicted one such domestic-helper robot, as we will see later in this chapter, but it was the Westinghouse Corporation, in particular, that took a keen interest in domestic robots, manufacturing promotional robots for over a

decade. Through Scott Schaut's published collection of primary materials, *Robots of Westinghouse: 1924–Today*, I found examples of Westinghouse's robots selling Westinghouse products through print advertisements as well as performances for live audiences on promotional tours around America.<sup>19</sup>

The Westinghouse robots offered much more than hokey entertainment and appliance demonstrations. As Westinghouse manufactured its robots, the company also displayed its vision of the relationship between technology and consumer products by producing a fantasy of the robot as domestic laborer and household companion. The Westinghouse robots on stage demonstrated the fantasies of a better American life that Westinghouse projected based on its own expectations of what its consumers wanted to see.

Examining the Westinghouse robots—Televox, Katrina Van Televox, Rastus, Willie Vocalite and Elektro—draws out what Westinghouse and its audiences considered as technology's relationship to domesticity, labor, entertainment and consumerism. In addition, these cases help illustrate shifting sensibilities of American engineers, homemakers and children as they interacted with these new technologies. This chapter illustrates these changing relationships, interrogates the future fantasies these figures symbolized, and sets up key themes for this dissertation: the intersection between household technology and fantasies of better living; mainstreaming interaction with new technologies; technological evolution; and transmediation. By transmediation, I mean the acts of translating a thing into a different medium as well as the exploration of how these things across media are connected to form the whole network of meaning.

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<sup>19</sup> Scott Shaut, *Robots of Westinghouse: 1924–Today* (Mansfield, OH: Shaut: 2007)

Despite the fact that Westinghouse robots were in part promoted to women as a method for selling the company's household appliances, we will see in this chapter that American female consumers generally had very limited influence over the Westinghouse public relations tactics used to construct and brand these robots and other Westinghouse technologies. Because of this, there are limitations to reconstructing their voices. However, by using George Marcus's "follow the metaphor" to construct the space of inquiry, we can better understand not only how Westinghouse viewed the American housewife, but why and how cultural exchange influenced the corporation's technology.<sup>20</sup> While this feedback between Westinghouse engineers and an intended female audience remains largely lopsided, we can see varied Westinghouse responses to their presumed consumers through iterations of technological change.

By following the metaphor we can trace the material object (the robot) through the circulation of signs and symbols found both at the level of the physical robot as well as representations of it in print and visual media. The Westinghouse robot becomes less of a "thing" (a Westinghouse product made of metal, rubber and electric wires) and takes on a personality and a life of its own as other individuals beyond the company's robotic engineers help construct the identity behind the robot: the man behind the machine. By following the robot from the factory floor to the Westinghouse showroom, the home, the world's fair, print cartoons, newspaper accounts and corporate advertisements, we can better see exactly how Westinghouse used the robot to stand for progress, control, modernity and Westinghouse.

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<sup>20</sup> George E. Marcus, *Ethnography through Thick and Thin* (Princeton, NJ: Princeton University Press, 1998).

The works of Roland Marchand also provide a useful frame for understanding the changes in Westinghouse advertising and robotic innovation. His work shows that advertisers did not inject their values into open and willing consumers, but participated in an ongoing discussion with the public that influenced their corporate message, brand and tactics. In *Advertising the American Dream*, Marchand argues that “advertisements contributed to the shaping of a ‘community of discourse,’” an integrative common language shared by an otherwise diverse audience.” Advertisements reached Americans through ubiquitous displays in print and visual media, infusing through repetition, display and creativity their slogans and visions into everyday American discourse. He continues, “if the metaphors, syntactical patterns, and verbal and visual ‘vocabularies’ of our common language establish our parameters of thought and cut the furrows along which our ideas tend to flow, then advertising has played a significant role in establishing our frames of reference and perception.”<sup>21</sup> The Westinghouse robots provide a frame for how Americans saw and discussed the uses for robotics as well as the technological possibilities afforded by the new technologies they represented. Yet these robot visions were not static, but changed as Westinghouse introduced and reintroduced the same robots to American audiences.

For Westinghouse public relations, in particular, the robots’ physical forms reflected conceptual revisions in the company’s marketing plans as designers made technical modifications to the robots themselves. For example, as Westinghouse identified housewives as consumers for its appliances, robot promotion and demonstration became far more domesticated. Westinghouse robots wielded telephones

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<sup>21</sup> Roland Marchand, *Advertising the American Dream: Making Way for Modernity, 1920–1940* (Berkeley: University of California Press, 1985), xx.



and vacuums, performing tasks around the house generally left to the middle-class homemaker. Westinghouse's modifications for robot demonstrations suggest a changing view of domestic labor and domestic consumption, which are also reflected in advertising of the late 1920s era. In fact, the rise of the American female consumer factors into the company's design of its robots, as well as its branded identity.

In addition to selling products, these robots initially demonstrated labor-saving strategies stemming from an ideal that prioritized efficiency and progress. This ideology, based by Westinghouse largely in the home, promised a gendered modernity whereby women and men occupy separate spheres. The Westinghouse robot began in the public sphere as an electrician, but transferred labor positions to become a mother's helper in the private sphere soon after it was introduced. Here, in the modern home, the robot became a symbol for "modern housekeeping," which was linked to technologically-bolstered, streamlined processes rooted in Frederick Winslow Taylor's scientific management and the efficiency movement of the Progressive Era.<sup>22</sup>

Beyond doing work, the Westinghouse robots promised companionship (physical, if not emotional). In line with efficiency expert Christine Frederick's assertion that the radio could combat the isolation and loneliness of solitary housework, the robot could likewise provide a housewife with company, even if it was in the form of a machine. At the same time, Westinghouse presented the robot to the housewife as a labor-saving device: an object of technological modernity that could entertain as well as provide companionship while it did household chores.

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<sup>22</sup> The efficiency movement accompanied the emergence and popularization of scientific management at the turn of the twentieth century. See Janice Williams Rutherford, *Selling Mrs. Consumer: Christine Frederick and the Rise of Household Efficiency* (Athens: University of Georgia Press, 2003).

Beyond being electronic laborers, representations of modern technology, consumer objects, household companions and ever-ready entertainers, the Westinghouse robots also prefigured many remote controlled toys of the post-World War II era, particularly as they took a turn from being depicted as entertainment for adults to providing entertainment for children. Though not marketed always as toys in themselves, later robots gave consumers an appealing perception of control over and interactivity with their technology. This chapter will introduce the fantasies of control by illustrating how robots within the modern, technologically-driven home could control the house while being controlled by the household. Kitchens and houses of tomorrow were presented alongside the Westinghouse robots, offering a fantasy of the perfect space for the modern lifestyle.

### **Rationalizing the Private Sphere: The Rise of Technology, Efficiency and the Professionalization of the Housewife**

Although the Westinghouse robots toured the United States and Canada from the late 1920s through the 1950s, popular histories of American technology and robotics have largely overlooked them. Most cultural histories of robots have tended to focus on the filmic representations of mechanical beings made popular through science fiction films of the last half of the twentieth century. This section addresses two significant film studies of robots before teasing out the historical contexts that contributed to the development of the Westinghouse robots: the significant changes in household management that prefigured the roles of technology in the home, and the evolution of Westinghouse from a company that specialized in electric brakes for railroads to a

corporation which produced everything from dynamos and electrical grids to light bulbs and toasters.

In their separate works on robots, J.P. Telotte and Vivian Sobchack address robotics and technological representation by focusing on a handful of popular film robots and gathering particular tropes and stylistic elements unique to the genre. Telotte argues that an understanding of the constructed self develops through the representation of the constructed other, the robot, and this dyad remains a prevailing theme in science fiction film. He also argues that cyborg or robot films work to define the boundaries of the individual by depicting the human body as “losing its private dimension” as it is replaced by “an image of generally empty human nature.”<sup>23</sup> Here, Telotte shows how the robot or cyborg suggest ways that technology could transform, even destroy, the self. Even humanity itself could be absorbed by its automaton doubles.

Vivian Sobchack’s essential study of sci-fi film, *Screening Space*, concentrates on the construction of science fiction films’ formal stylistic aspects. By examining the “look” and the “sound” of popular sci-fi from the 1950s to the 1980s, Sobchack offers a richer study of science fiction than traditional film surveys, observing through her analysis of the robot that fear in science-fiction films stems from a future possibility that we may lose contact with our own bodies. Both Telotte and Sobchack establish compelling arguments for how robots, cyborgs and technology more generally establish and reify boundaries between the human self and mechanical other, as well as illustrate

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<sup>23</sup> J.P. Telotte, *Replications: A Robotic History of the Science Fiction Film* (Urbana: University of Illinois Press, 1995): 159.

social anxiety about new or “foreign” technologies, particularly in relation to their potentially destructive impact on the human body, if not humanity more generally.<sup>24</sup>

Telotte and Sobchack address numerous mid-century representations of robots, and their work identifies film robots who exist in underground civilizations, far-flung galaxies, undisclosed laboratories or industrial complexes. In relation to the public sphere and general understandings of human identity we learn much from this analysis, but this perspective overlooks what can be learned when we bring robots and other representations of technology closer to home—discussing them through the lens of the household rather than the film audience.

In order to understand how important household management was to the construction of the Westinghouse domestic robots, we need to take a brief digression into the American home. The closest realm of study that addresses this intersection is the study of domestic labor of the past thirty years. These histories of the domestic sphere offer an understanding of household labor and service that are key to the imagined domestic purposes that the Westinghouse robots represented, particularly as they address the rhetoric of professionalization and class status.

### **The Work of Making a Home**

The literature related to domesticity historicizes domestic labor and explores how identities and duties in the home shifted with changing American values and practices. It also illuminates a power struggle whereby home efficiency experts, advertisers and businesses sought to better the home and the housewife by redefining servanthood, rationalizing household practices and persuading housewives to become key American

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<sup>24</sup> Vivian Sobchack, *Screening Space: The American Science Fiction Film* (New Brunswick, NJ: Rutgers University Press, 1997)

consumers. From this body of literature, important themes arise that speak to Westinghouse's construction of the robot as well as the company's promotion of household technology and its assumptions about the American household. These themes are: the changing responsibilities of housewives, the role of the domestic servant in the American home, the transformation of the household from production to consumption, the performance of class, the role that scientific management and the technological system played in the process of work, and the false assumption that new domestic technologies will ultimately offer the housewife added leisure time. While historians of domestic labor vary in their historical scope and their approaches to consumption, politicization and class-consciousness, they collectively illustrate a history of domestic labor whereby industrialization occurred in the home.<sup>25</sup>

Before the American Revolution, Mary Beth Norton notes, housewifery was a vocation in itself: women described their work "as 'my Narrow sphere,' 'my humble duties,' or 'my little Domestik affairs.'"<sup>26</sup> The housewife's duties within the home related almost entirely to serving the family within the private sphere.<sup>27</sup> This concept of separate, gendered spheres continued through the nineteenth century even after new tools and products changed the processes of housework and expectations of housewifery.

As the percentage of American families living in towns and cities increased in the early nineteenth century, some household tasks were eliminated through the purchase of basic household items. Glenna Matthews finds that ready-made cloth and soap offered

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<sup>25</sup> Ruth Schwartz Cowen, *More Work for Mother: The Ironies of Household Technology from the Open Hearth to the Microwave* (New York: Basic Books, 1983), 4.

<sup>26</sup> Mary Beth Norton, *Liberty's Daughters: The Revolutionary Experience of American Women, 1750–1800* (Boston: Little, Brown, 1980), 38.

<sup>27</sup> Glenna Matthews, *"Just a Housewife": The Rise and Fall of Domesticity in America* (New York: Oxford University Press, 1987), 11. Matthews notes that church and market activities related to the home remained the housewife's only connections to the world outside the home.

the housewife a considerable savings of time and labor.<sup>28</sup> Increasing urban density also afforded an explosion of household goods—utensils, kitchen tools, even China tea sets — that led to a growing material culture reflected in middle-class displays of household abundance.<sup>29</sup> With these new devices, however, expectations for housework grew. Ruth Schwartz Cowen observes, for example, that the invention of the egg-beater spurred the popularity of angel food cakes. Since yolks and whites must be carefully divided and beaten separately, the labor eased by the egg-beater actually doubled.<sup>30</sup>

With more ready-made household goods at hand, the housewife had more time to "improve" the home and domestic processes in what Faye Dudden calls "an elaboration of domestic space and rituals."<sup>31</sup> Domestic service also became an increasing trend as middle-class households became more comfortable with hired domestic labor. In *Serving Women*, Dudden notes that two forms of domestic service evolved during the second quarter of the nineteenth century: "help" and "domestics." These new roles changed both the face of domestic labor and the relationship between household employer and employee, giving the housewife a greater sense of control over her home at the expense of her domestic servant.

Beginning in the 1820s, and more noticeably in the 1830s, white, middle-class, native-born Americans began to hire more servants to work in an explicitly domestic sphere. Abandoning the language of "help," they began to call household workers "domestic servants" or just "domestics." The difference was more than semantic: it reflected altered relationships, in many ways more burdensome to domestic workers and

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<sup>28</sup> Ibid.

<sup>29</sup> Matthews described an 1850 Philadelphia hardware store as offering two hundred fifty kitchen tools.

<sup>30</sup> Cowen, *More Work for Mother*, 53.

<sup>31</sup> Faye E. Dudden, *Serving Women: Household Service in Nineteenth-Century America* (Middletown, CT: Wesleyan University Press, 1983), 44.

more complicated for their employers than the “helping” relationship had been.

While domestic servants helped alleviate middle-class housewives of some household tasks, they also incited a shift in identities and relationships within the home. Housewives began to operate as supervisors and household managers, gaining a position of authority within the home at the expense of the domestic servant.<sup>32</sup> Having domestic servants also opened up a series of new considerations and fears for housewives. Beyond training servants to perform domestic service in ways specific to their employers’ homes, housewives performed managerial labor as they trained and supervised new employees, made boarding arrangements within the home, and often took servants’ own conduct and “respectability” as their own responsibility.<sup>33</sup> Fears that servants—often young, unmarried women—would invite their own friends and family into the home, for example, caused many mistresses to disallow their employees any visitors.<sup>34</sup>

Yet the “servant problem” went beyond new responsibilities for the housewives. Domestic servitude was seen as degrading: a profession to be avoided at all costs, especially for an American woman. Ruth Schwartz Cowen notes that “servant girls complained that young men almost automatically treated them as if they were wanton women, that working girls in other occupations were reluctant to socialize with them.”<sup>35</sup> The pool for domestic employment further decreased as language barriers prevented many households from employing Eastern European immigrants and industrial work offered many poor and newly-immigrated women jobs outside the home.<sup>36</sup> In addition to

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<sup>32</sup> Matthews, “*Just a Housewife*,” 12.

<sup>33</sup> Susan Strasser, *Never Done: A History of American Housework* (New York: Pantheon Books, 1982), 167–170.

<sup>34</sup> *Ibid.*, 170.

<sup>35</sup> Cowen, *More Work for Mother*, 125.

<sup>36</sup> Strasser, *Never Done*, 167; Cowan, *More Work for Mother*, 126.

a shrinking labor pool for domestic help, there was a social impulse to move beyond a system of mistresses and maids. Reformers like Sarah Josepha Hale and Catherine Beecher sought to abolish domestic servitude, arguing that women belonged at home, doing their own housework.<sup>37</sup>

In spite of various obstacles and social pressures in employing domestic labor, many families still belonged to the "one servant class" into the twentieth century. Tasks like scrubbing floors, washing windows or hauling laundry required heavy labor and were considered demeaning for middle-class housewives.<sup>38</sup> Yet despite the added help, many housewives still spent forty, fifty or sixty hours every week doing household labor.<sup>39</sup>

From these circumstances, a new proposal for freeing the housewife emerged. As it became harder and harder to find help, the idea of integrating scientific practices into household work began to be promoted as a dependable time-saver for the overworked housewife. These new practices of household efficiency had their start well outside the home. Frederick Winslow Taylor, a mechanical engineer, suggested that a fine-tuned system of standardization and routinized processes would yield increased production on the factory floor. His system grew into a movement as professional societies like the Taylor Society and Efficiency Society of New York disseminated Taylorism not only to mechanical engineers, but also to businessmen and production managers.<sup>40</sup> Women's magazines similarly embraced scientific management as a household solution, if not a cure-all. The *Journal of Home Economics* suggested in 1910 that housewives mimic

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<sup>37</sup> Strasser, *Never Done*, 167.

<sup>38</sup> Cowen, *More Work for Mother*, 156–157.

<sup>39</sup> *Ibid.*, 159. Cowen cites the 1920s study that found that housewives spent an average of fifty-six hours per week doing housework.

<sup>40</sup> Rutherford, *Selling Mrs. Consumer*, 44.



factory and commercial laundry managers by calculating their hours.<sup>41</sup> The *Outlook* ran an ongoing series of articles examining scientific management in the home in 1911 and 1912, including a discussion of the standardization of dishwashing.<sup>42</sup> As Janice Williams Rutherford notes, these widely-read publications brought Taylorism into the home, suggesting that “homemaking could be changed from drudgery to humming efficiency through scientific management, but only if housewives were properly trained as experts.”<sup>43</sup>

The introduction of more streamlined, reified processes for completing household tasks further influenced the scope and representation of household work that helped establish home economics as a field of study. Home economics programs not only trained women to be college-accredited housekeepers, but also offered women what Megan J. Elias calls, “A Department of One’s Own.”<sup>44</sup> Sanitation and bacteriology courses made their way to home economics from engineering and natural science departments, and classes in food science and nutrition were listed in the course offerings. Practice houses were set up in 1910s Home Economics Departments, built to resemble contemporary homes and operated as laboratories for young home economists. These simulated home environments offered an extended opportunity to play house by allowing students to test out methods of home efficiency, prepare meals and sometimes even care for infants in simulated home environments. Laboratories introduced women to the latest household appliances, turning students into household managers and savvy consumers of the latest

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<sup>41</sup> Rutherford, *Selling Mrs. Consumer*, 44–45; “Standardization of Housework,” *Journal of Home Economics* (November 1910): 475.

<sup>42</sup> J.B. Guernsey, “Scientific Management in the Home,” *Outlook* 100 (April 1912): 821; J.B. Guernsey, “Scientific Management in the Home,” *Outlook* 102 (September 14, 1912): 72.

<sup>43</sup> Rutherford, *Selling Mrs. Consumer*, 45.

<sup>44</sup> Megan J. Elias, “A Department of One’s Own,” *Stir It Up: Home Economics in American Culture* (Philadelphia: University of Pennsylvania Press, 2008), 118.

household technology.<sup>45</sup> Courses in interior design, clothing design and decoration further rounded out a young woman's college education.

The role of the housewife as household consumer evolved as more women ventured to markets, department stores and other retail spaces in the growing consumer culture of the Progressive Era. When Westinghouse began selling household appliances around 1915, advertisers already considered women to be the chief consumers in the family. Home efficiency expert Christine Frederick cultivated audiences of advertisers during the 1920s as she theorized ways to sell to the modern American housewife. Her 1929 book, *Selling Mrs. Consumer*, analyzed women's relationship to the consumer economy, noting women consumers' purchasing power and buying habits. She worked as what Gwendolyn Wright calls a "double agent" by appealing to women interested in modern household efficiency while lending aid to advertisers looking to attract female consumers.<sup>46</sup>

Many products approved by professional household "experts" in popular ladies' magazines were prohibitively expensive for struggling families.<sup>47</sup> Tiled bathrooms, gas stoves and an expanding array of utensils and cleaning products were beyond the budgets of low-income housewives. However, during the interwar years, Cowen notes, housewives of lesser means did live, at least some of the time, at a higher standard than their mothers. "Looking back," Cowen writes of the pre-1940 housewife, "we can readily

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<sup>45</sup> By 1917, fifteen universities had set up "practice houses" in their Home Economics schools or departments. Often "practice houses" were used in household management courses: small groups of students lived for a few weeks in a house or apartment outfitted to resemble a real home, gaining hands-on household experience in this laboratory-styled environment. Elias, *Stir It Up*, 42–50; "Practice Houses for Students in Home Economics," *Journal of Home Economics* (1918): 153.

<sup>46</sup> Gwendolyn Wright, "The Model Domestic Environment: Icon or Option?" in *Women in American Architecture: A Historical and Contemporary Perspective*, ed. Susana Torre (New York: Whitney Library of Design, 1977), 18–31. Also cited in Rutherford, *Selling Mrs. Consumer*, 4.

<sup>47</sup> Cowen, *More Work for Mother*, 187.

understand why she, and her daughter in the next generation, believed that gas ranges, pasteurized milk, electricity, washing machines, fortified margarine, and vacuum cleaners had played a significant role” in “decent” living.<sup>48</sup> In addition, new products and tools became seen as instruments of liberation and modern advancement rather than vestiges of slavish “women’s work.”

The histories of household efficiency and practices of work illustrate changing understandings of both household operations as well as the status and responsibilities of the housewife, particularly as she gained and lost various kinds of domestic labor. Appliance companies like Westinghouse would capitalize on the housewife’s changing role as they introduced and promoted products designed to maximize leisure time by minimizing household “drudgery.” This battle to keep the housewife away from toil, in fact, promoted a line of appliances (which we will see in the following chapter) in addition to a concept of managerial labor that supposedly offered homemakers both authority and autonomy.

### **Westinghouse Electric Corporation: Electrifying Fair America**

As women’s roles and responsibilities changed through the nineteenth and early twentieth century, manufacturers modified their technologies and marketing strategies to cater to the modern home. This section illuminates the Westinghouse Electric Corporation’s corporate development and promotion strategies related to the company’s involvement in public displays of technology at America’s world’s fairs and their interest in attracting “Mrs. Consumer.” In addition, this section examines how Westinghouse manufactured and modified its own corporate identity, making a “soulless corporation”

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<sup>48</sup> Ibid., 191.

seem like part of the family, in part, through the company's lavish world's fair exhibits and eventual purchase of several radio stations. In *Creating the Corporate Soul*, Roland Marchand provides a thoughtful look at the transformation of the American corporation from the soulless monolith unknowable by the American public to the friendly neighbor engaged with small-town America. "Beyond their amoral conduct, impersonal size, and lack of humanizing personality," Marchand observes, "the intense secrecy and zealous autonomy of many of the largest corporations seemed to invite charges of soullessness."<sup>49</sup> Westinghouse, General Electric, the American Telegraph and Telephone Company and other large, nineteenth-century corporations worked to brand and rebrand their corporate image as their business grew into the twentieth century. This section describes how Westinghouse grew as a business and developed its brand as both an American innovator and a familiar friend.

Founded in Pittsburgh by George Westinghouse in January 1886, the Westinghouse Electric Corporation pioneered long-distance and high-voltage power transmission. The company was George Westinghouse's fifth enterprise; Westinghouse himself had been experimenting with electric current since the early 1880s.<sup>50</sup> Just a few months after incorporation, Westinghouse Electric employee William Stanley exhibited alternating-current technology by electrifying the village of Great Barrington, Massachusetts.

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<sup>49</sup> Roland Marchand, *Creating the Corporate Soul: The Rise of Public Relations and Corporate Imagery in American Big Business* (Berkeley: University of California Press, 1998), 9.

<sup>50</sup> Westinghouse put inventor William Stanley on salary in 1884, tasking him with creating a direct-current system that debuted at the 1884 Philadelphia Electric Exhibit. Jill Jonnes, *Empires of Light: Edison, Tesla, Westinghouse, and the Race to Electrify the World* (New York: Random House Trade Paperbacks, 2003), 120.

Although not quite the consummate promoter of inventions as Thomas Edison, Westinghouse still looked to spaces of grand exhibition to construct corporate displays.<sup>51</sup> World's fairs, in particular, provided a premier popular venue for Westinghouse to market his company's technical advances, and one of the only sites for people to see new technologies and products in action. In 1876, the Westinghouse Air Brake Company exhibited at the Centennial Exhibition across the state in Philadelphia.<sup>52</sup> By 1893, Westinghouse (now renamed the Westinghouse Electric and Manufacturing Company) participated in the World's Columbian Exposition on a grand scale, beating out Edison's General Electric to win the lighting contract for the fair. Westinghouse illuminated the southside Chicago fairgrounds with 250,000 electric lights, turning the White City into an electrician's paradise.<sup>53</sup> By 1900, the company looked to other fairs and other innovations. Westinghouse himself traveled to the 1901 Paris Exposition while Westinghouse, the company, displayed its numerous dynamos, gas-powered engines and transformers in the Electric Building at the 1901 Buffalo Pan-American Exposition. A hundred Nernst Lamps, Westinghouse's latest patent acquisition from Germany's Walther Nernst, illuminated the exhibits.<sup>54</sup> For the 1904 Louisiana Purchase Exposition in St. Louis, Westinghouse constructed the Westinghouse Auditorium and showed audiences over two dozen short films that documented work at various Westinghouse manufacturing plants. Three-minute vignettes of coil winding machines and female

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<sup>51</sup> Ibid., 138.

<sup>52</sup> At the time, Westinghouse Air Brake was thriving with 120 employees and an annual payroll of \$75,000. The company's success provided a financial cushion for Westinghouse's future endeavors and investments in electric research. Quentin R. Skrabec Jr., *George Westinghouse: Gentle Genius* (New York: Algora Publishing, 2006), 57.

<sup>53</sup> Ibid., 268. See also "To Light the World's Fair; Westinghouse Puts up a Bond of a Half a Million," *New York Times*, May 7, 1892.

<sup>54</sup> "Westinghouse Pan-American Exhibits," *Western Electrician* 29, no. 5 (1901): 65–67. Article also available at <http://library.buffalo.edu/libraries/exhibits/panam/sel/westinghouseexhibit.html> (accessed February 6, 2009).

workers winding armatures promoted the company's innovations by employing the recent innovation of the moving image.<sup>55</sup>

In relation to Westinghouse's involvement in turn-of-the-last-century fairs, Roland Marchand notes that both General Electric and Westinghouse hoped to astonish the 1893 "multitudes by converting buildings into 'fairy-like palaces' with the 'most stupendous' lighting effects 'ever conceived.'"<sup>56</sup> Towers of light, illuminated promenades and glowing exhibition halls all transported audiences to a fantastic world that defied the difference between day and night through illumination. This manufactured fair world was purposefully far removed from fairgoers' homes and apartments as corporate showmanship created electrical exhibits designed to awe audiences with a fantastic dreamland rather than offer a practical comprehension of technology through demonstration.

Amid conflicts with the company's board of directors, George Westinghouse retired in 1910. He died in 1914, a year before the Panama-Pacific International Exposition in San Francisco. (General Electric provided lights for the fair.) In the 1910s, however, Westinghouse Electric continued to grow, expanding its number of factories and types of innovations. As electricity came into more American homes, the market for electrical appliances rapidly expanded.<sup>57</sup> The company entered the home appliance arena in 1917 with the acquisition of Coperman Electric Stove Company, moving the company from Flint, Michigan, to a factory in Mansfield, Ohio. Soon after, Westinghouse released

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<sup>55</sup> *The Westinghouse Works Collection—A 1904 Tour of the Westinghouse Air Brake Company, the Westinghouse Electric and Manufacturing Company and the Westinghouse Machine Company*, DVD produced by the American Mutescope and Biograph Company. See also the Library of Congress catalog: <http://memory.loc.gov/ammem/papr/west/westhome.html> (accessed February 26, 2009).

<sup>56</sup> Marchand, *Creating the Corporate Soul*, 253–254.

<sup>57</sup> In 1907 just 8 percent of American residences were wired for electricity. By 1920 34.7 percent of American homes were wired for electricity. Cowen, *More Work for Mother*, 93.

Coperman's latest innovations: an electric stove and a toaster that turned bread automatically to toast both sides.<sup>58</sup> Westinghouse released more toasters as well as a host of household appliances, including irons, vacuums and electric stoves. The company's investment in the home appliance market signaled a diversification of Westinghouse products as the company moved from delivering electricity to producing electric devices for the home. As Marchand notes, industrial giants like Westinghouse, a primary supplier of equipment to other industries, increasingly developed and sold products to individual consumers.<sup>59</sup> The shift to producing for the home paid off for the people of Mansfield: from 1918 to 1998, Westinghouse was the biggest employer in the Ohio town.

As Westinghouse grew in the 1910s and 1920s, the company developed its own institutional identity and purpose. Its role, apart from developing products, was to not only serve the needs of Americans. They and other companies ranging from automakers to pharmaceutical firms felt qualified to solve America's social problems. Westinghouse executives saw themselves "employed today in the public service."<sup>60</sup> As we will see in this chapter, this institutional impulse to solve modern problems through modern institutions and conveniences would extend into the private sphere in the 1920s and 1930s as Westinghouse became involved in transforming the home with "helpful" technologies from the factory. Yet Westinghouse's new role as social savior continually threatened to undermine and displace women in their own homes.

In addition to branching out into home technologies, Westinghouse followed other avenues of innovation and revenue streams, looking to media outlets as both

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<sup>58</sup> See Westinghouse official website: <http://www.westinghouse.com/timeline.html>. Anita K. Clever, "Fifty Years as an Inventor," *Popular Mechanics*, 1954, 108–110.

<sup>59</sup> Marchand, *Advertising the American Dream*, 2.

<sup>60</sup> *Ibid.*, 199.

income generators and avenues for corporate promotion and product advertising. The Westinghouse Electric Corporation made its first attempt to break into the entertainment industry with the 1920 purchase of KDKA, a Pittsburgh radio station. Shortly after, the company went on to acquire two more stations: Boston's WBZ and Newark's WJZ.<sup>61</sup> Westinghouse's interest in branching out into various forms of media not only indicated an interest in corporate diversification, but also underscored the company's attempts to promote itself in numerous media outlets in order to establish, promote and control its brand identity.<sup>62</sup>

Radio not only helped Westinghouse reach new potential consumers, but helped it reach one type of consumer in particular: the American housewife. In the late 1920s, home efficiency experts like Christine Frederick promoted the radio as a helpful companion for housewives who were often home alone.<sup>63</sup> Westinghouse would also cater its robots toward the American housewife, starting with its first robot, "Tellie" Televox. Televox and the lineage of robots that followed would show Americans what modern living could look like in a way distinct from Westinghouse's ads in popular magazines like *Good Housekeeping* and *Better Homes and Gardens* by promoting products for the home to live audiences around the United States.

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<sup>61</sup> KDKA radio went on the air at 6:00 PM on November 2, 1920, broadcasting the results of the U.S. presidential election. In 1955 Westinghouse acquired DuMont's WDTV in Pittsburgh, changing the name to KDKA-TV. Lynn Boyd Hinds, *Broadcasting the Local News: The Early Years of Pittsburgh's KDKA-TV* (University Park, PA: Pennsylvania State University Press, 1995), 4–6.

<sup>62</sup> Not surprisingly, Westinghouse made a promotional film for the New York World's Fair, *The Middleton Family at the New York World's Fair*, and the company was one of many to experiment and exhibit television at the fair.

<sup>63</sup> Rutherford, *Selling Mrs. Consumer*, 187.



## **A Robot for Every Home: Televox, Vocalite and the Westinghouse Robots of the Early 1930s**



**Image removed due to copyright restriction<sup>64</sup>**

Westinghouse's conception of the household robot began not in an American home, but at a remote electrical substation. In the mid 1920s, Westinghouse engineer Roy James Wensley began working on supervisory control systems at the company's Pittsburgh plant. These systems perform simple automated tasks based on input from a

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<sup>64</sup> Scott Schaut, *Robots of Westinghouse: 1924–Today*.

human operator, such as a mechanical door opening at the touch of a button or the sound of a voice command like “Open Sesame.”<sup>65</sup> Wensley patented several innovations that operated on vocal cues, including the popular Televox system.

The journey from Televox, the device for electrical substations, to Televox, the household robot involves a number of players both inside and outside of Westinghouse. In fact, the choice of Televox to become the first in a series of popular twentieth-century robots was not carefully orchestrated, but rather arbitrary, considering that numerous American companies were developing new technologies that could have easily been transformed into “robot” characters. However, due to the widespread discussion of technological deskilling in the late 1920s, robots were rarely thought of as the bringers of leisure that Westinghouse finally promoted, but represented something more conflicted. As discussed in this dissertation’s introduction, the term “robot,” made popular by Karl Čapek’s *R.U.R.*, depicted human workers being replaced with a manufactured robot other. Those robot workers would then go on to destroy all of humanity. This depiction of the robot was certainly not an image most corporations would embrace. Yet Westinghouse’s mechanical man became popular through a series of ideal fantasies that displayed Americans’ needs from technology as well as immediate technological capabilities. This section will break those fantasies down into several categories to determine who thought what of Televox and his capabilities, starting with Westinghouse engineers, and moving to Westinghouse public relations workers, reporters, cartoonists and live audiences. Through these players, we can follow the rich metaphor of Televox

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<sup>65</sup> In 1926, Wensley installed doors in his lab that only opened when someone said, “Open Sesame.” Scott Schaut, *Robots of Westinghouse: 1924–Today* (Mansfield, OH: Mansfield Memorial Museum, 2006), 21.

through different media and contexts in order to determine how the robot evolved outside the factory to take on different roles in the marketplace.

### **What Engineers Thought of Televox**

While Televox would be Westinghouse's first "robot," Westinghouse engineer Roy Wensley's first incarnation looked like little more than a circuit-laden wood box. Around three feet tall and two feet wide, Televox ("tele" to suggest remote, "vox" to suggest "voice") was operated through voice commands spoken through a candlestick telephone. Westinghouse sold Televox systems initially as a means to control electrical substations by remote, eliminating the need for on-site human operators to monitor meters and flip electrical switches. Wensley explained the pre-Televox process in 1928: "Suppose a dispatcher wants a certain switch in [a remote] station to open; he goes to the telephone and tells the operator to open the circuit breaker #3; he repeats that order and does it and comes back and says it is all done. Let's build a mechanical operator which will answer the telephone, go and open the switch."<sup>66</sup> Televox systems became easy ways to automate and control substations from an operating center without needing a technical infrastructure beyond the Televox and a telephone line. After 1928, over one hundred Televox units were in operation at remote electric substations.<sup>67</sup> The first Televoxes, in fact, resembled more of what we would think of today as a computer, but over time became more embodied as a human man for marketing purposes.

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<sup>66</sup> Ibid., 22.

<sup>67</sup> Ibid., 29.

## What Public Relations Thought of Televox

The transformation from a Televox, the wooden box installed at electrical substation, to “Mr.” Televox, the “electrical man,” occurred in part because Westinghouse wanted to introduce the Televox technology to a non-technical audience as yet another way to promote Westinghouse as a technological innovator. Televox, to advertisers, was yet another angle in a quick-moving advertising industry where advertisers continually vied for consumer attention in magazines, radio and billboards.<sup>68</sup> After a Televox demonstration, Wensley recalled the Westinghouse marketing department’s pitch: “Why you have a mechanical man here. That is a good story for the newspapers. I am sure we can get a few publicity articles in some of the New York papers.”<sup>69</sup> Westinghouse sent Wensley to New York to show Televox to the New York press. In late October 1927, Wensley packed the Televox system into a trunk and traveled to the demonstration, not knowing if anyone would care about his new device for flipping switches by remote. He explained the device and answered reporters’ questions about what Televox could do and what it was capable of. By the next morning, Televox had evolved beyond a system for controlling substations into a real-life mechanical man.

Televox as a plain wooden box of cramped circuits and wires was not distinctive until someone gave the technology a face and a body. In doing so, the unfamiliar new Westinghouse technology became anthropomorphized: familiar and identifiable. Through this process, Televox became the subject of multiple, unintended reinterpretations as various individuals quickly identified a square blob of wires and

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<sup>68</sup> Roland Marchand notes: “In their anxiety to stay alert for any signs of change and in their urgency to impress prospective business clients with the indispensability of their expertise in interpreting current tastes, advertising leaders in the 1920s heralded a new society transforming itself at breathless speed.” Marchand, *Advertising the American Dream*, 3.

<sup>69</sup> Schaut, *Robots of Westinghouse*, 23.

switches as a humanoid figure. These multiple rereadings of the Televox machine steered the physical process of adding a body and face that helped to capture people's imagination regarding this new technology. Televox as humanoid robot made the Televox technology inside more appealing and understandable. In turn, it gave those outside Westinghouse an embodied tabula rasa by which to inscribe their technological fantasies. And, it gave those inside Westinghouse a series of fantasies to build their concepts of technology toward.

### **What Reporters Thought of Televox**



*New York Times*, October 23, 1927. (Image from removed due to copyright restriction)

While the real Televox system was packed away at Westinghouse's New York offices, a sensationalized Televox was taking the city by storm from page 1A of the *New York Times*. Within a few days of the machine's introductions, the Televox device was already being inscribed with fanciful projections of its technological possibilities. The first fantasies—Televox the Electrician and Televox the Household Helper—were described carefully by the *Times*'s Science and Engineering Editor, Waldemar Kaempffert. His description of the machine and these possibilities suggested a rapidly

evolving purpose for the Televox machine well outside of possibility and Westinghouse's intended use. Nonetheless, his article establishes a foundation for future imaginings of Televox born outside Westinghouse's factory.

Kaempffert's article, "Science Produces the 'Electrical Man,'" first offers a brief description of the real Televox machine. "On the table," Kaempffert begins, "stands an invention that might be mistaken for a radio receiving set or an automatic telephone switching machine, but is in reality an artificial, electrical man."<sup>70</sup> Accompanying cartoon illustrations of the Televox system with newly-sprouted mechanical limbs verify the mechanical man that Kaempffert describes in the article. This illustrated Televox performs tasks routinely done by male factory workers. Resembling a factory inspector, Televox moves from panel to panel reading an electrical gauge, measuring water levels at a mountain dam, tightening a screw and even turning on a light to examine an engine. (This is particularly peculiar since even the fictive Televox has no eyes.) Kaempffert goes on to connect the "nuts and bolts" of the machine with a technological possibility by describing how Televox's construction from ordinary objects has been repurposed to yield fantastic results. "Here are the familiar radio tubes to amplify feeble currents and the equally familiar desk telephone, but applied to the new purpose of controlling lifeless mechanisms that may be in Chicago or even across the sea in London."<sup>71</sup> Here, Televox goes from the familiar to the exotic, yet in both circumstances, humans control Televox, allowing him to operate within the home and from far-flung destinations.

The lure of Televox's new limbs, compounded with his ability to be and work from virtually anywhere, propels the rest of the article, transforming the device from a

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<sup>70</sup> Waldemar Kaempffert, "Science Produces the 'Electrical Man,'" *New York Times*, October 27, 1927.

<sup>71</sup> *Ibid.*

wooden box to a mechanical man with humanoid limbs and features that enable it to do tasks on its own. Televox can not only flip switches at remote substations, but “this electrical substitute for humanity” promises a future in which “men and women will do little more than think and bid automatons to fetch and carry, manufacture the countless things a machine civilization requires, sweep streets, cook, wash and dig ditches.” In addition, this future with Televox not only allows for more leisure, but also provides a conflict-free environment as Televox obeys his human masters’ commands “without the usual human arguing, impudence or procrastination.”<sup>72</sup> Kaempffert’s fantasy of technological omnipresence also operates as a fantasy of command by offering servile robots as ideal laborers with built-in obedience. In addition to being versatile, Televox units can be controlled, even dominated, giving all humans who own Televoxes a sense of authority and control over their world and their technology.

After his brief consideration of Televox as the productive, ordered worker, Kaempffert provided a domestic setting for his detailed fantasy for Televox. He imagined a fictional housewife, Mrs. Twitchell, to illustrate Televox’s “manners,” situating him as a home companion and ready-made “mother’s helper.” When the fictional Mrs. Twitchell commands the machine to “connect me with the draft-opening switch,” Televox’s buzzes are translated to respond, “You’re connected with the furnace-draft switch. Permit me to report that the drafts are closed.”

“Toot.” Says Mrs. Twitchell, or ‘Open the drafts.’”  
“Back comes a long buzz. ‘The drafts are opened.’”<sup>73</sup>

From her home, Mrs. Twitchell and Televox converse in this special language in order to perform household chores together and maintain the home. If she leaves a

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<sup>72</sup> Ibid.

<sup>73</sup> Ibid.

window open, the reliable Televox buzzes to tell her. This occurs likewise if the baby is crying or the children come in the house. This conversation gives Mrs. Twitchell household help, but also a companion who is always attentive, always checking in. They connect with one another through a secret code of beeps and buzzes, communicating perfectly to both maintain the home and offer Mrs. Twitchell a non-threatening friend. In addition, Televox's loyal company offers a different fantasy than simply running a well-organized house. He allows Mrs. Twitchell to remain free of human interaction by eliminating her need to hire, train and pay a human servant. For the better part of the day, Mrs. Twitchell can be alone in her home.

For Kaempffert, Televox assumes his most useful position in the home, ready to accomplish any household task as part of a team. As seen in the history of American domestic practices, Taylor's system of scientific management shaped household work and offered new avenues towards domestic efficiency. Since "science" produced the mechanical man, Kaempffert assumed that Televox embodied the same scientific methodologies that led to more efficient, productive processes inside the household and out. Televox was created by science and consequently was viewed and billed as a team player who not only obeyed, but embodied technology as efficient, scientific and inhumanly obedient. Televox didn't have to be taught, argued with or convinced that the new methods of Taylorism were better than previous, unrationalized practices. Rather, his metal being embodied those methods of household efficiency, even when the housewife did not.



## How Public Relations Changed Televox

As Kaempffert and others outside Westinghouse explored the possibilities of Televox as the “electrical man” and “mechanical servant,” the company reciprocated reporters’ assumptions about Televox by building a physical body for the Wensley’s wooden box of wires and tubes. On February 21, 1928, “Herbert Televox,” or “Mr. Televox,” was born.<sup>74</sup> Made of a Televox machine encased in a two-dimensional cardboard cutout with a crudely hand-drawn face, Herbert Televox toured the country with Westinghouse demonstrators showing off the potential future of electrical men. Yet in these displays Televox was not switching traffic lights or supervising gauges. Instead, Westinghouse’s Televox demonstrations showed Televox as a convenient household device that any woman could operate. A demonstration with Fanny Brice instructing Televox on “Electrical Day” at the Home Show in Milwaukee combined the ease of operating Televox with Hollywood glamour as Brice gave instructions via a whistle to a cardboard Herbert Televox.<sup>75</sup> While Brice demonstrated her star power, Mr. Televox demonstrated his limited range of skills: Televox shows were comprised of a program where Televox turned on a miniature column of street lights, activated a siren and powered a Westinghouse-brand vacuum cleaner.<sup>76</sup>

While Televox’s vaudevillian live displays seems a far cry from the cutting-edge mass media advertising of the 1920s, they were actually a very clever instance of modern advertising. Roland Marchand defines the development of “modern” advertising as the point at which ads hid their origins as mass communication tools and achieved a personal

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<sup>74</sup>Schaut, *Robots of Westinghouse*, 25.

<sup>75</sup> Image in Schaut, *Robots of Westinghouse*, 34.

<sup>76</sup> R.J. Wensley, “Instructions for Televox Demonstration,” 1928. Reprinted in Schaut, *Robots of Westinghouse*, 40–43.

tone.<sup>77</sup> Through its small-scale stage performances, Televox connected directly with Westinghouse consumers in their own hometowns, his personal appearances helping to personify the mammoth Westinghouse Corporation and making Televox look less like a technology of mass communication and more like an out-of-town visitor.

### **What Cartoonists Thought of the New Televox**

For the grand finale on many of these stages, an operator dropped Televox's arm to cause a counter-weight to unfurl a sign or flag. It was a far cry from the cartoon depictions of Televox created by Kaempffert and others in the mainstream media. While the cardboard version turned on switches, the illustrated version could do everything a man — or a housewife—would need. Cartoons showed Televox walking the dog, carrying the baby, mowing the lawn, shaking a martini, hauling shopping bags, knocking out a burglar and even hugging a “lovelorn woman.”<sup>78</sup> These depictions were far from Westinghouse's initial promotion of Televox as a labor-saving device and instrument for household management. Audiences had begun to extrapolate Televox's abilities, imagining Televox as a caring domestic companion rather than a pedestrian home appliance.

As we saw earlier in this chapter, hired domestic labor became increasingly unattainable in the twentieth-century home, and robot labor became a metaphor to democratize feelings of control. In addition to this control, however, was an element of camaraderie. Cartoon versions of Telvox appeared to provide controlled companionship that suggested not only can household tasks now be automated, but elements of

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<sup>77</sup> Marchand, *Advertising the American Dream*, 9.

<sup>78</sup> Syndicated newspaper cartoons, “What Mechanical Man May Do” and “It Won't Be Long Now” are reprinted in Schaut's chapter, “Televox: The Robot Legacy Begins,” in *Robots of Westinghouse*.

interpersonal communication and relationship-building can be automated as well. The robot, in addition to being a household servant, becomes a friend controlled by human command.

### **Televox and Playing Human**

Kaempffert's article, Westinghouse's promotions, audience turnout and live reception to the shows, cartoon images, and the occasional modification from an engineer—these all worked to define Televox's significance through anthropomorphization, transforming it from a suitcase of wires into a "him" with a humanoid body and a willingness to be both household servant and domestic partner. Before proceeding, however, it is necessary to define what exactly anthropomorphism is. David Levy notes, "It is important to recognize the distinction between believing that a computer, for example, is essentially human and merely treating it in the same or similar ways as one might if it *were* human."<sup>79</sup> This distinction between believing that an object is human and treating it as if it were lends itself to a better understanding of how Televox was used and played with: there is no evidence that Televox was ever considered human or a threat to humanity. Rather, the technological object was dressed up and masqueraded as lifelike, but this process was more focused on molding the robot to Westinghouse consumers' expectations and technological fantasies. As we will see at later points in this dissertation with other robots, Televox was meant to *play* human, not necessarily *be* human. This is particularly relevant to Televox because it underscores the ways various individuals used this metaphor to tease out the effects of new technologies on daily lives. There is no evidence that individuals tried to buy Televox, imagining that he would walk their dogs

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<sup>79</sup> David N.L. Levy, *Love and Sex with Robots* (New York: HarperCollins, 2007), 75.

and comfort their children, yet they packed this collection of circuits with a set of attributes that reflected on their own visions, imaginings and needs. Televox was powerful not for its innovative underlying technology, but because it could represent what individuals needed in numerous aspects: a servant, a friend, a caregiver, an entertainer.

Televox, the device devised for remote industrial operation at electric companies, now had a very different consumer audience—the household consumer. These consumers were not expected to buy Televox and install him in their home. Instead, they were expected to buy into Westinghouse technologies—to consider Westinghouse the go-to brand for all things related to the home. These consumers—mostly housewives—nonetheless remain mute in the ongoing branding of Televox for the home. They were, perhaps, in the audience at Televox performances, but the voices of these women remain largely left out of the record. The next section, however, will follow the metaphor of Televox into the lives of women indirectly by looking at what cartoonists and Westinghouse public relations imagined women saw in Televox.

### **Romancing the Housewife**

According to many magazine and newspaper cartoons, if Televox could turn on switches, he apparently could also turn on women. A *Women's Wear* sketch depicting a Televox home demonstration in front of female shoppers connects ladies' shopping, household help and romantic amour. Here, purchasing a Televox appliance is akin to choosing a lover, as one shopper muses, "I can't decide whether I prefer one with the blond finish." Her girlfriend remarks, "I should like [Televox], but my husband is frightfully jealous." The threat of the electrical man also turned Televox into a rival and

ready replacement for men.<sup>80</sup> Another wife threatens her husband with dismissal thanks to this new technology: “Now, don’t fuss [Husband]. I wish I could trade you in for the 1929 model.” The cartoon not only depicts Televox as a purchasable companion, but it also offers readers of *Women’s Wear* a liberation from both housework and wifedom through the purchase of a machine that through itself and its labors promises to give women independence by rendering the husband obsolete.



***Women’s Wear Magazine*, July 23, 1928 (Image removed due to copyright restriction.)**

In these non-Westinghouse depictions of Televox, the American female consumer seemed to always come out ahead. Through her Televox, she gained a servant, companion and mechanical boy-toy to do her bidding. Yet, within this “new” system, old assumptions of domesticity were at play that limited the potential futures Televox provided. While Televox never left the housewife’s side, she, in turn, never left his. The home, even under Televox’s care, was still the woman’s chief sphere. She might go shopping with Televox, but no cartoon ever considered her leaving Televox behind for schooling or to join the workforce. Instead, she remained tied to domestic technology by

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<sup>80</sup> *Women’s Wear*, July 23, 1928.

operating as manager, steward and supposed rewarder. Yet the leisure time Televox supposedly offered seemed filled with more housework or household management as the housewife continually worked with the ever-ready, ever-industrious Televox to better her home.

The never-ending companionship between woman and machine was romanticized through published photographs of Televox “flirting” with women, reinforcing the budding romance between housewife and the household’s electrical man. A front page *Los Angeles Times* photo titled “‘Tellie’ Tell Me How Much He Knows” showed Televox, “the dog-faced mechanical servant,” with an arm wrapped around a giggling young woman as she talks into Televox’s attached phone.<sup>81</sup> Another photo taken in Los Angeles titled “The Automatic Sweetie” caught a woman and Televox in a more compromising position as Mrs. P.G. Garrett, the wife of the Chairman of the Pacific Coast Electrical Convention, reclined against Televox, embracing the cardboard figure while gazing up in adoration.<sup>82</sup> Yet another image from a demonstration in Canton, Ohio showed a young woman poised on a ladder holding Televox’s hand while Wensley looks on approvingly.<sup>83</sup>

Although ladies made eyes at Herbert Televox and his labor-saving efficiency, the early Televox was often depicted as a servant more interested in washing lingerie rather than taking it off. A sexless lover and faithful laborer, Televox brought companionship, obedience and industriousness into the home, giving the overworked housewife a surrogate for her husband and housekeeper. That Televox could be co-worker,

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<sup>81</sup> “Televox Plays Host,” *Los Angeles Times*, June 14, 1928.

<sup>82</sup> Televox collection, Southwest Museum of Engineering, Communications and Computation. Reprinted also in Schaut, *Robots of Westinghouse*, 37.

<sup>83</sup> Schaut, *Robots of Westinghouse*, 43.

companion and consumable object all at once seemed to be the epitome of this technological fantasy, which at its center assumed that an appliance that could capably communicate as well as work efficiently offered the housewife everything she needed.

Through 1928 and 1929, Mr. Televox's cardboard cutout changed though the technology behind it remained basically the same. Televox's head morphed from squarish to rounded, his drawn-on nose widened and narrowed, a tuft of hair was added, then a hat. By late 1929, Westinghouse engineers had added a new feature, or habit, to Herbert Televox. In addition to vacuuming and turning on lights, Herbert could now smoke cigars.<sup>84</sup> The "superhuman" domestic machine invented by Kaempffert and others in 1927 was now becoming more flawed, more relatable, more human.



**Man lighting a cigar on Televox, 1929. (Image removed due to copyright restriction.)**

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<sup>84</sup> Image of Westinghouse employee lighting Herbert's new cigar, in Schaut, *Robots of Westinghouse*, 53.

Through these modes of dress up, Televox also became a parody of male sexuality. While he lacked a cardboard penis, the new cigar gave Televox a phallic sign of his masculinity. The square Televox unit had already been obviously masculinized, leaving little doubt that this technology was male. Now, the naked cardboard robot that loved to labor seemed to be focused more on leisure and love. Ironically, Televox the robot, purported to alleviate the housewife's "servant problem," was becoming a hypothetical handful for the housewife. After just over a year of being introduced into the home, Televox had assumed the poor stereotype of servanthood that Victorian household reformers railed against: he enjoyed leisure over work; dabbled in vices like cigar smoking; and with hat-on-head he appeared ever-ready to leave the home when something else exciting emerged.<sup>85</sup> Televox had gone from Ladies' Helper to Man's Man with a few wardrobe changes from Westinghouse's PR department.<sup>86</sup> This new sexual satire that had started in the homemaker's kitchen left women out entirely.

In this supposed female consumer fantasy, women were not only losing their mechanized servant, but could also lose their husbands. As Herbert Televox discovered his new vice, hen-pecked male husbands discovered theirs. Televox had always been characterized and promoted as a red-blooded (or wired), heterosexual male, but what if there was a woman Televox to suit needs other than household chores? Hearst newspaper cartoonist T.E. Powers explored a lady version of Televox in his panel "A New

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<sup>85</sup> For a detailed analysis of the "servant problem, see Strasser, *Never Done*.

<sup>86</sup> Televox's "First Birthday Party" was covered by many American and international newspapers. The accompanying image of Televox standing at a banquet table surrounded by six Westinghouse businessmen suggest the robot's prominence in the boardroom. Televox's birthday was even covered in Germany's "Jahrbuch der Technik," 1928-29, 15.



Mechanical Servant.”<sup>87</sup> Here a blonde robot drops the dinner plate, pours soup on her male master’s head, blows up the stove making coffee and struts out of the house wearing “Madame’s furs and new hats” before demanding a raise. The only thing she appears to do right is in a panel titled “Lover’s Night” where she smiles, eyes vacant, from the lap of a cigar-smoking police officer while clutching an oversized glass of wine. Though inept at household chores, this female depiction of the mechanical servant performs tasks no “good” housewife will do, attending to a husband’s sexual appetites while his human wife cooks dinner.

Televox was not formally retired, but Westinghouse began developing and promoting new robots in the early 1930s, effectively ending Televox’s short run. Yet Televox’s display of domesticity became one that Westinghouse would continue to repeat throughout the 1930s. In this portrayal of domestic practices, however, one voice—the housewife’s—was notably silent. While photographed housewives gazing adoringly in posed images or were drawn up in cartoons, women’s agency over their own relationship with Televox and the domestic technology he represented was surprisingly absent. Televox’s domestic fantasy, developed by Westinghouse public relations, put a face on technology and domesticity, but made the face that of a male heterosexual who can only give so much domestic obedience before he must transform into an indulgent man’s-man. In the end, this domestic fantasy shows Televox, cigar in mouth, exiting the home and leaving the housewife behind.

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<sup>87</sup> T.E. Power’s cartoon, “A New Mechanical Servant” (© 1930) reprinted in Schaut, *Robots of Westinghouse*, 49.

## **Failed Westinghouse Robotic Attempts: Katrina Van Televox and Rastus**

Although Herbert Televox became the penultimate mechanical man in the late 1920s, there were attempts to solve household needs with a “female” device. Yet this Westinghouse experiment and another attempt—creating a “black” robot—were dismal failures that appear like sideshows in Westinghouse’s robotics history. This section discusses these corporate endeavors at giving technology a non-white race and female gender as well as uncovers the reasons why these technologies did not capture the attention of audiences in the same way as Televox.

As early as 1910, Professor Isaac M. Rubinow introduced one of his “servant girls of the future,” Sarah Electric Button. Sarah, along with his poorly-named “Mart Pneumatic Valve,” would take the place of Rubinow’s and other’s housemaids. (Rubinow noted that he had employed “a long line of more or less efficient housemaids and therefore ... [was] a practical expert as well as a theorist.”)<sup>88</sup> While Rubinow’s Electric Button never became a household name, Westinghouse resurrected the female housemaid in the form of Katrina Van Televox: the Mechanical Girl. Presumably a distant Dutch cousin to Televox, Katrina was made of cardboard in the shape of a floor length dress. An apron was fixed around her center with a hole cut through it exposing the Televox machine. Her face, supposedly painted after a female Westinghouse employee, smiled brightly under a white work bonnet.<sup>89</sup> Katrina could perform any of Herbert Televox’s tasks, and could even smoke a dainty cigarette while doing chores. However, her tours around smaller 1930s mid-Atlantic venues afforded her less marketing potency than her more famous electrical cousin.

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<sup>88</sup> “INVENTORS WARRING ON THE SERVANT GIRL; Professor Rubinow Suggests Some Mechanical Instead of Human Housemaids for the Future,” *New York Times*, March 6, 1910.

<sup>89</sup> Posters of Katrina Van Televox ads are in Schaut, *Robots of Westinghouse*, 55.

Katrina may have not made it to the big stage for reasons beyond being simply a variation on the Mr. Televox. While she came at a moment of transition for the company, she presented an image not of the future but of a bygone past. Katrina, in her uniform complete with house apron, was reminiscent of a servant girl akin to the foreign, female domestic servant prevalent in nineteenth-century middle-class American homes following industrialization. Her painted face, while pretty, offered a view of antiquated household labor fit for the Victorian parlor instead of the house of the future. Furthermore, while Katrina was a “feminine” robot, her buttoned-up version of femininity was a far cry from the blonde robot caricature featured in “A New Mechanical Servant.” As a sexless, female servant, Katrina offered neither the progressive values of the modern woman nor the streamlined efficiency of the modern robot, rendering her culturally obsolete long before the technology that powered her.

Katrina Van Televox was not the only Westinghouse robot to be upstaged by Herbert Televox. While the famed “Tellie” demonstrated his abilities on main stages, Rastus, a black robot, premiered as a West Coast sideshow attraction. In June 1930, Westinghouse research engineer Dr. Phillips Thomas and S.M. Kitner demonstrated Rastus, a robot made to resemble a small African American man, at the American Electric Light Association’s (AELA) annual convention in San Francisco.<sup>90</sup> Rastus could stand, sit and bow, say six words and had a photo-electric cell in his head that when activated by a light, triggered a gunpowder charge that blew the apple off his head. The robot’s grand finale was a William Tell performance featuring Kitner with an arrow pointed at Rastus’s head. When light gleamed off the arrow, the apple exploded.

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<sup>90</sup> Ibid., 56.



**Rastus stands on a box facing the audience while Kitner fires at an apple on his head. Image reprinted on Cyberneticzoo.com<sup>91</sup>**

Rastus looked less like the technology of tomorrow and more like a character from an early twentieth-century minstrel show. Rastus was covered in black Goodyear rubber and wore a pair of overalls and a bandana tied around his neck, signifiers of a poor, rural black stereotype.<sup>92</sup> His act was one of vaudevillian violence whereby Rastus's existence appeared to be threatened by Kitner at every chance. Yet, Rastus remains passive, waiting for the arrow to hit. His performance is less about doing things and more about having people do things to him.

Unlike Televox, who demonstrated technological possibilities and time-saving needs, Rastus performed American racism. Even the name, "Rastus"—a stereotyped

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<sup>91</sup> Cyberneticzoo.com, "A History of Cybernetic Animals and Early Robots" (accessed December 19, 2008).

<sup>92</sup> Ibid.

name for African American men—did not connote technological possibility, but suggested a pejorative black stereotype: the ignorant, shiftless Negro. Before Rastus Robot, for example, there were several Rastuses in blackface minstrelsy. Rastus characters even appeared in several short films in the 1910s, including *How Rastus Gets His Turkey* (1910) and *Rastus in Zululand* (1910).<sup>93</sup> While fewer Rastus films appeared in the next decade, similar African American characters like Amos and Andy kept the Rastus figure present enough to have Dr. Phillips Thomas create a blackface robot with his name.<sup>94</sup>

Like Herbert and Katrina, Rastus toured around the country with Westinghouse engineers for demonstrations at trade shows and university campuses. In late November 1930, Rastus visited Armour Institute of Technology (now the Illinois Institute of Technology) as a complement to Dr. Thomas's "electric flea circus."<sup>95</sup> An article in the *Armour Tech News* reported, "Doctor Thomas will bring Rastus Robot, his mechanical slave, with him. This robot will perform various duties at the sound of his master's voice with a quiet, astonishing efficiency. In addition to seeing this mechanical man work, the students will have the privilege of listening to his voice, for ... he speaks."<sup>96</sup>

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<sup>93</sup> Rastus shorts include *How Rastus Gets His Turkey* (Pathé Frères: 1910); *How Rastus Got His Chicken* (unknown: 1911); *Rastus Among the Zulus* (unknown: 1913); *Rastus and Chicken* (unknown: 1911); *Rastus and the Game Cock* (Keystone Film Company: 1913); *Rastus Loses His Elephant* (Pathé Frères: 1913, produced in France); *Rastus in Zululand* (unknown: 1910); *Rastus Knew It Wasn't* (Lubin Manufacturing Company: 1914); *Rastus' Rabid Rabbit Hunt* (Pathé Frères: 1914); *Rastus' Riotous Ride* (Pathé Frères: 1914); *Rastus Runs Amuck* (Gaumont Company: 1917—animated short).

<sup>94</sup> The *Amos and Andy* radio program ran as a nightly serial from 1928 until 1943. It continued as a weekly situation comedy from 1943 to 1955, and as a nightly DJ program from 1954 to 1960. Elizabeth McLeod, *The Original Amos 'n' Andy: Freeman Gosden, Charles Correll and the 1928–1943 Radio Serial* (Jefferson, NC: McFarland, 2005).

<sup>95</sup> "Noted Scientist to Demonstrate Mechanical Man: Engineer Shows Results of Research at Assembly." *Armour Tech News* 6, no. 10 (November 25, 1930): 1.

<sup>96</sup> *Ibid.*

Rastus's few words and his black rubber body has been lost: little is known of him beyond 1930.<sup>97</sup> However, of the robots in Westinghouse's stable, Rastus was unique because of his racial identity. Whereas Televox was the Mechanical Man and Katrina was the Mechanical Girl, Rastus was the Mechanical Slave. Because of this, Rastus was also the only robot with visible skin, giving him the physical appearance of a particular ethnic minority. In addition to being "skinned," Rastus was also unique because he operated not to complete a function, but to demonstrate particular racial stereotypes. While other Westinghouse robots performed to demonstrate innovative technologies, Rastus the robot performed to demonstrate a white American fantasy of a completely subservient African American race. Rastus's performance as a robot, ironically, hearkened back to Capek's original intent of the word "robot" to signify "slave." Rastus the robot's position as a slave performing for his robot "master," Dr. Thomas, underscored a complicated construction between worker/slave and engineer/master as an engineer creates a mechanical worker to perform as a black man in a minstrel show.

While Rastus performed for the electrical convention delegates—dubbed by the *San Francisco Chronicle* as, the "Light Men,"—leaders in the electricity industry spoke of better tomorrows. Owen D. Young, chairman of General Electric and the Radio Corporation of America, said on the convention's first day, "While the rest of the world is catching up with us on our ten years' start, we shall again be making advances into fields unknown."<sup>98</sup> These unknown fields, however, were quite well known by the homemakers attending the convention as travel companions for their husbands in the

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<sup>97</sup> Schaut, *Robots of Westinghouse*, 50.

<sup>98</sup> Articles in the *San Francisco Chronicle* use the term "Light men" in reference to the fair. These include "Light Men Hear State Control Plans Launched," *San Francisco Chronicle*, June 20, 1930; "Young Leader Slated Chief of Light Men," *San Francisco Chronicle*, June 20, 1930; "Owen D. Young Says Industry Will Advance," *San Francisco Chronicle*, June 18, 1920.

electrical industry. American Electric Light Association (AELA) President Sloan remarked in his keynote, “electrification of the home is the first step to happiness.”<sup>99</sup> Sloan’s intent of creating a fully electrified home was realized in an exhibit of a model home wired for electricity and appliances.<sup>100</sup> Sloan’s words, however, only fell on the men attending the convention. Most of the women at AELA (largely there as representatives of the women’s committee and wives of delegates) were taken out of the San Francisco Civic Auditorium for luncheons and tours of the city while much of the convention was held.<sup>101</sup> Rastus, therefore, was reserved for the entertainment of AELA’s predominantly male audience. His place was decidedly only in the corporate sphere. Unlike Televox, there is no picture of Rastus with a woman or in the modern American home.

The fact that Rastus had to be explicitly raced to denote “blackness” indicates a concept of white invisibility. Although many of these Westinghouse robots were made of metal or cardboard, it was necessary to explicitly skin the robot body in order to make a robot that read as non-white. In addition, Rastus was a robot skinned to resemble a black stereotype. Since we will see that Westinghouse presented robots as by default male and Caucasian, Rastus was an exteriorization of otherness: the alien, the African American. Presented through his name, synthetic skin, clothes and performance routine, Rastus was intended to offer a full representation of the stereotypical black soul. However, as Thomas Foster notes, this representation is “partially excluded on a temporal level,

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<sup>99</sup> “Electricity Held First Aid to Happy Home,” *San Francisco Chronicle*, June 19, 1930.

<sup>100</sup> “Full Program for Delegates,” *San Francisco Chronicle*, June 18, 1930.

<sup>101</sup> “Flowers for Fair Visitors,” *San Francisco Chronicle*, June 18, 1930.

because blackness functions as a nostalgic memory.<sup>102</sup> Although filled with new technologies, Rastus was skinned to resemble a black inferiority situated in the past. Therefore, his description, the “mechanical slave,” was based in American nostalgia for black slavery rather than in modern labor and servanthood. By skinning technology and coding it as black, Westinghouse materialized a ‘consumable soul’ that was designed to be antiquated. This view of technological modernity, complicated by a nostalgia for a racist American past, did not appear to be well-received by audiences: clear-cut efficiency and defined processes seemed more captivating to audiences than the reimagining of technology wrapped in a black body.

Although Rastus and Katrina offered little in Westinghouse technological innovation, they did indicate a lack of public interest in robots that challenged the figure of the robot as presumably white, heterosexual, and male. To make this non-white, non-male robot, Westinghouse used wardrobe, paint and makeup in addition to the naked cardboard body. Beyond Rastus and Katrina, one might assume that future Westinghouse robots would be dressed and assembled like those in a Disneyland display, but this was not the case. Thereafter for Westinghouse, the figure of the robot needed no clothes. Yet the robots’ nakedness became encoded as presumably white and male. Through the 1930s, Westinghouse’s mechanical spokespeople reverted back to the Televox model: white, male, and naked would come to be the face of technology for Westinghouse.

### **Willie Vocalite**

Katrina Van Televox was not the only Westinghouse robot character to debut in spring 1931. In fact, her premiere was outshined by a new robot named Willie Vocalite.

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<sup>102</sup> Thomas Foster, *The Souls of Cyberfolk: Posthumanism as Vernacular Theory* (Minneapolis: University of Minnesota Press, 2005), 3.



Constructed at the Westinghouse Appliance Division, Vocalite began touring the nation in March 1931, performing for audiences at airports and exhibition halls, as well as salesrooms featuring Westinghouse appliances.<sup>103</sup> On March 1, 1931, Vocalite, or “Mr. Vocalite,” debuted at the Barr Exhibition Hall in St. Louis, Missouri in celebration of the first Westinghouse refrigerators to be sold west of the Mississippi.<sup>104</sup> Vocalite’s three-dimensional, metal, barrel shaped body and moveable arms and legs allowed him to perform more tricks than any previous Westinghouse robot. On the day of Vocalite’s debut, nearly seven-thousand people saw the new robot stand from his seated position, move his arms and smoke a cigarette before returning to his seat. In addition, Vocalite became a real spokes-figure for the company through a series of human voice recordings on seventy-eight rpm records.<sup>105</sup> Through these recordings Vocalite appeared to sing a number songs, give speeches and even “converse” with the audience (providing everyone expected a pre-programmed response). His humanoid body—complete with eyes, mouth, hands, nose, and ears—made him a lifelike Westinghouse robot that Americans could meet “in person” as he toured from store to store drawing potential consumers to his stage, conveniently located next to Westinghouse appliances.

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<sup>104</sup> Schaut, *Robots of Westinghouse*, 66.

<sup>105</sup> *Ibid.*, 65.



**Like Televox, Vocalite appears in press stills in close contact with attractive, young women. In this image published in the *Atlanta Constitution*, a woman sits on Vocalite's lap. *Atlanta Constitution*, March 29, 1931 (Image removed due to copyright restriction.)**

Westinghouse orchestrated carefully Willie Vocalite's appearances in towns and cities to draw out audiences to local stores and promote Westinghouse's domestic technologies. The company suggested copy for the would-be store venue to publish in the local paper, as well as an advertisement.<sup>106</sup> Willie was carried in a truck with mounted speakers and a sign on the side, reading "Willie Vocalite the Westinghouse Mechanical Man." When audiences came to Willie's demonstration, the robot's tricks complemented a corporate sermon given by Willie's operator, a Westinghouse representative. Here, Westinghouse noted the research and development that went into Willie was considerable, and suggested that if those in the audience wanted the newest and the best

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<sup>106</sup> Examples of Westinghouse's script and clippings of regional newspaper ads can be found in the Mansfield collection. Some from the Public Service Company of Indiana, the Borstein Electric Company and Bullock's department store are published in Schaut, *Robots of Westinghouse*.

innovations in electrical appliances, they should buy Westinghouse. While Willie stood up, smoked, and sat down, the operator would go on to say that for those audience members wanting a robot like Willie in their homes today, Westinghouse appliances were the closest option. After all, the ingenuity Westinghouse engineers put into Willie also went into Westinghouse's home appliances.<sup>107</sup>

Audiences could not see the technology behind Willie Vocalite even though they could see its results through his human-like actions. Unlike the Televox robots, Vocalist's circuits and wiring were masked behind a shiny metal barrel-shaped chest. In fact, his entire body masked the technology beneath, rendering it mysterious and unknowable. In many respects, Vocalite's hidden workings turned the robot into a "black box:" a device or system that is viewed only in terms of input and output, without any knowledge of its internal workings. By doing this, Westinghouse created a stand-in for the concept of technology itself. Westinghouse's technology no longer needed to be represented in circuit-board patents or electrical networks. Now, Westinghouse's technology, regardless of what form it would eventually take, could be packaged and sold as something in itself.

In *Science in Action*, Bruno Latour introduces "black box" as a term "used by cybertechnicians whenever a piece of machinery or a set of commands is too complex. In its place they draw a little box about which they need to know nothing but its input and output."<sup>108</sup> The black box allows scientists and engineers to both circumscribe technological components with inner workings that remain irrelevant to a device's overall

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<sup>107</sup> Schaut, 68. While Vocalite was featured at appliance stores around the nation, he had no place in Westinghouse's magazine advertisements in women's magazines like *Good Housekeeping*. At the height of Vocalite's career (just before the Chicago World's Fair), Westinghouse published eight appliance ads in *Good Housekeeping*, none featuring Vocalite.

<sup>108</sup> Bruno Latour, *Science in Action: How to Follow Scientists and Engineers through Society* (Cambridge, MA: Harvard University Press, 1987), 2-3.

output, and to substitute for those black-boxed technical processes assumptions based in social and cultural influences that are often wholly unrelated to the mechanisms inside the “black box.” In the case of Vocalite and other Westinghouse robots, this process of hiding the technological process yielded social processes like anthropomorphization and masculinization of technology, as well as the complicated act of masking the robot’s gears and wires in order to generalize Westinghouse technology by rendering it unseeable.

The transfer of meaning from the robot on stage, to the concept of “Westinghouse technology” hidden beneath the robot’s shell, to the Westinghouse home appliance at home was a popular Westinghouse ploy. While Vocalite and other Westinghouse robots could not be sold, corporate demonstrations suggested that their parts were indeed “for sale” through the technology contained in Westinghouse’s electric stoves, dishwashers and other appliances. For Westinghouse, audiences should come away from Willie Vocalite and the innovative technology he represented with the notion that by buying a toaster, they were buying their very own part of Willie to take home and display in the kitchen.

As Rastus and Katrina were dressed to hide modern technology behind the antiquated guise of the subaltern, Vocalite was constructed to simultaneously embody technology, yet keep its inner workings hidden from the audience, letting their imaginations run wild. Audience members’ visions of future possibilities could easily transmute the mishmash of wires, chords and gears inside Vocalite into a sleek toaster, iron, or coffee pot. Thus, by hiding the technological interiority of Vocalite, the robot could represent “could be” anything ... that Westinghouse manufactured.

Vocalite's tour schedule became so packed that by early 1933 Westinghouse needed another robot. The Mansfield plant built Willie Westinghouse, a mustached version Willie Vocalite, to promote the company at venues Vocalite could not make. The robots set out in different directions, but with the same tricks, and the same corporate message: buy Westinghouse because its robots are made from the same research and of the same parts as found in Westinghouse appliances. Willie Westinghouse or Vocalite's "brother," as he was called, needed to pick up the slack even more as Vocalite stopped touring for several months to appear on his biggest stage ever: The 1933 Century of Progress International Exposition in Chicago.

### **Willie Vocalite, Domestic Visions, and the Century of Progress**



**Display ad, *Chicago Daily Tribune*, November 26, 1933 (Image removed due to copyright restriction.)**

When Vocalite was plugged in at the Chicago World's Fair, he was added to a circuit of exhibited progress previously unmatched by any other international exposition.

While earlier world's fairs sought to exhibit the material benefits of empire, the mechanical dynamos of industry, and the exoticism of the subaltern peoples of the world, Depression-Era fairs presented a future far brighter than the present circumstances currently offered. In *World of Fairs*, Robert Rydell suggests that the six expositions held during the 1930s became cultural icons for America's hopes and future, displaying more prosperous tomorrows through scientific and technological accomplishments that promised to, one day, make America a better place to live.<sup>109</sup> In many cases at the fair, this better place to live started in the home. Visions of future progress and modernity came together through the transformation of domesticity through new technologies in the form of material goods. New household "labor-saving devices," promised consumers added leisure. Faster dishwashers took the stage alongside Vocalite, becoming models for entertainment as they performed household chores.

Without walking into a single exhibit hall, new views of modern housekeeping and domestic life were readily available. Part of the 1933 fairgrounds was taken up with examples of future home-life by the Homes of Tomorrow exhibit, which included models of future dwellings. The House of Today offered fairgoers a present-day foil for the innovative homes to come, but the gleaming white, one-story structure also suggested an optimistic middle-class life far pricier than most Depression-era incomes could afford. A glass-covered, octagonal House of Tomorrow, complete with roof-top balcony, suggested the streamlined modernity to come. Other examples promoted the companies constructing them. Beyond homes of today and tomorrow, branded homes, including a

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<sup>109</sup> Robert W. Rydell, *World of Fairs: The Century-of-Progress Expositions* (Chicago: University of Chicago Press, 1993), 1. The Century of Progress in Chicago was the first of the American Depression Era fairs. Following it were the 1935–36 San Diego California Pacific Exposition, the 1936 Dallas Texas Centennial Exposition, the 1937 Cleveland Great Lakes and International Exposition, the 1939–40 San Francisco Golden Gate Exposition, and the 1939–40 New York World's Fair.

Frigidaire home, a Masonite home, a Mayflower home, a Cypress log cabin, a *Good Housekeeping*-Stran-Steel metal home, as well as a series of houses constructed by various builder's associations gave visions of tomorrow with industrial looks and corporate seals of approval.<sup>110</sup> Even when there was no material house, the concept of the home was still used: General Electric's exhibit featuring a history of electricity was contained in their "House of Magic:" a metaphorical domicile that demonstrated the wondrous powers of electricity.

In themselves, the fair's model houses were more than promotional exhibits or brick-and-mortar promises of a better tomorrow. They were laboratories where experiments combining practices of Taylorism, home efficiency and practical innovation could be materialized, packaged and sold to modernizing American homemakers, allowing them an opportunity to "try on" different ways of living within the safe, enclosed context of the World's Fair. The houses themselves, as Davin Heckman argues, provided more than model applications of industrial technologies and scientific management in the home. They offered "the context for the insertion of information technologies into the workspace and the home, creating yet another way to produce value beyond the limits set by frontiers of time-managed spaces."<sup>111</sup> The webs of appliances offered in the model home and represented symbolically by interactive Westinghouse robots offered an early method of managing household duties by establishing manageable technological infrastructures.

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<sup>110</sup> Monika Brooks, *1933 Chicago World's Fair Homes of Tomorrow Exposition—Complete Listing of Homes & Bibliography* (Huntington, WVA: Marshall University, updated June 2007). Available at [http://users.marshall.edu/~brooks/1933\\_Chicago\\_World\\_Fair.htm](http://users.marshall.edu/~brooks/1933_Chicago_World_Fair.htm) (accessed March 23, 2008).

<sup>111</sup> Davin Heckman, *A Small World: Smart Houses and the Dream of the Perfect Day* (Durham, NC: Duke University Press, 2008), 37.

The fantasy of total human control over servile robots was specifically visualized in the film *Leave It to Roll-Oh*, which debuted at the 1940 New York World's Fair. Here a lumbering, mechanical man performs chores around the home of a white, middle-class housewife, freeing her from the drudgery of housework. The film's narrator breaks up the picture, noting that, while Roll-Oh is just a daydream, what do exist are "his little brother and sister robots; the millions of small mechanical servants that never ask for afternoons off; the amazing machines and gadgets that almost seem to think for themselves ...". Roll-Oh disappears from the housewife's kitchen, replaced by an array of appliances, including a toaster, tea kettle, and stove "that can do everything but read the cook book." This network of appliances offer to control the domestic space like the loyal Roll-Oh. But, rather than enabling the fictional housewife to leave the home, she simply remains idle within it. Thus, through Roll-Oh and her network of "thinking machines" the housewife may gain free time but she never can leave the home "unattended." Instead, she is pictured lounging and reading while technology tends to her home. Yet, she appears not as the foundation of the network, but as a vestigial appendage. She must stay within the home, even though she serves no purpose.

As Televox left his housewife behind in the home, Roll-Oh moves her into a position of apparent uselessness. This pictured fantasy is far from another advertised impression in which many housewives were learning, cleaning, maintaining and replacing new technologies. This became such a part of the idealized daily routine that housewives in Westinghouse ads were lauded as experts in domestic technology. A June 1933 Westinghouse refrigerator ad in *Good Housekeeping* reads "I bought it for the dependability," below the picture of a smiling housewife. "Seven hundred kitchen-wise



women, practical home economists, helped design Westinghouse refrigerator cabinets ... thus assuring convenience-features to match the mechanical efficiency provided by Westinghouse engineers.”<sup>112</sup> Here, the housewife is professionalized, rebranded as a “home economist,” and pictured as working with engineers as part of a collaboration that matches the appliance’s intended user with the developers. The result, according to the ad, is an appliance “complete in every detail.” This collaboration between the engineer as developer and the housewife as expert consumer yields not only a convenient, more efficient refrigerator but suggests a partnership where women have agency to design their homes for better tomorrows. Of course, the only real way to buy into this fantasy of egalitarian collaboration with Westinghouse engineers was to buy a Westinghouse refrigerator.

At the Chicago World’s Fair female consumers were of course limited in their access to engineers and designers. Rather than helping sketch designs on the drawing table, they could view finalized possibilities of better of domestic wares through interactive product exhibits and models of the American homes tomorrow. The Hall of Science’s McKay Lounge offered visitors a respite from the fair upon spring-action metal furniture designed for sunrooms, porches and lawns. Chromium-plated gliders, chairs, tables, smokers, and stools tended by lounge staff offered a space for relaxation, refreshments and the perusal of the latest in accessories for the American home or garden.<sup>113</sup> A disembodied voice in General Electric’s model kitchen (developed at the “General Electric Kitchen Institute”) explained the advantages behind the latest G.E. appliances. These exhibits, designed to allow visitors to see and interact with products

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<sup>112</sup> “Westinghouse Refrigerator ad: Convenience vs Dependability,” *Good Housekeeping*, June 1933, 157.

<sup>113</sup> <http://www.cityclicker.net/chicfair/science.html> (accessed May 27, 2009).

within model spaces, offered a streamlined vision of domesticity, modernity and leisure where “smart” technological devices eased the work and worries of modern consumers.

Human models in these demonstrations, representing the intended consumers for these displayed appliances, were largely white, middle, class women. As in *Leave It to Roll-Oh*, the middle-class housewife took the stage as a convenience-obsessed consumer of leisure. Young white women modeled items within domestic and consumer exhibits, happily displaying the latest innovations, methods and fashions. Smiling models demonstrated Hoover vacuum cleaners, calmly maneuvering the vacuums around streamlined sculptures.<sup>114</sup> In addition to electric conductors and turbines, the Electrical Building included a “Model Dress Shop,” containing white, female mannequins posing in fashions upon revolving stages as a black maid mannequin looked on approvingly.<sup>115</sup> These images of the future collectively presented at the fair suggest that a better life could only be enjoyed by young, white housewives with money for the latest innovations.

It was not only the shiny new consumer gadgets that indicated that a better living could be reached through “technologically-advanced” devices. The technologically deterministic optimism seeped through a variety of displays, anticipating the fair’s unofficial motto: “Science Finds, Industry Applies, Man Conforms.”<sup>116</sup> The fair even offered a vision of science leading humanity, through an art piece placed atop the

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<sup>114</sup> A model demonstrating the use of a Hoover vacuum cleaner. Images of Progress: Views of a Century of Progress International Exposition, 1933-1934 (Special Collections and University Archives, University of Illinois at Chicago Library).

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[http://collections.carli.illinois.edu/cdm4/item\\_viewer.php?CISOROOT=/uic\\_cop&CISOPTR=1324&CISOBOX=1&REC=19](http://collections.carli.illinois.edu/cdm4/item_viewer.php?CISOROOT=/uic_cop&CISOPTR=1324&CISOBOX=1&REC=19);

[http://collections.carli.illinois.edu/cdm4/item\\_viewer.php?CISOROOT=%2Fuic\\_cop&CISOPTR=370&DMSCALE=25&DMWIDTH=600&DMHEIGHT=600&DMMODE=viewer&DMFULL=0&DMX=75&DMY=0&DMTEXT=&DMTHUMB=1&REC=20&DMROTATE=0&x=333&y=207](http://collections.carli.illinois.edu/cdm4/item_viewer.php?CISOROOT=%2Fuic_cop&CISOPTR=370&DMSCALE=25&DMWIDTH=600&DMHEIGHT=600&DMMODE=viewer&DMFULL=0&DMX=75&DMY=0&DMTEXT=&DMTHUMB=1&REC=20&DMROTATE=0&x=333&y=207) (The model dress shop contained models of white male and female customers along with a black doorman and a black maid.)

<sup>116</sup> “Century of Progress Exposition.” The Electronic Encyclopedia of Chicago. Chicago Historical Society. © 2005 <http://www.encyclopedia.chicagohistory.org/pages/225.html> (accessed March 20, 2009).

prominent Fountain of Science, a focal point at the fair.<sup>117</sup> Atop the fountain stood artist Louise Lentz Woodruff's "Science Advancing Mankind," a metallic sculpture of a man and a woman being ushered forward by Science—represented as a five-hundred point, white bronze robot—to a better life with technology.<sup>118</sup> A pamphlet from the fair explained, "The theme of this fountain—Science Advancing Mankind—is represented by the great robot-like figure typifying the exactitude, force, and onward movement of science, with its powerful hands at the backs of the figures of a man and a woman, representing mankind."<sup>119</sup> Woodruff's robot is easily twice the size of the human figures in her sculpture. Rather than being in servitude to mankind, the robot crouches over them, like a father both leading and guarding his children, bending forward to advance the group at a slow, measured pace. The robot's gaze, toward the ground and toward his human charges, suggests that he does not need to look forward, but only to rely on the vision of mankind as they move on their forward-facing course. The man and woman, arms slightly raised, appear to gaze upon this unseen course with reverence, as though this new future promised a heavenly existence for both man and machine.

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<sup>117</sup> The Fountain of Science stood in the front entrance of the Hall of Science and could be easily viewed from the outdoor terrace, the rotunda or the Sky Ride cars that transported visitors above the fairgrounds.

<sup>118</sup> For more information, read Cheryl R. Ganz, "Science Advancing Mankind," *Technology and Culture* (2000): 783–787.

<sup>119</sup> Cheryl R. Ganz, *The 1933 Chicago World's Fair: Century of Progress* (Urbana: University of Illinois Press, 2008), 56.



**Fountain of Science at the 1933 World's Fair.  
CARLI Digital Collections, University of Illinois**

Cheryl Ganz argues that Woodruff's benign robot offered a vision of the mechanical man counter to many popular representations (particularly those of Karl Čapek's *R.U.R.* and Friz Lang's *Metropolis*). The robot in *Science Advancing Mankind* is heroic, protective and a trustworthy companion leading man to his destined future with scientific innovations. However, as shown through *Televox*, *Rastus*, *Katrina Van Televox*, *Willie Vocalite* and *Willie Westinghouse*, there also existed a representation of the robot that promised a life not just of efficient "progress," but of technologically-driven companionship and entertainment. Westinghouse's robotic at-home companions

did not lead their humans into a noble future but operated as the mechanical slaves that newspaper reporters and corporate promoters dreamed up.

While the Hall of Science offered a shining beacon for a life with oversized, cleanly symmetrical robots, the Electrical building showed a less marvelous future with the nicotine-addled Willie Vocalite continually performing on the eighth floor. Willie's performances remained much the same as they had been when he toured department and appliance stores around America. However, he was now situated within the elaborate Westinghouse floor, a department-store-like exhibition space featuring the wonders of Westinghouse innovation. The context of new Westinghouse products reinforced Willie's intimate relationship to the corporate goods. In addition, the fair's bustling souvenir trade caused Willie to become a bit more of a commodity than ever before as miniature robot replicas resembling Willie were on display behind the toy counter of Marshall Field's downtown department store.<sup>120</sup> Far beyond the fairgrounds, Willie had made a major transformation. In addition to being a surrogate for Westinghouse appliances, Willie was also now a toy.

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<sup>120</sup> An image of the Marshall Fields toy counter shows a two- to three-foot Willie look-alike behind the toy counter. Schaut, *Robots of Westinghouse*, 74.

## Controlling Toys and Possibilities for a Future Tomorrow



Detail from "Chicago World's Fair" article in *Modern Mechanix*, October 1933, 73. Here J.M. Barnett gives Willie instructions via a telephone. His verbal commands are transferred by photoelectric cells to the control system, a modified Televox unit.<sup>121</sup>

Vocalite's place as a child's companion was reinforced by images of the robot with children visiting the fair, and by his newfound status as a useful plaything. A 1933 *Modern Mechanix* article shows Willie seated while a young boy stares at him, mouth

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<sup>121</sup> Ibid., 70.

agape, clutching his hand as if to shake it in greeting. The caption reads, "... he will do anything you command—almost. He'll smoke, blink his eyes, shake hands, talk, stand up or sit down. In fact, he'll even sing." These tasks are far from "anything." In fact, they're simple actions towards conveying humanity by mimicking human body language.

Viewing and responding to Vocalite's programmed gestures offered audience members a form of interaction between man and machine that had less to do with labor and more to do with playful mimicry.<sup>122</sup> The idea that these human characteristics turned on and off by human command furthered a fantasy of human control over servile technology as well as indicated that ready-made human companionship was available at the flip of a switch. In the above image, the boy and the man behind him operating Vocalite are in control, commanding the robot to "play human" by interacting with the gazing boy.

Through his array of performative tricks, Vocalite demonstrated both human gestures and innovations in remote-control technology. While the prior Televox robot was based on earlier concepts of remote control that related to maintaining electrical substations, Vocalite appeared more as a fantastic toy than a mechanical electrician. This was in part due to innovations in remote control and in the American toy industry that influenced how Vocalite was marketed as well as who interacted with him on stage. This concluding section offers a view of children's relationships with Vocalite in order to situate how Vocalite fit into the playscape of 1930s America. This section hints at themes of gendered interaction, science as play, and branding technology for children. These themes will be more fully developed in the following chapters, and we will see how the

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<sup>122</sup> To see Vocalite's performance: Burton Holmes, *A Century of Progress Exposition: Exhibits of the World's Fair* (1933). Burton Holmes's other Fair film, *The Fair at Night*, (1933) is available through Flickr: <http://www.flickr.com/photos/burtonholmesarchive/sets/72157613012062535/comments/#comment72157617451917840> (accessed April 28, 2009).

focus of robot culture increasingly shifts into fantasies of control over technology.

Clark C. Abt suggests, “a game is a particular way of looking at something, anything.”<sup>123</sup> We learn from games and play, are influenced by them as we learn the rules and our control over them. The act of play itself is significant for childhood development and can be a powerful tool for adults as well. Play provides a safe space to experiment and learn outside of the world of real consequences. The act of playing with technology is both a way to develop confidence and power over it, as well as a way to reimagine ourselves and our relationship to it. Ultimately, the act of play can provide a way to feel control over something new or unfamiliar. While Vocalite could not be controlled through purchase, the introduction of the robot as an interactive character that could be manipulated within the confined space of the World’s Fair or traveling stage offered a learning experience that could even allow a child visiting the fair to feel like he had a relationship with the Westinghouse’s mechanical man developed through controlled play.

In the early 1920s “control” for engineers meant “switching on, or off, devices ... either directly or through relays.” Early “remote control” was developed for switching on or off electrical devices or gauging the amount of an element (like electricity) going in or out of a device.<sup>124</sup> However, by the early 1930 innovations in control technology influenced how and what could be controlled remotely. General Electric installed a remote control system in Rockefeller Center Theater in New York, while other firms built radio-controlled airplanes (sometimes dubbed “robot planes”) for military use.<sup>125</sup>

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<sup>123</sup>Clark C. Abt, *Serious Games* (Lanham, MD: University Press of America, 1987), 5.

<sup>124</sup> Stuart Bennett, *A History of Control Engineering, 1930-1955* (London: The Institution of Electrical Engineers, 1993), 2.

<sup>125</sup> *Ibid.*, 20. Articles for “robot planes” dotted popular scientific journals like *Popular Mechanics* and *Modern Mechanix* from the 1930s until as recently as 2006. Examples include Rolfe, Douglas, “ROBOT Planes to FIGHT ENEMY AIR RAIDERS,” *Modern Mechanix*, July 1934, 52–53 and 133. “Robot Space



While engineers incorporated remote control into aircraft and lighting systems—paving the way for automatic control systems—toymakers were adding control systems to children’s toys, changing the act of play through novel electrical animations. These electric toys became widely advertised objects fit for any American boy’s Christmas list. A November 1931 ad for Chicago’s Mandel Brothers department store plugged the latest products in the store’s Toyland: “you’ll find the very newest toys to be had, from remote control electric trains to great big beautiful dollies.”<sup>126</sup> An illustration of a girl starting at a baby doll, her hand waving while her mother gazes approvingly, suggests that she isn’t the demographic for the unseen remote control train. A *Popular Mechanics* article highlighting remote control toy boats guided by magnets shows two young boys bent over a tray populated by small boats. The author states, “Guided and powered by a magnetic control in a boy’s hand, the little merchant marine can ply the playroom ocean, put in at sheltered docs . . . then ship out for faraway harbors.”<sup>127</sup> Here, remote control signified control and exploration and also had a decidedly male user. The little merchant marine is a boy who not only transports imaginary goods using this new technology but can build and explore his own ocean world.

Historian Gary Cross traces these remote control toys to an (often male) fascination with mechanical movement: “Automata in the form of mechanical figures or birds had been powered by water or even steam from the second century BCE in Alexandria, Egypt.”<sup>128</sup> Cross connects these ancient toys to more recent innovations:

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Plane Flies, Lands, Crashes,” *Popular Mechanics*, April 10, 2006. Available at [http://www.popularmechanics.com/blogs/science\\_news/2603531.html](http://www.popularmechanics.com/blogs/science_news/2603531.html) (accessed May 3, 2009).

<sup>126</sup> Mandel Brothers ad. *Chicago Daily Tribune*, November 26, 1931.

<sup>127</sup> “Remote-Control Toy Boats Guided by Magnet,” *Popular Mechanics*, August 1935, 235.

<sup>128</sup> Gary S. Cross, *Kids’ Stuff: Toys and the Changing World of American Childhood* (Cambridge, MA: Harvard University Press, 1997), 15.

“French artisans Jacques de Vaucanson and Pierre Jaquet-Droz fashioned mechanical angels, pecking birds, and other novelties that delighted adult aristocrats ... In the 19<sup>th</sup> century these objects trickled down to children as windup toys, and they survive today as remote-control robots.”<sup>129</sup> These innovations were decidedly connected to male amusement: mechanized toys provided opportunities to experience new technologies that were reserved for boys, and as we will see, it was assumed that women would grow up to be served by and exploit new technologies, but not to control them.”<sup>130</sup> Westinghouse furthered this long-standing Western tradition of introducing mechanical toys to boys through the company’s press stills, which featured boys interacting with their bulky, metal male robots.

As newspaper articles designated the gender “designed” to play with these new remote-controlled toys, they also praised toys for being harbingers of better days to come. A December 1933 article in the *Washington Post* titled “Grown-ups Vie with Children in Admiration of the 1934 Super-Models” lauded new toys as agents of technological and social change: “The machine age has interested Toyland’s craftsmen, and as a result the play-world is going to have efficient transportation. Electricity has been harnessed to drive fire-rescue trucks, and fast mails, and other exciting vehicles. All the new models run toward ultramodernism with even a futuristic touch. As a result, when Johnny and Willy ... unscramble their gifts, they’ll really be five years ahead of the times.”<sup>131</sup> Here toymakers, inspired by new technologies, build a better (play) world for Americans: one

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<sup>129</sup> Ibid.

<sup>130</sup> For another discussion of nineteenth-century gender-specific toys, see Karin Calvert’s chapter on androgynous dress and gender-specific toys in *Children in the House: The Material Culture of Early Childhood, 1600–1900* (Boston: Northeastern University Press, 1994).

<sup>131</sup> “Grown-ups Vie with Children in Admiration of the 1934 Super-Models,” *Washington Post*, December 17, 1933.

designed with rescue services, streamlined transportation, and ultramodern excitement. In addition to pushing players “five years ahead of the times, “these toys seemed to point to a model utopia that could be constructed and carried out within the comfort of an American home.

Connections between electric toys, boys and future technologies carried a newfound correlation between scientific research and leisurely play. A 1939 article, “Toys Aid Research,” suggested that science and technology themselves are nothing more than playgrounds for the mind. Through their work, “sedate play-boys of science are demonstrating scientific principles or gauging weak danger points in diminutive models that will some day grow up into giant realities. It’s Christmas all year for them ... and nice work for those who get it.”<sup>132</sup> Another article applauded Willie himself as a toy fit to inspire as well as alleviate tedious work, affording more time for play: “A deceptively simple looking toy-man is Willie Vocalite, Westinghouse laboratory stooge, who looks like a tin man out of a fairy tale but who can do tedious jobs to save less efficient humans the bother.”<sup>133</sup>

Westinghouse also took steps to show boys playing with its devices, even if they weren’t primarily designed for children’s play. A *Good Housekeeping* advertisement for Westinghouse table fans depicts a group of boys using a fan as a propeller for their homemade toy airplane. Exasperated at the smooth-running fan, the ringleader proclaims, “We gotta get another fan; this Westinghouse don’t make any noise! It don’t sound like a airplane!” While the playful boys repurpose household technology for their amusement,

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<sup>132</sup> Emily C. Davis, “Toys Aid Research,” *The Science News-Letter* 36, no. 25 (December 16, 1939): 390. *The Science News-Letter* was a biweekly magazine geared toward non-technical audiences consisting of short articles about new scientific and technical developments. Article topics were often gleaned from science and technology journals.

<sup>133</sup> *Ibid.*, 390–391.

it still doesn't suit their needs. They "may not appreciate the *silence* of a Westinghouse fan," the ad says, "But *you* will, in your home."<sup>134</sup> Here the *Good Housekeeping* reader, presumably a housewife, benefits from silent running of dependable Westinghouse appliances, while her boys play with her appliances, using Westinghouse technologies designed for the home to build their own technologies and entertain themselves. This circuit of innovation may yield disappointed playgroups, as indicated by the Scorpions airplane, but it also suggests that appliances can inspire boys into activity while they supposedly eliminated household activities for women.



Westinghouse advertisement, *Good Housekeeping*, July 1933, 183.

<sup>134</sup> Westinghouse ad, *Good Housekeeping*, July 1933, 183.

Boys' play offers a very different, gendered way of seeing technology. While Westinghouse assumed women looked to technology as a means for freeing themselves of household drudgery, the company marketed their technologies for day-to-day use and exotic metal men as inspirations for American boys. Women were presumed to see technology only for the purposes it is being marketed for. They had a discerning eye for refrigerators, but could not imagine creative ways to innovate technology beyond its present purposes. Boys, conversely, looked to technology with wonderment, treating new innovations as playthings that further their own development as well as create new technologies. In short, Westinghouse depicted boys as being inspired to action by their home appliances, and house-bound women as being allowed leisurely passivity within the home.

### **Conclusion: Robots and Homes Evolve and Devolve**

In just five years, Westinghouse robots progressed from suitcased-sized supervisory control systems for electrical substations to household servants, companions and toys. They came to represent not only a consumer dream of a more efficient household, but symbolized the magical impact of technology at their best and racist, sexist stereotypes at their worst. Unlike *Metropolis's* robot-Maria, who seductively dances for an all-male audience, or Capek's biological robots, who overthrow their human masters and form their own government, Westinghouse's image of robotic technology offered a future that was both leisurely and efficient, lonely and mediated by ever-present mechanical companionship.

However, the robots offered by Westinghouse could not perform any of the tasks they promised to alleviate, nor were they constructed of the appliances they promoted.

While Televox could turn on a vacuum, the robot's shabby cardboard arms could not move it. Although Vocalite could smoke and sing, he could not toast bread, make a bed, or perform the tedious tasks labeled as domestic drudgery.

Ideals of progress and efficiency cultivated through these fantasies in fact appear isolated and sterile: Housewives sit idle in neatly managed homes, their only companion a tin-man who can sing, but cannot talk. One reason for this lopsided view is that these dreams of a better home-of-tomorrow were generated by home efficiency experts, Westinghouse ad men, cartoonists, and reporters. While advertisements and press releases pictured women prominently using these technologies, housewives themselves had little voice in technological development or representation. Nonetheless, the sale of these fantasies suggests an evolving lifestyle whereby the housewife's identity, her daily household responsibilities, and her duty to make a better domestic life for her family became deeply tied to consumer practices based around new technologies. Rather than feeling a loss of control in an changing society brimming with new practices, evolving technologies, economic tumult and the threats of a World War, audiences and consumers could leave it Roll-Oh, Vocalite or Televox to give them a routinized reflection of human identity, a sense of technological mastery, and the promise of push-button control over a rapidly changing Depression-Era America.

Westinghouse's promise of convenience and control through technology reaches its zenith in the late 1930s through the figure of Elektro the Westinghouse Moto-Man. The next chapter will explore Elektro in depth, tracing how a seven-foot robot built partially out of home appliances would become an example of American heterosexual masculinity.

## Chapter 2

### Elektro and Selling the World of Tomorrow

Televox, Willie Vocalite and other early Westinghouse robots offered a refactoring of Westinghouse technologies into a human form. Through rotors, rubber, and records Westinghouse could give Americans mechanical men as mechanisms for envisioning the possibilities of future technological innovation. Elektro, however, offered more than previous robots. Standing almost seven feet tall, Elektro the Westinghouse Moto-Man was the largest, most expensive and technically complicated of the Westinghouse showbot line. The giant robot had articulated movements, a sophisticated voice-command system and infrared capabilities that let the robot discern color. The innovations this analog robot possessed were also met with its towering size and physique. Elektro was the last and the pinnacle of the Westinghouse robots, and whereas other Westinghouse robots toured for two-to-three years, Elektro was on display from 1939 through the late 1950s.

In the spring of 1939, Elektro: The Westinghouse Moto-Man offered visitors to the New York World's Fair both robotic possibility and a dystopian technological nightmare. Despite his golden body, robustness and sunny disposition, comparisons between Elektro and Frankenstein's monster introduced Elektro in the print media. *Mechanix Illustrated* called Elektro, "the mechanical man is a robot nightmare come to life; an actual monster of metal that stands 6 feet 10 inches high, weight 260 lbs. and walks, talks, sings, dances (just a simple waltz—no jitterbug stuff), smokes, knows

colors, smells flowers and counts on his fingers/ Call him Elektro.”<sup>135</sup> In terms of body type, Elektro resembled Boris Karloff’s film portrayal of Frankenstein’s monster – a role Karloff played three times between 1931 and 1939.<sup>136</sup> The comparison was not far-fetched. Like Karloff’s 1930s film monster, Elektro was gigantic in size at seven feet tall and weighed two-hundred-sixty pounds. The robot’s oversized, squarish metal feet were shaped like boots, and his shuffling walk resembled Karloff’s lurching gait, which was produced by a pair of thirteen-pound, asphalt shoes that added several inches to the five-foot-ten actor.<sup>137</sup> Elektro’s disproportionally large blockhead and broad chest completed his Frankensteinian look.

Beyond size and movement, Elektro and Frankenstein’s monster share other similarities. The monster was made out of human parts in Dr. Frankenstein’s lab. Electric current, delivered through a bolt of lightning, charged the monster with enough electricity to bring him to life. Elektro was made out of household parts – the cords from Westinghouse irons and coffeemakers; the wheels from vacuum cleaners—in a lab inside the Westinghouse Appliance Division in Mansfield Ohio.<sup>138</sup> Elektro was electrified through a power chord that charged his motors, but he was animated by man: A human operator spoke prepared, well-metered voice commands that were transferred into electrical impulses that prompted Elektro’s gestures, movements and speech.

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<sup>135</sup> Stanley Gerstin, “Science Secrets Revealed at New York World’s Fair,” *Mechanix Illustrated* XXII, no. 3 (July 1939): 39.

<sup>136</sup> Karloff played Frankenstein’s monster in *Frankenstein* (1931), *Bride of Frankenstein* (1935), and *Son of Frankenstein* (1939). *Son of Frankenstein* was released in January 1939, just five months before the fair opened on April 30, 1939.

<sup>137</sup> Stephen Jones, *The Frankenstein Scrapbook: The Complete Movie Guide to the World’s Most Famous Monster* (New York: Carol Publishing Group, 1995), 37.

<sup>138</sup> Scott Schaut, *Robots of Westinghouse, 1924–Today* (Mansfield, OH: Mansfield Memorial Museum, 2006).



Like Karloff's Frankenstein, Elektro also appeared on the silver screen, but the comparisons end there between the two figures. Upon the Westinghouse stage at the fair, Elektro, a walking, talking, smoking mechanical man, performed for the everyday fairgoers as well as for the fictional Middleton family in Westinghouse's Technicolor film, *The Middleton Family at the New York World's Fair* (1939).<sup>139</sup> After the fair, Elektro toured the U.S. and Canada, appearing on smaller stages set up in local appliance stores selling Westinghouse products. In his second film, shot over twenty-years after the *Middleton Family*, Elektro's bronze finish was covered with silver plate for his role as an alcoholic computer opposite Mamie Van Doren in *Sex Kittens Go to College*.

This chapter illuminates Elektro's place in the history of Westinghouse robots, as well as his role as one of the popular representations of robotics, as Elektro transitioned from the better tomorrows of the Depression Era to the tense climate of World War II. It examines Elektro's "career," specifically in relation to the female Westinghouse employees that both operated him and provided comic relief for his act. As we saw in the last chapter, Westinghouse robots were presented as operating within the private sphere, aiding the housewife. However, within the Westinghouse factory, women assembled Westinghouse technology on the factory lines. In taking a "long view" of Elektro's development, depiction, and demise, we can see how Elektro interacted with women from the Westinghouse factory and on the exhibition stage as well as how Westinghouse used Elektro in stage shows to represent 1930s masculinity, emergent technology and human interaction.

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<sup>139</sup> "According to reviews, this picture was one of the first industrial films made for the commercial market and was offered free to exhibitors to show on the bottom half of their double bills. It was produced by Audio Productions, Inc., for Westinghouse and was used to promote Westinghouse products at the 1939 New York World's Fair." Film record for *The Middleton Family at the New York World's Fair*, AFI Film Catalog.

## Why Elektro Matters

Elektro presents a unique and rich case study because despite being part of six-decades of Westinghouse history, he has been largely dismissed by technology historians as another in a series of antiquated “showbots” developed for casual amusement. In fact, as mentioned in the introduction to this dissertation, many fair historians have dismissed Elektro as a campy relic of a by-gone era, if they mention Elektro at all.<sup>140</sup> In his lengthy study of the two Depression-era “Worlds of Progress” fairs (Chicago 1933/34 and New York 1939/40), Robert Rydell barely mentions Elektro, noting only that Westinghouse “introduced fairgoers to Moto, the mechanical robot.”<sup>141</sup> In his later review of a 1939 World’s Fair exhibit at the Museum of the City of New York, Rydell mentions Elektro only parenthetically: “The next section of the exhibit ... provided an overview of the fair that included drawings of proposed exhibits, magazine covers, a slideshow, and souvenirs (including pins showing the robot Moto-Man and the advertising symbol Mr. Peanut).”<sup>142</sup> Other fair scholars are similarly dismissive of Elektro, providing brief description but little more. Larry Zim, Mel Lerner and Herbert Rolfes’s *The World of Tomorrow* lists Elektro among other attractions through a quote from the official fair guidebook.<sup>143</sup> Joseph Corn and Brian Horrigan’s *Yesterday’s Tomorrows* introduces Elektro as a foil for the menacing robots depicted in “technocracy” magazines of the early 1930s. They conclude that Elektro was simply a “gentle giant, harmless to women and children,

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<sup>140</sup> Despite having a chapter titled “Futurama and the Future,” Alfred Heller’s *World’s Fairs and the End of Progress: An Insider’s View* makes no mention of Elektro or the other Westinghouse displays of future innovations.

<sup>141</sup> Robert W. Rydell, *World of Fairs: The Century-of-Progress Expositions* (Chicago, IL: University of Chicago Press, 1993), 111.

<sup>142</sup> Robert W. Rydell, “Selling the World of Tomorrow: New York’s 1939 World’s Fair,” *The Journal of American History* 77, no. 3 (December 1990): 966–967.

<sup>143</sup> Larry Zim, Mel Lerner, and Herbert Rolfes, *The World of Tomorrow: The 1939 New York World’s Fair* (New York: Harper and Row, 1988), 78.

designed to entertain visitors at the fair, and sell a benign message about technology and the future.”<sup>144</sup> If Elektro seemed benign to Corn and Horrigan, the robot was downright boring to David Gelernter. In his painstakingly-researched history of the 1939 World’s Fair, Gelernter suggests in a discussion of a 1939 *Newsweek* article that Elektro was the latest in a popular search for “bigger and better Frankensteins,” but the robot’s abilities to tell the difference between red and blue seemed “ridiculous.” Gelernter concludes his tour of Westinghouse, passing by Elektro saying “I am much more impressed with the automatic electric dishwasher in the Hall of Electrical Living.”<sup>145</sup>

Although Elektro loses out to the dishwasher in Gelernter’s account and is discounted along with Mr. Peanut for space in the margins of Robert Rydell’s influential *World of Fairs*, his place in Westinghouse history, and the histories of home appliances, robotics and media studies, is significant. While the New York World’s Fair itself captivated forty million fairgoers and inspired the creation of two-hundred-thirty-six newsreels and numerous popular and scholarly accounts, it remains a moment in a longer history featuring Elektro and other Westinghouse robots.<sup>146</sup> While listing Elektro as just one of many exhibits at the fair neatly folds the robot into the fair’s history, it overlooks Elektro’s own evolution and place among earlier predecessors, many of which also

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<sup>144</sup> Joseph J. Corn and Brian Horrigan, *Yesterday’s Tomorrows: Past Visions of the American Future* (New York: Summit Books; Washington, D.C.: Smithsonian Institution Traveling Exhibition Service, 1984), 74. Technocracy was a short-lived movement led by Howard Scott that argued that scientist and engineers were the only people who could effectively run a technologically advanced society. The cover of *Technocrats Magazine* features technology run amok in the form of a giant robot walking through a crowd of people as they run away from the U.S. Capitol Building. The image suggests that, without governance from engineers and scientists, technology will soon destroy America. For further information, see David E. Nye, *Electrifying America: Social Meanings of a New Technology, 1880–1940* (Cambridge, MA: MIT Press, 1990).

<sup>145</sup> David Gelernter, *1939: The Lost World of the Fair* (New York: Free Press, 1995). Ironically, Gelernter’s only mention of Elektro comes in his brief “Robot!” chapter, which offers a much more detailed review of the Westinghouse Time Capsule and the General Electric building.

<sup>146</sup> Rydell, *World of Fairs*, 1.

performed on fair stages, representing American audiences' dreams of a brighter future, a better home, and efficient, affordable living.

Like the other Westinghouse robots, Elektro also provides a useful study for how Westinghouse and audiences generated differing views regarding how exactly women figured into the evolution of consumer technologies. From Elektro and his relationship to his female audience members and other actors in Westinghouse demonstrations we can ask a few key questions: Who is and who is not expected to interact with Elektro and the Westinghouse technologies he represents? Were there ways that technology became domesticated by not only "living" inside the home but by becoming part of a family network? How do relationships with technology change as our understandings of those technologies change?

To tackle these questions, I offer a biography and star study of Elektro: the Westinghouse Moto Man. In his book *Stars*, Richard Dyer's first star-study, he establishes the idea that viewers develop their ideas about a movie star based on the roles the star plays on film as well as the interviews, photo shoots, biographies and other paratexts that add to that celebrities image. This history of Elektro is designed to display and examine the shifting representations of consumer robotics from the late Depression through the Post-War Era through analyses of his films as well as through the magazine articles, newspaper advertisements, and Westinghouse promotional materials that also portray him.<sup>147</sup>

Alongside this biography, this chapter will also introduce an upcoming theme of childhood interactions and the act of playing with technology, which will be carried forward in the next chapter on Robby the Robot. This concept of "play" not only folds

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<sup>147</sup> Richard Dyer, *Stars* (London: British Film Institute, 1979).

into the theme of convergence culture, where consumers of media actively participate in meaning making by messing with or playing with media works, but in the case of Elektro the act of play literally saves the giant robot. Elektro's life today continues thanks to the children that kept Elektro in their basement during the post-war Era. In March 2004, the Weeks boys of Mansfield helped get Elektro to the Mansfield Memorial Museum for restoration and display. He continues to live in the museum today. Scott Schaut, the museum's curator, helped preserve Elektro, and has kept the robot on permanent exhibit at the museum. "He's a piece of history," says Scott Schaut, curator of the Mansfield Memorial Museum. "He's not going anywhere."<sup>148</sup>

While this may be true about Elektro's physical position in Mansfield, I will show that Elektro indeed did go many places and continues to be on the move in Internet fan fiction even today.

### **Producing Elektro: Turning a Vacuum into a Robot**

Work on Elektro began in 1937 at the Westinghouse Appliance Division in Mansfield, Ohio. J.M. Barnett, the brains behind Willie Vocalite, worked on the design and manufacture of Elektro from the drawing room to the production floor. "Built in total secrecy by Westinghouse," notes Scott Schaut, "Elektro was promoted as the ultimate appliance. In fact, it was thought that Elektro would one day be able to cook, do laundry and entertain the children."<sup>149</sup> The giant analog robot was a motley mix of recycled technology and new innovation. Mansfield's several appliance lines provided Elektro's electrical wiring. As Schaut observes from one photograph of Elektro's exposed torso:

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<sup>148</sup> Justin Martin, "Whatever Happened to ... Elektro?" *Discover*, January 6, 2009, <http://discovermagazine.com/2009/jan/06-whatever-happened-to-elektro>. (accessed June 5, 2014)

<sup>149</sup> Roland Piquepaille, "Elektro, The Oldest U.S. Robot," [http://www.primidi.com/Elektro\\_the\\_Oldest\\_US\\_Robot](http://www.primidi.com/Elektro_the_Oldest_US_Robot). (accessed June 5, 2014)

“You can readily see the bakelite plug ... out of the back that plugged into an appliance.”<sup>150</sup> Westinghouse vacuum cleaners provided the wheels at the bottom of Elektro’s feet.<sup>151</sup> Elektro’s head and hands were made of cast aluminum, while his body was made of bent sheets of aluminum.<sup>152</sup>

As with previous Westinghouse robots, Elektro’s aesthetic makeup was an amalgam of consumer household technology and custom craftsmanship. Through this combination of the quotidian and the novel, Elektro both embodied nascent technologies and the everyday appliances he stood among on Westinghouse stages. In a perhaps unintended nod to future engineers, Elektro’s face was carved by one of the youngest of the Westinghouse-Mansfield team: Bob Constance, a seventeen-year old working at his father’s business, Twentieth Century Pattern Works in Mansfield, Ohio.<sup>153</sup>

### **Taking Apart Elektro**

As many contemporary magazines point out, Elektro was quite a luxury item. Producing the six-foot, ten-inch, bronze robot cost around one-hundred-ten thousand dollars.<sup>154</sup> Just as scintillating as judging these extraordinary costs, dissecting these mechanics became a featured topic in many popular scientific and engineering publications. Articles documented the cams, gears, motors vacuum tubes, telephone relays, and photo-electric cells that made up Elektro’s construction. Forty-eight electrical relays operated the robot. Four vacuum-cleaner wheels tucked under his large boots helped propel Elektro forward, but only the left leg could bend, giving the impression of

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<sup>150</sup> Schaut, *Robots of Westinghouse*, 92.

<sup>151</sup> *Ibid.*, 95.

<sup>152</sup> *Ibid.*

<sup>153</sup> *Ibid.*, 99.

<sup>154</sup> *Ibid.*, 95.

walking while the right leg rolled smoothly forward. “He walks with a peculiar limp, as only one leg bends. In spite of this infirmity he is probably the most educated robot alive,” a *Mechanix Illustrated* reporter noted about Elektro.<sup>155</sup> Elektro’s gait, controlled through an operator’s voice command, gave the effect of an autonomous machine, but the main part of Elektro’s “brain” was outside the humanoid figure, hidden behind a curtain or the stage: “This control unit transferred the voice commands into electric impulses through the telephone relays and vacuum tubes through a power chord attached to Elektro’s lower right foot along with his electrical power chords. This intern [sic] gave the signals to the relays and tubes to start or stop the selected motors, which ran the robot.”<sup>156</sup>

Elektro’s mechanics marked advancements in Westinghouse’s robotic and household technologies. Scott Schaut argues, “The technology that went into making appliances better and more efficient were in part incorporated into Elektro. And some of the advancements that were made specifically for him went into the merchandise that was available to the general public.”<sup>157</sup> As we saw in the last chapter with Willie Vocalite’s performances, this technical reciprocity between robotic developments and the development of household appliances underscored Westinghouse’s ongoing assertion that robots not only belonged in the home, but also were already part of the home through the very technologies that they shared with Westinghouse’s household appliances. Yet, Elektro was far more than motors and cams: unlike the Westinghouse toaster and vacuum, Elektro was a spirited mechanical man with a physical presence designed every bit as carefully as his mechanics.

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<sup>155</sup> Gerstin, “Science Secrets Revealed at New York World’s Fair,” Cover, 36–39, 114–115.

<sup>156</sup> *Ibid.*, 100.

<sup>157</sup> Schaut, *Robots of Westinghouse*, 97.

Elektro's performance was well rehearsed and broken into a routine. "A 6-impulse voice code (3-1-2) was used to start all of Elektro's 'tricks,'" recalls C. Bruce Hardy, one of Elektro's operators. "The code was spoken thusly: Will you come (3) – down (1)—front please (2)?"<sup>158</sup> At this, Elektro slowly walked to the front of the stage. To stop him, the operator gave another 6-impulse code like "You have come—far—enough." Following this, the operator conducted a short interview, asking Elektro questions like "Tell us how—old—you are." Elektro responded, "I am only three years old but I am bigger and smarter than you are." At another 6-impulse voice code in the sequence, "Tell us more—'bout—yourself," Elektro spoke of "Big Daddy Westinghouse [George Westinghouse] and that he loved to travel to 'Stores like this' to tell nice people about how great Westinghouse appliances, 'like me' are."<sup>159</sup> To demonstrate his humanness, Elektro smoked, counted and discerned between red and green flashlights.<sup>160</sup>

Elektro's size and surroundings are prominent features in *The Middleton Family At the New York World's Fair* (Robert R. Snody, 1939). When he is introduced in the film the shot comes from the spectator level, looking up at Elektro. The young, human operator stands a few feet away from Elektro, helping to distinguish Elektro as much larger than a human. The stage background behind Elektro, comprised of art-deco streamlined steel curving upward and around the walls, also indicates a departure from the space of the home. Elektro stands apart from the grey art deco due to his brilliant color, but he also stands apart from the operator to occupy a space between the steely industrial design of the stage set his young, human operator.

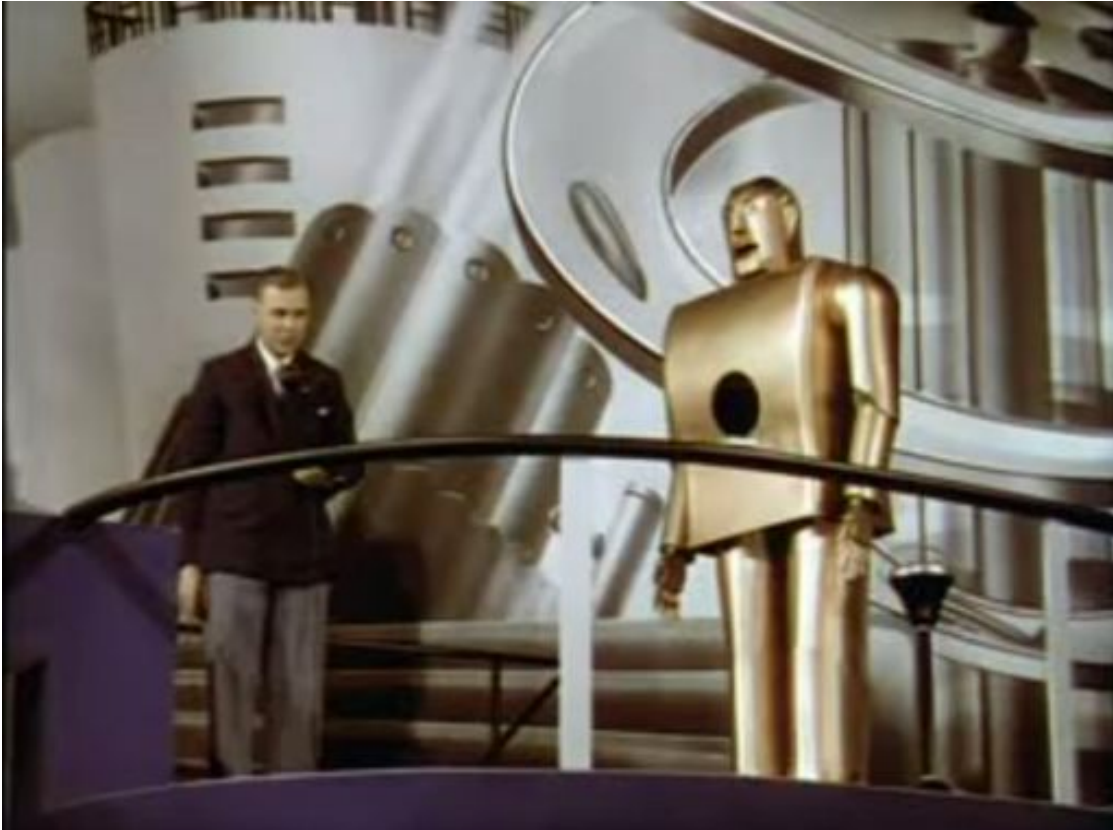
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<sup>158</sup> Ibid., 149. Each syllabic word represents one impulse.

<sup>159</sup> Ibid., 113.

<sup>160</sup> Elektro was in fact color blind. The trick involved holding the red light up to only his right eye, and a green light up to his left eye. The eye that registered the light could relay it as "red" or "green."





Still image from *The Middleton Family at the New York World's Fair* (Westinghouse, 1939)

While the technology behind Elektro proved fascinating to the amateur engineers reading popular mechanics magazines, Elektro's physicality proved quite visually striking. Unlike the cardboard, rubber and grey metal robots that preceded him, Elektro's "skin" was a gleaming gold color, making him look more like the Oscar statuette than the Tin Man from *Wizard of Oz*. In sheer size, Elektro also didn't resemble the Tin Man or most other human men. He stood at seven-feet tall with a broad metal chest twice the width of his female operators. In the middle of his chest, where the diaphragm would be located, was a round circular window into Elektro's working In most photographs and films, it appears black inside, beckoning people to peer within. In the tiny Elektro pins that Westinghouse manufactured later, the chest hole is painted bright red, giving it the

appearance that Elektro is illuminated from within and perhaps is filled with a version of crimson lifeblood.

Elektro's broad chest plate narrowed to give the robot a slightly tapered waist and a more athletic appearance. From his torso extend two polished legs, propping Elektro up like parallel tree-trunks. Elektro's thick thighs taper slightly before being hidden at the knee behind which appears to be Elektro's only clothing: tall platform boots. Built from the same metal as the rest of the robot, Elektro's boots were taller than standard-issue military boots and lacked any kind of heel. They were blockish and flat, a style designed to hide the wheels that propelled the robot forward. In fact, the practical, mechanical requirements of Elektro's boots caused them to resemble the boots worn by Boris Karloff in *Frankenstein* more than contemporary men's fashion. As we will see later in this chapter, the similarity between Elektro and Frankenstein's monster did not end at shoe design.

The arms of Elektro—which are shown in Westinghouse pictures in various human gestures like walking, shaking hands, motioning, counting, even conducting musicians—helped audiences visualize Elektro's humanity by suggesting his ability to perform human activities. Long, highly articulated metal fingers bent and straightened on command allowing Elektro to be posed with particular items. His elbows bent neatly and his arms rotated at the shoulder, which further gave the robot the appearance of being highly articulated—able to do anything a human could do. Elektro's arms, however, were disproportionately short, terminating just a few inches below his torso. The short arms extending from a broad torso, in fact, gave Elektro the appearance of a human caricature: an overly broad, almost blockish torso, with short arms extending down like a poorly

drawn human figure. While this gave Elektro the appearance of being rather silly, it also suggested an otherness that made him visually robotic. Elektro's arms and hands appeared usable, yet they were not the arms or hands of a human. His proportions were different, blocky but streamlined, tall yet short. They distinguished him from his Westinghouse makers and operators. His strangely proportioned body made him distinctly non-human. His metal frame, like that his predecessor Willie Vocalite, made him distinctly robotic.<sup>161</sup>

Elektro's carved head and face further distinguished him from a human man. Like his body, his head was also metal and blockish and was not covered with human looking skin or hair. A pair of large, streamlined metal ears sat at each side of his bald head for aesthetics, but most of Constance's carving went into Elektro's large face. At first glance, Elektro's features were similar to a male athlete—a short thick neck, broad face, and a square jaw that almost looks jowly at times. His nose, straight and neatly tapered, gave Elektro a Roman appearance, while his broad, slightly pursed lips appeared disproportionately large and allowed for both holding cigarettes and speaking gestures that live audience members could easily see from far away. Elektro's black, almond shaped eyes, which are slightly inset, were the smallest feature on the face. They completed Elektro's humanoid appearance but also appeared neutral and unexpressive. Despite this blankness, his eyes give Elektro the impression that he was looking off into the distance rather than at the person or audience in front of him. He appeared to be taking everything in, yet never looking at a single individual.

Elektro's gigantic proportions may have been initially off-putting to some individuals, but his appearance as a humanoid robot falls outside the “uncanny valley.”

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<sup>161</sup> For a slideshow of representation of pictorial 1930s robots, see Matt Novak, “The Robot Panic of the Great Depression,” Slate.com, December 1, 2011, <http://www.slate.com/slideshows/technology/the-robot-panic-of-the-great-depression.html> (accessed October 25, 2012).

Coined by Japanese roboticist Masahiro Mori in 1970, the uncanny valley describes the point at which robots and other human facsimiles appear and behave so close to humans that it causes a response of revulsion. People feel “creeped out” by not-quite-right simulated humans and therefore respond negatively to their presence. Elektro’s human-like but distinctly different proportions, coupled with his metal body free of human skin, hair or clothing distanced him from being too human. His lack of eyes, making him unable to make eye contact, further mechanized him by making his face a series of features most of which didn’t work. Metal ears that couldn’t hear, eyes that couldn’t focus, a nose that couldn’t smell—only Elektro’s mouth moved and smoked cigarettes but even these activities were dictated by the performance. Where Elektro exactly fits into Mori’s model is up to the discretion and feelings of each viewer, but I would place him somewhere between industrial robot and humanoid robot. He looked human but his gigantic proportions and lack of clothing do not have him passing as human in any way. His metal exterior also indicated he was more a product of industrial manufacturing than designed to be human.



**Mori's Uncanny Valley shows a valley separating humanoid robots from healthy humans, as the robot (or person) begins to move toward "close to human" the observer distances him from the being or object. Movement amplifies the effect.<sup>162</sup> (Image removed due to copyright restrictions.)**

Elektro's figure made him distinctly non-human but human enough that people could identify his humanoid characteristics without Elektro seeming too lifelike. His appearance was safely personable; familiar enough that people could see him as behaving human like, but far enough removed so he would not be perceived as eerily similar. Who Elektro interacted with—often pretty, young women—made him identifiable. He was distinctly a robot, but charmed humans with his slang and one-liners.

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<sup>162</sup> K.F. MacDorman, "Androids as an Experimental Apparatus: Why Is There an Uncanny Valley and Can We Exploit It?" *CogSci-2005 Workshop: Toward Social Mechanisms of Android Science* (Stresa, Italy: July 25–26, 2005), 108–118.

## Elektro's Family Tree

As seen in the previous chapter, Elektro came from a long line of robots developed by the Westinghouse Electric Corporation. While some could look today at Elektro as a one-off novelty, he was actually the top of a line of robots extending to the decades before. Westinghouse therefore situated Elektro within the lineage of Westinghouse robotics, giving him a ready-made family to further humanize his character. Elektro was pronounced fit to begin display at the New York World's Fair, while his "brother" Willie Vocalite appeared at the smaller San Francisco World's Fair. "There's no professional jealousy between Willie Vocalite who's appearing at the San Francisco Fair, and his brother Elektro, who is playing in New York," reported *Westinghouse Fair World*. "Offspring of the same Westinghouse Engineering Department, they are both mighty proud of their parentage."<sup>163</sup> Here, Elektro is not another model from the corporate assembly line. Instead, he is given human ties to other mechanical devices, further anthropomorphizing Westinghouse technology by turning Elektro into a brother to Vocalite and a direct descendent of Westinghouse innovations.

Engels and other Marxist scholars observe that family units are the most basic unit of social reproduction needed to propel a productive economy. Annalee Newitz notes "robots who join family units do it as domestic servants or child substitutes whose jobs are to provide their masters with care, companionship and love. Robot families are built and rebuilt around the idea of work."<sup>164</sup> Mechanical family members not only provide companionship, but can be always tasked with doing more work for the betterment of the

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<sup>163</sup> *Westinghouse Fair World: Official News of Westinghouse, Activities at the New York and San Francisco Fairs* (Pittsburgh, PA: Westinghouse Manufacturing Co.), 1939.

<sup>164</sup> Annalee Newitz, *Pretend We're Dead: Capitalist Monsters in American Pop Culture* (Durham, NC: Duke University Press, 2006), 149.

family, the community or the culture. Newitz suggests that the other extreme, robot families—ones with multiple mechanical members—“undermine traditional values but shore up capitalist ones.”<sup>165</sup> While it is strange to think of Televox, Vocalite and Elektro swapping stories in a House of Tomorrow (and Westinghouse never offered this vision of the robots as a domestic unit), the consideration of Elektro as a son and brother to other robots tied him to a product line, gave him a place in the “Westinghouse family” of workers, and propelled him as the next in a seemingly natural technological evolution.

While Elektro’s production occurred in response to and simultaneously with the development of new appliance models, the robot’s development impacted more than just next year’s Westinghouse models. It underscored a highly collaborative effort to reimagine the social role of the robot that involved not only engineers like J.M. Barnett, but also people outside the factory like Bob Constance, and a number of Westinghouse employees, many of them women. The story of producing Elektro is, in part, the story of his mechanical assemblage, but it also is about context and individuals who helped to shape his identity and cultural value.

As Westinghouse manufactured Elektro in 1937 and 1938, they also constructed a personality and set of values that ran him just as much as gears and wiring. The Westinghouse appliance factory that was the company’s robotics workshop also served as a space for meaning making, and even for the manufacture of a technology mythology about technological possibility. Janice Rushing and Thomas Frenz note that “the workshop of a mythologist cannot be located in a single place: it accommodates play as much as work, and never really closes. It is culture itself—the books, art, music, films, dances, television programs, speeches, stories and conversations a people produces to

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<sup>165</sup> Ibid., 150.

construct itself, reflect upon itself, stir things up for change or secure the status quo.”<sup>166</sup>

Like the mythologist’s workshop, the workshop that produced Elektro extended beyond J.M Barnett and his colleague Harold Gorsch into a network of players who were not engineers, but helped to build Elektro’s personality through human relations. Just a few weeks after the fair opened, Westinghouse employees working at the fair already had a new reference for Elektro that endeared him as an Average Joe. His new nickname was Metal Mike.<sup>167</sup>

Several images in Schaut’s history of Elektro show Barnett and others standing alongside young women from Westinghouse’s Mansfield Merchandising Division—Beatrice Howard and Bea Kochenderfer—inspecting the robot’s inner workings. They appear in several images alongside a constructed Elektro—teaching him to walk, to sing, and to smoke. Howard and Kochenderfer were cast as two of a handful of “girlfriends” Westinghouse developed for Elektro while on tour. They appeared alongside Elektro when he was introduced to Westinghouse workers in the company’s April 1939 Westinghouse magazine. Here, Elektro with Kochenderfer and Phyllis Van Derau (another employee of the Merchandising Division) sing the newly composed Westinghouse Song, written by Schuller C. Morgan, a company employee.<sup>168</sup> The first lines of the new company song, “We all sing out for Westinghouse, The name that means most to ev’ry house,” again located the company and its robots, this time Elektro, within its household appliance line and within every American home.<sup>169</sup>

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<sup>166</sup> Janice H. Rushing and Thomas S. Frenzt, *Projecting the Shadow: The Cyborg Hero in American Film* (Chicago: University of Chicago Press, 1995), 5.

<sup>167</sup> Meyer Berger, “At the Fair,” *New York Times*, May 5, 1939. Meyer Berger, “On Top of the World of Tomorrow,” *New York Times*, May 7, 1939.

<sup>168</sup> *Westinghouse Magazine* 11, no. 4 (April 1939), Cover and 1.

<sup>169</sup> *Ibid.*, special insert.



Despite Elektro's introduction as a domestic figure, these girlfriends of Elektro also posed a relationship with the creature not unlike the 1935 film, *Bride of Frankenstein*. Like the Bride, their characters were created for Elektro to be his companion rather than their own individuals. Granted, the friendly songs and play in Schaut's images of Elektro were far different images than the ones shown in the *Bride of Frankenstein* (1935), but the relationship is somewhat similar: a bride is constructed for Frankenstein's monster after his manufacture to act as a companion to the unnatural creature. Bea and Beatrice, who appear reviewing the construction of Elektro in several images, make their first public appearances at Elektro's debut in 1939 as his smiling companions.<sup>170</sup> Elektro's ongoing female companionship was different than the cartoons capturing Televox as a household helper. Here, Elektro was the leader, the football star, the Big Man. His place at the fair, often beside a female operator, was not that of a house servant, but of a personality ready to break off the stage and out of his current relationship. As we will see, the "girlfriends" relationship to Elektro starting at the Mansfield plant provide a preamble to Elektro's representation at the New York World's Fair, and throughout his entire career, Elektro was a ladies' man, a piece of technology designed to be around women, in part to entertain, in part to control.

Elektro's production was a process comprised of mechanical and design decisions as well as the careful development of a character that both could represent Westinghouse and sell its products by being personable enough to draw audiences, capture attention and connect with fairgoers on a human level. His large size drew people's attention. His color suggested both the richness of gold and the metals of tomorrow: Westinghouse's own time capsule, also exhibited at New York World's Fair, was made of another of the

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<sup>170</sup> Schaut, *Robots of Westinghouse*, 92–96.

company's technological innovations, the alloy "Cupaloy." The hue of the sleek gold Cupaloy time capsule resembled Elektro's body. These decisions made while developing Elektro not only shaped his persona and formed what ideals he represented, but in themselves also display Westinghouse's evolution of not just robotics, but forming the ultimate corporate robot character as he moved from cardboard to gold, from domestics to cigarettes, and from male spokespeople to female girlfriends as robot companions.

### **(Re)Presenting Elektro to America**

Bringing Elektro to the fair was an effort comprised of far more than securing transportation for a seven-foot electric machine. Westinghouse constructed a grand exhibition space for Elektro and a number of other exhibits that promoted a modern lifestyle brought by Westinghouse. This space at the fair brought its own share of design and advertising decisions that some thought conflicted with the nature of the fair. This section first addresses how Westinghouse and other companies set the stage at the fair in order to educate consumers, sell products and sell the vision of a better tomorrow. After reviewing the context of the fair and the Westinghouse Pavilion, this section turns to Elektro's own representation as portrayed through Westinghouse publications and newspaper and magazine reviews of Elektro's performances. This section will also examine Elektro's portrayal in the Westinghouse promotional film, *The Middleton Family Goes to the 1939 World's Fair*. Through analyses of these films and reviews we can better understand what Westinghouse intended for Elektro to represent as well as what various media outlets saw represented through the newest technologically-advanced robot.

Before looking at Elektro's place at the 1939 New York World's Fair, it's key to understand the size of the stage where Elektro debuted. I offer now a brief overview of the New York World's Fair and its significance and place within late 1930s American culture. My intention is to not give a full history of a fair, but to indicate its far reaching scope and popularity, even for those millions of Americans that did not attend the fair but read about it in magazines and newspapers, or saw moving images from the fair in contemporary newsreels.

*Esquire* magazine described the 1939 World's Fair: "The essence, the true import of the Fair ... lies in its unique ability to stimulate trade and commerce; its influence on styles, customs, buying habits ... is a 'shot in the arm' with permanent ramifications."<sup>171</sup> Glad to find the fair exporting economic abundance and consumerism, reports like the one in *Esquire* found the fair to be the much needed boost out of the Great Depression that Americans sorely wanted to experience. This praise of the almighty product came, some believed, at a price. Several members of the scientific community felt the fair offered more in terms of purchasing product than it did in progressive education. A controversy over fair themes and practices of presentation had been brewing while Westinghouse engineers worked on Elektro and other domestic technology exhibits. In fact, how the New York World's Fair was to portray science and technology to audiences had been a contested issue long before Elektro was wheeled out of the Mansfield Plant. Scientific reformers, particularly those in the New York scientific community, felt that the fair's representation of science was being overtaken by corporate interests, and sought to find a space for serious scientific education. New York Times science editor Walter

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<sup>171</sup> *Esquire* editorial from January 1, 1939, reprinted in Zim, Lerner, and Rolfes, *The World of Tomorrow*. Also reprinted in Peter J. Kuznick, "Losing the World of Tomorrow: The Battle over the Presentation of Science at the 1939 New York World's Fair," *American Quarterly* 46, no. 3 (September 1994): 341–373.

Kaempffert (who had introduced Televox to Times readers ten years earlier) accused one planner of having “overlooked the responsibility of a World’s Fair in the direction of education of the people who will attend it” in favor of making it a “commercial success.”<sup>172</sup>

Yet these commercial interests provided the foundation for the fair’s coverage and interest. Rather than teaching fairgoers, newspaper readers and radio listeners about the theories behind the latest scientific innovations, exhibitors and those covering the fair sought to sell visions of a more prosperous future through innovative modes of entertainment. The fair’s motto, “Building the World of Tomorrow,” suggested not only the new World’s Fair building constructed on the Flushing, Queens fairgrounds, but also the new cars, plastics, televisions and other soon-to-be consumable items housed within them.<sup>173</sup>

The fair’s corporate pavilions offered lavish exhibition spaces that promoted and entertained in ways beyond product displays or even factory demonstrations. In fact, to please audiences, exhibitors offered unorthodox displays that sometimes seemed to have little to do with the corporate brand, but evoked a nostalgic American past. Oddly, the Firestone Tire and Rubber Company chose to represent modernity through an agrarian ideal: the American farm. Along with featuring a diorama of its Liberian rubber plantation, a working tire assembly line, and a Hall of Products, Firestone offered viewers a tour of a “typical American farm” operated by Farmer Breckenridge with assistance

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<sup>172</sup> Waldemar Kaempffert to Grover Whalen, April 29, 1938, NYWF Archives. Peter J. Kuznick. “Losing the World of Tomorrow.”

<sup>173</sup> Arranged into a series of zones—Government, Community Interest, Food, Communication and Business, Production and Distribution, Transportation, Amusement—the New York World’s Fair offered national and state exhibit halls as well as displays about railroad transportation, dairy farming, and oil production.

from the Firestone Farmerettes, a group of young women "working" on the display farm.<sup>174</sup> Answering the question of why there would be a Firestone exhibit, the narrator of Firestone's promotional film, *Firestone at the World's Fair*, explains: "It is only natural that an agriculture display should be included because ... it was Firestone who put the farm on rubber."<sup>175</sup> For Firestone, the "working farm" suggested the importance of the company's tire technology in making "labor easier, more comfortable and more profitable" but it also gave visitors a "timeless" picture of America linked to gendered labor. As white men in factory uniforms worked the display assembly line in Firestone's tire exhibit, women in dresses tended to purebred cows near Firestone's "modern farm home." Firestone's typical farm offers a modern view of farm life that is much different than the pre-industrial American farm. Like the Firestone factory, this farm runs on new technologies making it supposedly efficient and profitable. As foreclosure hit many American family farms during the Depression, Firestone envisioned the new "typical American farm" as one run by a business-minded farmer who has both the latest equipment and a labor pool of beautiful young Farmerettes.<sup>176</sup>

Firestone's "Typical American Farm" seemed quite atypical in the Transportation Zone, but it signals a trend that other companies also adopted, the promotion of an American Dream, an ethos whereby democratic ideals translate to egalitarian modes of prosperity for Americans. The term, coined in 1931 by James Truslow Adams, suggests

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<sup>174</sup>"World's Fair," *Life* magazine, May 15, 1939. The Farmerettes are also featured in the Firestone promotional film *Firestone at the New York World's Fair* (Firestone Tire and Rubber Company: 1939).

<sup>175</sup> *Firestone at the New York World's Fair*.

<sup>176</sup> Leo Marx's *Machine in the Garden* draws similarities to the Firestone farm. Looking at nineteenth-century literature, Marx identifies a prevailing theme: a dialectic tension between an American pastoral ideal and the rapid transformations wrought by new mechanical technology. This tension appears all but defunct in the Firestone farm, as the nostalgic rural farm not only happily coexists with the latest technologies but is sustained by them. Leo Marx, *Machine in the Garden: Technology and the Pastoral Ideal in America* (New York: Oxford University Press, 2000).

that every American, regardless of rank, can achieve a "better, richer, and happier life."<sup>177</sup> While historian Jim Cullen notes that variations on the American Dream have been in existence long before the term and have focused on religious and political freedoms, the American Dream as related to upward mobility and financial prosperity was especially prominent during the Great Depression.<sup>178</sup> As Americans struggled to make ends meet, companies at the Fair sought to tie their products to financial freedom and prosperity based in familiar, albeit idealized, settings like the American farm. This American Dream was based in economic security, access to the latest American technologies, and integration of those technologies into farms, homes and other "traditional" spaces that evoke Americana.<sup>179</sup>

### **Building the Stage: The Westinghouse Pavilion**

Historian Stuart Ewen notes, "for the most part, World's Fairs had provided ritualized occasions for companies to show their technologies and products to a receptive middle-class public ... by the late thirties, however, it was apparent that for business a display of wares would not be enough."<sup>180</sup> Businesses needed to sell social ideals as well as products, providing audiences "with a recreational opportunity to imagine themselves as part of an engaging and futuristic spectacle."<sup>181</sup> To promote these ideals, entertain people and engage with middle-class America, businesses constructed exhibition spaces that offered a fantastic vision of tomorrow wrapped in democratic ideals. The fair and the

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<sup>177</sup> James Truslow Adams, *The Epic of America* (Boston: Little, Brown, and Co., 1959), 335.

<sup>178</sup> Jim Cullen, *The American Dream: A Short History of an Idea that Shaped a Nation* (New York: Oxford University Press, 2004).

<sup>179</sup> By "Americana," I refer to the highly abstract, imagined concept that is best defined through numerous symbols related—baseball, apple pie, the family car, Johnny Appleseed—that supposedly represent the culture, history, and heritage of a collective American identity, values, and experience.

<sup>180</sup> Stuart Ewen, *PR! A Social History of Spin* (New York: Basic Books, 1996), 324.

<sup>181</sup> *Ibid.*, 325.

exhibition spaces were deliberately designed for the Common Man as a way to reach out to Americans and combat anti-corporate New Deal propaganda. “It insisted it was the People’s Fair,” writes historian Warren Susman, “and developed itself for average Americans.”<sup>182</sup>

To represent and sell Westinghouse’s brand of a better tomorrow to “average America,” the company constructed a million-dollar monument to modernity.<sup>183</sup> The 1939 Westinghouse Pavilion (a larger and grander exhibit space than Westinghouse’s exhibit within the Palace of Electricity and Communication at the concurrent San Francisco World’s Fair) was designed by New York’s Skidmore and Owings and John Moss, who also designed other buildings at the fair, including the Gas Exhibits Building and the Continental Baking Company Building.<sup>184</sup> As a “Fair Within a Fair”, the Westinghouse Pavilion offered entertainment, spectacle, and an in-person introduction to new innovations. The Singing Tower of Light beckoned fairgoers into Westinghouse’s world of wonders through a siren song of music and choreographed colored lights. The Halls of Power and Electrical Living exhibited consumer products and new technologies. The Playground of Science turned the scientific laboratory into a play space and the fair-going amateur researcher into the prime-player. The Microvivarium, an exhibit that projected images of magnified microbes to the size of jack-rabbits, offered visitors a zoo of strange creatures from a collection of microscopic organisms.<sup>185</sup>

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<sup>182</sup> Warren I. Susman, “The People’s Fair: Cultural Contradictions of a Consumer Society,” *Culture As History: The Transformation of American Society in the Twentieth Century* (New York: 1984), 211–229.

<sup>183</sup> “What You Won’t See at the Fair,” *Westinghouse Magazine* 11 (May 1939), 5. (4-page insert)

<sup>184</sup> Schaut, *Robots of Westinghouse*, 105; Andrew Wood, “The Gas Exhibits Building Postcard,” *Wood Valley Brand*, San Jose State University. Available at <http://www.sjsu.edu/faculty/wooda/card40.html>; “Touring the Future,” University of Virginia. Available at <http://xroads.virginia.edu/~1930s/display/39wf/taketour.htm>. (accessed October 15, 2009)

<sup>185</sup> Gerstin, “Science Secrets Revealed at New York World’s Fair,” 39–114, 115.

While companies at the Fair couldn't promise people wealth or employment, they could give them access to new innovations designed to make their life better and happier. In the Westinghouse Building, the Great Halls of Power and Electrical Living were bolstered by appliance displays. In a theater marked "The Battle of the Centuries: The Solution to One of Woman's Problems" audiences could watch a dishwashing competition between Mrs. Modern and Mrs. Drudge, two actresses playing housewives tasked with washing fifty dishes. Mrs. Drudge hastily hand-washed her fifty dishes, while Mrs. Modern stood calm and collected next to a gleaming white Westinghouse dishwasher. Although Mrs. Drudge might eventually beat Mrs. Modern and her dishwasher, the intent of the competition was to display Mrs. Modern as calm, well-dressed and full of leisure-time while Mrs. Drudge sweated through the task of washing plates by hand, an exercise that resulted in splashing water, flipping hair and flailing arms.

Mrs. Modern—who could have been better titled Mrs. Leisure—did not promote the dishwasher's ability to wash dishes so much as she did the advantage of technology in the home for freeing up the housewife's time. Unlike household expert Christine Frederick's vision of technology assisting the housewife by making her tasks more efficient, Westinghouse's dishwasher display offered a vision that freed housewives entirely from any work around the home but also rendered them inactive and ineffectual. Mrs. Modern was free to sit back and read the newspaper while her dishwasher industriously hummed away in the kitchen, but this leisure activity suggests her contribution to household operations, in this case washing dishes, is now rendered



obsolete. In its place was a different role for Mrs. Modern. Rather than performing work, she stood as a display of idleness.

### **Elektro Takes the Stage**

The public's introduction to Elektro begins strangely with the robot's already checkered past. Despite being manufactured in Mansfield only months before the fair, Elektro was quickly diagnosed with various well-developed human neuroses before setting one metal foot on the World's Fair stage. "Fair's new robot is schizophrenic," an April *New York Times* article proclaimed: "A new robot with a split personality and one or two habits of the jitterbug era was introduced to the electrical profession last week at a luncheon at the Engineers Club."<sup>186</sup> Another article in the *Washington Post* diagnosed Elektro with "unmistakable symptoms of dementia praecox."<sup>187</sup> Elektro's troubled behavior had started two weeks earlier when Elektro appeared on April 11, 1939. He disobeyed Barnett at the Ohio Valley Improvement Association's annual meeting: "Once he was told to raise his arm and instead he began walking backwards. He was told to stop, but continued walking. Mr. Barnett had to cut off the electric current." To recover from the Elektro's "disobedience" Barnett emphasized the new machine's humanity. "He's very human," the inventor announced, "If you don't talk right to him he just doesn't do what you say."<sup>188</sup> While some might have seen Elektro's bad behavior at the event as a failure of Westinghouse technology, others saw it as a call for civil disobedience. An April 14, 1939 column in *the New York Times* suggested that Elektro modeled how "real men" should behave: "Some parts of the world, at least, need real

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<sup>186</sup> "Fair's New Robot Is Schizophrenic," *New York Times*, April 23, 1939.

<sup>187</sup> "Mad, Sweet Heaven!" *Washington Post*, April 28, 1939.

<sup>188</sup> "Mechanical Man Rebels," *New York Times*, April 12, 1939.

men who will back up when they are told to raise their arms—either with the fist clenched or the palm open.” Elektro’s malfunction was not a defect in new technology, but for this author hearkened a practice of better social behavior: “Perhaps we shall eventually produce a dictator-proof human who when told to put on a steel hat and go gunning for his next-door neighbor will make the proper derisive gesture and go right on fishing.”<sup>189</sup>

These interpretations of Elektro as schizophrenic or rebellious were not what manufacturers had intended. According to *Westinghouse Magazine*, the company’s internal publication, Elektro was “designed by Westinghouse engineers to dramatize the many applications of electrical energy to practical purposes.”<sup>190</sup> He could smoke, differentiate between the colors red and green, walk, and perform twenty-six other tricks at this point, but civil disobedience was not supposed to be one of them. Nonetheless, Elektro was already being inscribed with a personality and politics outside Westinghouse’s control.

Newspaper articles made other attempts to both humanize and dramatize Elektro beyond evaluating his mental condition by focusing on his “meals” and bodily functions. One article titled “More Innovations of Science and Industry Are Unfolded at the Exposition” made Elektro more relatable by suggesting how much the robot consumed: “twenty ‘meals’ of electric current at a total daily cost of about 3 ½ cents. A package of cigarettes is included in his daily rations, because the Moto-Man smokes a cigarette at every performance.”<sup>191</sup> Despite the article’s focus on innovation, none of the applications

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<sup>189</sup> “Elektro Rebels,” *New York Times*, April 14, 1939.

<sup>190</sup> “What You Won’t See at the Fair,” *Westinghouse Magazine*.

<sup>191</sup> “More Innovations of Science and Industry Are Unfolded at the Exposition,” *New York Times (1857–Current file)*; May 7, 1939.

of electrical energy are described here. Instead the author fixates on what Elektro consumes rather than what he does. Another article equated a freak electrical glitch during a performance to a “hiccough” noting “something went wrong with his breakers, or some other electrical intestine.”<sup>192</sup> A tripped breaker becomes akin to an upset stomach as the author explains electrical errors as a case of indigestion.

These descriptions offer more than attempts of anthropomorphization. They present ways that people outside Westinghouse were finding to connect with and discuss Elektro without addressing any of his mechanics. The authors do not spend time explaining how the robot works, but they imagine his bodily functions and note his smoking habit. Elektro becomes something more than a piece of technology used to promote Westinghouse innovation. A persona—one of a flawed, awkward, hungry individual—develops around the bronzed machine.

In a bizarre twist to Elektro’s persona, one newspaper story even suggested that Elektro had a rival at the fair in Clarence, “the free-lance robot.”<sup>193</sup> Developed by New Yorker Austin Huhn during “his spare time these 2 years past to perfecting the mechanical man,” Clarence was built from storage batteries, metal and a loud speaker.<sup>194</sup> Clarence lumbered into the fair declaring “I am the man of Tomorrow!” From the way Clarence ... stressed ‘I’ in his declaration, any one could tell it was a none-too-subtle shaft of intimidation, aimed at his rival, Elektro, the mechanical man at the Westinghouse exhibit.”<sup>195</sup> The article teases with the real issue of worker rights by making the distinction between corporate robot and jobless robot: “Clarence is free-lance, while

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<sup>192</sup> Berger, “At the Fair.”

<sup>193</sup> “Free-Lance Robot Hunts Job at Fair,” *New York Times*, July 23, 1939. “Performing Robot Earns Money for Its Owner,” *Popular Science*, August 1940.

<sup>194</sup> “Clarence Radio Robot,” *Radio-Craft*, October 1939.

<sup>195</sup> Ibid.

Elektro has a regular job at the Westinghouse exhibit.”<sup>196</sup> But ultimately the author reduces both machines to a beauty contest: “Clarence is a huge, gleaming aluminum, Frankenstein’s monster sort of thing, with a barrel chest and a ridiculously tiny head, capped with by some sort of decrepit dented pot, while Elektro is a bulky but smaller and smoother fellow with a nice sun tan effect, created by a coat of bronze paint.”<sup>197</sup> In looks, Elektro clearly wins the contest with his smooth and bronzed body. Yet, the false rivalry hyped by the *New York Times* and WOR-Mutual’s World’s Fair radio program suggests that robots can intimidate, act up, be temperamental and even display a chest-thumping machismo that reinforces the machine’s masculine construction through manufactured combativeness.

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<sup>196</sup> Ibid.

<sup>197</sup> Ibid.



**Elektro's "Rival:" Clarence the Free-Lance Robot<sup>198</sup> (Image removed due to copyright restrictions.)**

The media-created rivalry between Clarence and Elektro provided both fodder for news stories as well as a way for audiences to diminish Elektro through a fanciful conflict. Reporters even changed "Elektro" to the feminine "Elektra" when describing the conflict, a way of mocking Elektro by suggesting the large robot was "girly".<sup>199</sup> Yet, despite all this coverage of Elektro, the technology that made Elektro work was

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<sup>198</sup> Image reprinted in Cyberneticzoo.com, [http://cyberneticzoo.com/?page\\_id=45](http://cyberneticzoo.com/?page_id=45) (accessed December 7, 2009).

<sup>199</sup> Berger, "At the Fair."

obfuscated in favor of more fantastic explanations. Elektro was not a promotional tool, nor was he the latest in Westinghouse robotics. Rather Elektro was a man in the hands of newspaper reporters: a larger-than-life character who could be manipulated and played with.

To curb the media's interpretations of Elektro as a silly, if not crazed robot, Westinghouse honed Elektro's routine at the fair, constructing his persona through repeat performance before committing it to celluloid. These daily performances, coupled with Westinghouse's promotional materials, constructed an identity for Elektro that was more controlled, more debonair, than the newspaper reports.

### **Elektro's Identity on Westinghouse Film**

The schizophrenic robot covered in the newspapers was much different than the confident, straightforward fellow depicted in the Westinghouse's 1939 promotional film, *The Middleton Family at the New York World's Fair*. The feature-length story of the fictional Middleton family as they travel from Indiana to the New York World's Fair promoted Westinghouse and exposed many Americans to Elektro through celluloid rather than live performance.

Elektro's on-stage performance was the climactic last-stop on the Middleton family's tour of the Westinghouse Pavilion. It was the longest exhibit depicted by the film and offered film viewers a glimpse into Elektro's tricks. Here, the robot went through the tried-and-true Westinghouse routine. He smoked, counted, traded barbs with his operator and took a few steps for the awe-struck audience. The amazement of the Middleton family and total stop to the film's plot suggests how important Elektro was to displaying and defining Westinghouse innovation.

His debut in the film centered him as the most interesting piece of technology at the Fair, but he was only a star among new technologies rather than a key player in the film's plot. Elektro's performance represents a sort of side show in the plot of the film, which deals not only with promoting Westinghouse but depicts a love triangle between an All-American girl, a sinister Marxist professor and a hometown-boy-turned-Westinghouse-employee. Elektro's part in this performance of middle-class interaction with technology offers useful context into how Westinghouse corporate promoters viewed ideal American values, the ideal middle-class American family and the ways Americans pursued and achieved the American Dream.

As their surname and Indiana home suggests, the Middletons are Westinghouse's depiction of a middle-class response to the company's products that projects social ideals mixed with elaborate techno-fantasies. Because *Middleton Family* is a Westinghouse promotional film, the Middletons's fair experience consists only of one activity: a tour around the Westinghouse Pavilion. They view the Westinghouse Time Capsule, a television display, the Playground of Science, the Junior Science Hall, the Hall of Power, the Hall of Electrical Living, and the dishwashing contest between Mrs. Modern and Mrs. Drudge. This tour of Westinghouse has life-changing effects particularly on the women of Middleton Family: Grandma Middleton finds liberation, her granddaughter Babs finds love, the mother Jane is sold on modern conveniences after watching a dishwashing competition, and everyone witnesses life-changing modernity through Westinghouse technologies. As we will see, these dramatic life-improvements brought solely by Westinghouse suggest better days to come for the female consumer. Strangely, however, Westinghouse hides its female employees from *Middleton* viewers, switching out female

Westinghouse employees (like those operating Elektro) for men. In doing so, Westinghouse shows women only linked to the home and falsely suggests that the Westinghouse worker is always male. While no accounts are available to why gender swap was made, the male operator reinforces the film's traditional representation of gender where women are in the home and men occupy all professional positions. The male operator suggests that Westinghouse opted to introduce only new technologies rather than addressing changing gender roles brought about by the Great Depression. Much like the Firestone Farm, Westinghouse portrayed the company's technology as reinforcing traditional roles rather than dismantling them.

Westinghouse depicts its workers as the real heroes of progress, depicting them even as social liberators. Taking in Westinghouse's displays of better living through electricity, Grandma Middleton (who employs a black house servant back in Indiana) marvels at Westinghouse engineers' ingenuity. She exclaims to her daughter, Mrs. Middleton, "I like electrical engineers: they signed our Emancipation Proclamation."<sup>200</sup> By "our," Grandma Middleton refers to modern women, who the film implies are limited to white, middle-class housewives like her and her daughter: those who can afford Westinghouse appliances. According to Grandma, the electrical engineers emancipated them from the household labor that women like Mrs. Drudge must still perform, unaided by technology. However, rather than saying "the electrical engineer set us free" Grandma equated their labor to American slavery by referencing the Emancipation Proclamation. The drudgery of unmechanized housework, according to the film, is akin to nineteenth

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<sup>200</sup> *The Middleton Family at the New York World's Fair*, directed by Robert R. Snody, 1939.



century enslavement, whereby only modern technology (constructed through the largely-male profession of electrical engineers) can set women “free.”<sup>201</sup>

As Grandma Middleton equates the electrical engineer to Abraham Lincoln, the teenage Babs Middleton; her Russian, Marxist boyfriend Nicholas Makaroff; and her hometown beau and Westinghouse employee, Jim Treadway, tour other Westinghouse exhibits. Babs’s two suitors represent ideologically opposing perspectives toward industrialization and economic progress. Jim Treadway, an all-American boy who passed up the chance to play professional football to help engineer a better tomorrow, represents American values and progress as Westinghouse imagines it. Nicholas Makaroff, a humorless art professor, embodies a Marxist Otherness that threatens American life and industry. As they tour the exhibits Jim demonstrates wondrous Westinghouse technologies as Makaroff scoffs, suggesting that Westinghouse’s efficient machines would replace millions of American jobs. Jim blithely rejects Makaroff’s arguments, noting that Westinghouse adds jobs to American economy, while improving the quality of all workers’ lives. Jim’s tour of Westinghouse successfully liberates Babs from the spell of Makaroff’s European Marxism and when the family returns to Indiana, she leaves Makaroff and college behind for presumable domestic bliss with Jim and Westinghouse. At the film’s conclusion Babs and Jim stand arm-in-arm gazing at Westinghouse’s 120-foot Singing Tower of Light and envisioning their life together. “I wonder if the years ahead will be as grand as this,” remarks Babs. Jim knowingly replies, “Why, this is only a sample of the real world of tomorrow.”

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<sup>201</sup> Carolyn Marvin offers a useful history of the electrical engineering profession, arguing that the occupation quickly diverged from the electrician, becoming a white-collar job by the early 1900s. Carolyn Marvin, *When Old Technologies Were New: Thinking about Electric Communication in the Nineteenth Century* (New York: Oxford University Press, 1988).

According to Westinghouse, Babs's commitment to Jim and to Westinghouse promises an unimaginably better life than Makaroff and his shabby Marxist ideals could provide. Despite the political rumblings of World War Two, Westinghouse shows that middle-class Americans have nothing to fear with Westinghouse around and only everything to gain. Women, in particular, seem to benefit most from Westinghouse: Grandma and Mother are freed by electrical engineers, and Babs finds Mr. Right as well as all the consumables she'll need to make Mr. Right happy at home. Yet Westinghouse's grand future for Babs grand is still mostly limited to her kitchen.

This message of All-American domestic prosperity and female freedom was packaged for movie-going audiences across America. In *Heartland TV*, Victoria Johnson argues that the Middletons represent "All-American" cultural values of populism by embodying values—faith in free enterprise, commitment to family, progress within traditional conventions—allied with New Deal-era liberalism. Babs's own change-of-heart for the hometown Indiana boy, Jim, reflects a re-centering of her romantic interests that go back to her Indiana origin and reify the gendered practices of her mother and grandmother. Although Jim notes that Westinghouse is a sample of "the real world of tomorrow," the fantastic world of technology promised by the company in fact operates within a modern home girded by a traditional sense of domestic labor. Babs may be Mrs. Modern with a Westinghouse dishwasher and the promise of her own Elektro, but she will still be standing in the kitchen like the last century's Mrs. Drudge.

Historian Andrew Wood asserts that the Middletons represent "corporate responses to deviance and social unrest in the industrial age." Westinghouse's film, he posits, is a "temporal heterotopia" used to mollify middle-class fears about the coming

technological age.<sup>202</sup> A “temporal heterotopia,” he considers,” may be defined as paradoxical places that employ multiple timelines to affirm a dominant narrative.” In the case of the Middletons, the viewer sees old ways of household maintenance clashing with new modern ones. Westinghouse also offers two very different futures for Babs Middleton, one that embraces Marxist proletarianism and another that offers the consumption of corporate technology for a more leisurely life. By offering these decision points and displaying their positive ramifications when made, Westinghouse constructs dominant narrative reaffirming corporate labor and domestic industriousness as well as linking practices of material consumption with the American Dream of a better life.

In this heterotopia where the viewer is asked to depart from daily American life into a pavilion of possibility at the World’s Fair, Elektro represents the farthest departure from reality, which could explain why his role in the film seems more novel than prescient. As a seven-foot metal robot, Elektro is at the end-point of the spectrum in terms of representing technological development far removed from the washing machine seen earlier in the film. If we consider *Middleton Family* as a temporal heterotopia where competing narratives can simultaneously exist in a liminal space, Elektro doesn’t really have an easy role to neatly fit into. He exists only on stage, has no home, and doesn’t look like anything in the American home. His comical, vaudevillian performance feels like a sideshow, perhaps because Westinghouse promoters too were unsure of where he fit into their social narrative.

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<sup>202</sup> Andrew Wood, “The Middletons, Futurama, and Progressland: Disciplinary Technology and Temporal Heterotopias,” *New Jersey Journal of Communication* 11, no. 1 (Spring 2003): 66–73.

## Operating Elektro off Camera

While the Westinghouse's portrayal World of Tomorrow in *The Middleton Family at the New York World's Fair* appears to reinforce a woman's role in the home through its female characters, the real World of Tomorrow afforded some women a very different role than the wives, mothers and daughters in the film. In fact, Westinghouse brought a number of female employees from their Mansfield factory to "work the fair" by operating exhibits depicted in the film. Although Jim was the tour guide to a Westinghouse that seemed to employ only men, women Westinghouse employees actually offered views of the world of tomorrow that went beyond washing dishes and marveling from the audience. The next section will display one such case of women working with technology at the Fair by examining Westinghouse's Elektro exhibit and his often female operators. Through Elektro's relationship with his operator, the only human being who directly interacts with the robot, we can see how Westinghouse was changing the identity of the robot as well as the Westinghouse employee by offering women a place beside Elektro as his controller. Yet this new role came with gendered limitations that made the operator oscillate between being Elektro's master, Elektro's mistress, and Elektro's foil.

"I see a lot of good numbers out in our audience today," declares Elektro, referring to the comeliness of female audience members. "Elektro behave yourself!" gently chides the operator. Above Elektro hangs the figure of a half-naked woman, wearing a bra and translucent skirt. Beside him stands an exhibit, "The Planned Electric Kitchen for the Home." Oblivious to the female nude and kitchen display, the robot appears to only notice the women in the audience below. Pre-recorded lines offer the

robot the choppy monotone voice of a human trying to sound like a robot: “Qui-et Ple-ase. I’m do-ing the talk-ing.” Elektro continues his act, performing a series of tricks designed to show his humanlike abilities: “Count on your right hand” commands the operator, a young white man dressed in a suit. The Middleton Family, the filmed audience and the film’s audience all watch as Elektro holds out his hand and carefully moves his metal fingers. This view of Elektro from *The Middleton Family* was the way many Americans saw Elektro at the fair. However, the performance at the fair was somewhat different. Here, Elektro interacted with a young woman. This gender switch made his remarks and the act take on a more demeaning connotation toward women, particularly as Elektro used gendered labels to describe his female operators.



**Elektro on stage with a Westinghouse operator during a performance at the 1940 New York World’s Fair. She instructs Elektro through a handheld microphone while putting a cigarette his mouth.<sup>203</sup>  
(Image removed due to copyright restrictions.)**

Practically, Westinghouse created a number of marketing advantages by giving Elektro a human female companion, including putting the audience at ease with the

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<sup>203</sup> Photograph reprinted in Harry Hutchinson, “Input/Output: A Modest Titan,” *Mechanical Engineering*, April 2008, <http://memagazine.asme.org/articles/2008/april/InputOutput.cfm>.

looming mechanical man and the future technologies he represented. Westinghouse, in fact, made the machine seem more human through a romantic relationship, as well as offering a young, attractive, female figure for the audience's gaze, and created a gendered, comic routine that allowed Elektro to display his personality at the expense of his female operator. This last element, in particular, is apparent in Elektro's script and the impact of his pre-recorded lines in the act as operators switch genders. As Elektro goes on stage he refers to his operator, saying "Ok, Toots!" which seems like a silly misuse of slang when said to the male operator in the film but takes on its actual connotation as a term of endearment, like "honey" or "babe" when spoken to a woman on stage. In addition to suggesting a relationship between the female operator and the machine, "Toots" also has a flirtatious connotation, particularly in a workplace environment. When Westinghouse introduces Elektro with his first words, "Ok, Toots," they in fact illustrate his masculinity and position his operator as his subordinate.

In fact, even the word "operator" takes on a different connotation between male and female actors as well. As opposed to being an "operator" in the sense of a skilled worker operating Elektro, the "operator" is related to the feminized position of telephone operator: "[My brain] works just like a telephone switchboard, if I get a wrong number, I can always blame the operator." Although Elektro's technology is another step away from the Televox unit, his explanation has less to do with his lineage than with his female companion. The first telephone operators were boys, but young women soon replaced them. Telephone operator became one of the few socially acceptable positions for single women in the early twentieth century.<sup>204</sup> Operating a telephone was far different than

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<sup>204</sup>Claude S. Fischer, *America Calling: A Social History of the Telephone to 1940* (Berkeley: University of California Press, 1992).

operating a robot, yet Westinghouse positions the robotic controller within a traditional female career role. In addition, Elektro mocks the powerlessness and supposed ineptitude of female operators, turning the woman beside him into a scapegoat. If something goes wrong it's not Elektro's fault, or a fault his mechanical construction. Rather in the act it's the operator who has failed to use the technology appropriately.

Westinghouse's vaudevillian approach to Elektro's display was part of an ongoing shift from a heavily cerebral form of advertising that emphasized thoughtful rhetoric to a heavily visual style of advertising that offered dazzling displays of modern technology. Elektro's banter and occasional technical hiccups turned the performance from a straightforward demonstration of a particular technology into a vaudeville double act with Elektro as comedian and the female operator as straight man. Instead of operating Elektro to show off Westinghouse technology, the female operator serves as a stooge who is reasonable, serious, and provides the comic conduit of Elektro's performance: She feeds Elektro jokes, setting the machine up to be funny and personable. Elektro's "identity" comes out through this comic routine at the expense of the operator, who both appears humorless and inept at her supposed job of controlling Elektro. Through careful scripting, Elektro always comes out as a witty metal man who audiences wait hours to see and the operator comes across as the unintentional comic foil.

Of Elektro's many female operators, only one was recorded for the historical record. Marguerite Smith was a Westinghouse employee brought to the fair's second season in 1940 to supervise the company's new iron assembly line exhibit.<sup>205</sup> While she only ran Elektro for one day (the robot's three other female operators were unavailable

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<sup>205</sup> Schaut, *Robots of Washington*, 136. Here, Westinghouse showed fairgoers the process of building Westinghouse irons, which could then be purchased as souvenirs.

and she was called in), Scott Schaut devotes an entire chapter to her experiences at the fair, offering a view of life behind Elektro, and a female Westinghouse employee's view of the fair. While, as we have seen, Smith and other women Westinghouse employees like Smith were not depicted in Westinghouse's *Middleton Family*, they played a significant role at the fair, running exhibits, giving tours, and in fact, being the face of Westinghouse. In fact, while Elektro's own identity was embedded in a history of Westinghouse robots, leaving him as a step in the evolutionary ladder, the identity of the Westinghouse employee was changing as women took on a more present role, even if it was playing a foil to technology.

While Westinghouse gladly presented the company's female employees at the fair, the presence of female employees at Westinghouse was for the most part aesthetic. Smith describes how company executives picked female employees from the Mansfield plant to go to New York.

They went through the factory and pick[ed] a bunch of us girls for a photo shoot. We went down to the train station and boarded a Pullman car, up and down, and the photographer snapped away. Part of this was that we had to step high to reach the step of the car raising our skirts as we stepped up. I was picked along with 11 other girls and 8 men to run the iron line at the fair.<sup>206</sup>

Gendered display also influenced the corporate dress code. While male Mansfield employees wore dark suits at the fair, their female counterparts dressed in knee-length skirts, white blouses and cropped jackets. Gender also divided the types of work each employee could do. While men worked as announcers, artists or were often in supervisory or team leader roles, women at the 1940 fair provided Westinghouse with telephone operators, worked the iron assembly line, worked as hostesses and attendants in

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<sup>206</sup> Ibid., 136. Smith's photo ID for the fair lists her name as "Margaret," an Anglicized version of Marguerite.



the pavilion's lounges, acted in exhibits and demonstrations, or operated Elektro.<sup>207</sup>

These gendered divides in assignment reinforced images of traditional career roles for women and men, even as they worked side-by-side back at the Mansfield plant.<sup>208</sup>



**Marguerite Smith, Elektro and Sparko, Westinghouse postcard, 1940**

Despite Smith's brief exposure to the robot, she became a well-known companion to Elektro. Smith was photographed alongside Elektro and Sparko, a squat, bronze canine robot built to resemble a Scottie that was introduced in the 1940 Fair.<sup>209</sup> The photograph was turned into a postcard for Westinghouse and was handed out at local exhibitions

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<sup>207</sup> "Personnel—Westinghouse World's Fair Exhibit," May 21, 1940. Published in Schaut, 138–141. Each Westinghouse exhibit in 1940 had at least one woman on the staff except for the television demonstration. The newest Westinghouse technology, TV, was presented exclusively by men.

<sup>208</sup> In addition to working together, Westinghouse employees often married one another. Westinghouse company magazines frequently congratulated newly married employees. After the fair, Marguerite Smith married Frank Zgela, a press operator who worked at Mansfield for over 35 years.

<sup>209</sup> Schaut, 127.

throughout the 1940s. Smith smiles down at Elektro in the image, hand raised in a gesture used when commanding a dog to perform a trick. Sparko sits upright on its hind legs, as though it is performing a dog trick for Smith. Elektro, looming behind Smith and Sparko, gazes in the direction of the dog. Elektro's head, unable to tilt downwards however, makes Elektro look only partially engaged in the scene.

Far from the smoking, wise-cracking robot depicted in the *Middleton Family*, the postcard image of Elektro situates the robot itself within a family unit. However, rather than being a household servant, Elektro stands in as the man-of-the-house, while Smith takes the role of Elektro's companion as she stands close to Elektro and playfully interacts with Sparko, a new robot built to resemble a family pet.

While Elektro had posed alongside women before, the activities displayed—singing, dancing, walking—didn't necessarily tie Elektro to the female companion in any significant way. The introduction of Sparko, however, changes the dynamic between Elektro and his companion to suggest domesticity and sense of family that has been long represented through family pets. In *Pets in America*, Katherine Grier argues that the domestic ethic of kindness that emerged in the nineteenth century helped solidify the representation of the pet within the home. Animals were, like children, largely helpless and needed to be cared for, raised, and trained.<sup>210</sup> “Pet keeping was strongly associated with childhood by the nineteenth century,” Grier notes. “Caring for pets was one avenue for the cultivation of self through expressive behavior during moments of leisure.”<sup>211</sup> Nineteenth century paintings and lithographs show children and women interacting with family pets within the family home, suggesting that dogs, cats and birds played an

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<sup>210</sup> Katherine Grier, *Pets in America: A History* (Chapel Hill: University of North Carolina Press, 2006), 213.

<sup>211</sup> *Ibid.*, 16.

important role in the family unit as companions, friends, and family members. Authors of training manuals used the metaphor of “civilizing” or “educating” animals.<sup>212</sup> Well-trained dogs were a canine equivalent to well-raised people: they were disciplined and developed not just through house-training but through amusing performances like “shaking hands” and rolling over.<sup>213</sup> Sitting up on command, the trick Sparko performed in the postcard, was another popular trick for the family dog.

Through both staged comedy routines and staged photographs, female employees of Westinghouse became the girlfriends and wives of Elektro. In some cases their interactions with the robot appeared wholesome, almost familial, and in other cases they resembled demeaning harassment designed for the amusement of a live audience. The changing and conflicted relationship between women and Elektro proved entertaining to many, but was far from the role of Mother’s Helper that Televox initially represented in the late 1920s. Although Elektro would never have another regular female operator, his relationships with families and women would follow him long after the close of the 1940 World’s Fair.

### **Consuming Elektro: Celebrity, Camp and Computers**

The seven-foot, smoking robot that stood as Westinghouse’s popular vision of the future went on to perform on smaller and smaller stages after the fair’s 1940 season. As the last of the company’s long line of domestic robot helpers, Elektro spoke to audiences with subservient catchphrases like “If you treat me right, I will be your slave.” Ultimately this fantasy of the robot slave proved impossible for Elektro. The robot was too big, too

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<sup>212</sup> Ibid., 96.

<sup>213</sup> Ibid., 98.

unwieldy, to even fit into most American homes, let alone do housework.<sup>214</sup> In addition, none of his tricks had any domestic application whatsoever. Instead they were amusing performances designed to entertain people rather than alleviate their daily chores. Rather than a viable alternative to the drudgery of housework, Elektro was a celebrity in his own right and a national spokesman for Westinghouse. Following the fair, Elektro traveled from coast to coast, promoting Westinghouse dishwashers and refrigerators at housewares shows or in the housewares departments of large department stores.<sup>215</sup> Although Elektro never washed a dish or cooked a meal, the robot became the face of Westinghouse appliances.



**Westinghouse's Elektro pin, c. 1940. The one-inch pins were included in the Westinghouse promotion and display packet that accompanied Elektro to live appearances. Instructions for pins: "PINS: Bronze with red and blue. For employees and handout. 75¢ per 100 (1FL-8005)"<sup>216</sup> (Image removed due to copyright restrictions.)**

At these free local shows, audience members could receive small souvenir pins featuring Elektro standing confidently above the company name and postcards featuring Marguerite Smith beside Elektro, but the goal of Elektro's tour in the post war era was

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<sup>214</sup> Martin, "What Ever Happened to ... Elektro?"

<sup>215</sup> Schaut, 149.

<sup>216</sup> "Elektro The Mechanical Man and His Dog Sparko: Promotion and Display," reprinted in Schaut, 151.

not to distribute Westinghouse souvenirs so much as it was to sell Westinghouse products to the real Middletons of America: middle-class household consumers. Like the robots that preceded him, Elektro was Westinghouse's spokesperson, a figure that both embodied Westinghouse technology and brought Westinghouse innovation to audiences' doorsteps. One of Elektro's operators observed, "next to Betty Furness, later the hostess of Westinghouse's well-known TV show, Elektro was probably the best appliance salesman the Company ever had."<sup>217</sup> As the town and venues grew smaller, Elektro's act shifted, incorporating new tricks that could appeal to a family audience. In 1941 engineers put a second hole in Elektro's upper lip that let him blow up balloons.<sup>218</sup> Press photos showed him blowing balloons in addition to smoking cigarettes. Elektro also appeared in photographs with kids and alongside the dog, Sparko. Through these technical adjustments and additions, the robot pair seemed more toned down, more familial than the bawdy Elektro of the 1939 fair season.

This section highlights Elektro's evolution and role as media celebrity during World War II and in the Post-War era in order to reveal Elektro's changing identity with a changing consumer audience as well and examine how exactly Elektro was used following his tenure at Westinghouse. To do so, we will first examine Elektro's road-tours, then move to his time at Pacific Ocean Park before being cast in the B-film *Sex Kittens Go to College* (Albert Zugsmith, 1960). It is useful to consider Susan Sontag's lens of "camp" over this twenty-year period, particularly as Elektro moves from doing family-friendly small-town live shows, to starring opposite Mamie Van Doren as a bourbon-swilling, gambling womanizer who happens to also be a computer at a small

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"Excerpts from C. Bruce Hardy, Interviews and correspondence[sic] of his recollections[sic] with Westinghouse, Elektro and Sparko." Schaut, 150.

<sup>218</sup> Schaut, 150.

liberal arts college. “Camp” Sontag suggests in her famous 1964 essay, “Notes on ‘Camp,’” is a way of consuming or performing culture with an overlying sense of irony or “in quotation marks.”<sup>219</sup> The final section will review Elektro’s late career and consider how Sontag’s theory of camp relates to the history of popular representations of technology.

In 1940 Elektro and Sparko made approximately twenty-five appearances following the close of the New York World’s Fair. In 1941 the duo made ten appearances followed by six appearances in 1942. By the fall of 1942 Elektro and Sparko headed back to Westinghouse to be boxed away during World War 2. The Mansfield plant, like many other factories at the time, halted consumer production and turned to making materials for the war effort. Binoculars, airplane parts, radios and bomb fuses replaced Westinghouse’s toasters, irons and refrigerators.<sup>220</sup> During these forty-one small appearances, Elektro was accompanied not by his “girlfriends” but by two young men, Bill Coffey of the Mansfield Westinghouse Appliance Division (he was drafted in 1941) and C. Bruce Hardy, who worked in the Westinghouse advertising department in Mansfield. This reversion back to a male operator likely had less to do with capability than with supervision. At the New York World’s Fair, female employees lived in a boarding house and were accompanied by chaperones.<sup>221</sup> To have a single female traveling across America alone would have seemed unsafe, taboo, perhaps even scandalous. Despite his size and masculine persona, Elektro was no substitute for a human husband. Thus, Elektro’s female companions

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<sup>219</sup> Susan Sontag, “Notes on ‘Camp,’” *Against Interpretation, and Other Essays* (New York: Farrar, Straus & Giroux: 1966). Picador, 2001.

<sup>220</sup> Schaut, *Robots of Westinghouse*, 149.

<sup>221</sup> Marguerite Smith interview, reprinted in Schaut, 136.

needed human chaperones, while his male operators following the fair could tour freely about the country.

Stores, shows and the occasional local fair could book Elektro for one hundred dollars per day. With that came a show approximately one-hour long performed five or six times per day. The show itself took place on a fourteen-by-nine-foot portable stage backed by a nine-foot velveteen background curtain. The extensive amount of electrical equipment for the show including record players and a case of 46 telephone relays was located behind the curtain.<sup>222</sup> “Each show he was introduced by the operator,” recalls C. Bruce Hardy, “who, after welcoming those in attendance, told the crowd that Elektro contained some of the same parts as refrigerators and dryers and was a ‘well-spoken’ representative for the company’s household appliances.”<sup>223</sup> Elektro’s elocution came from two record turntables with records cued in place. Even Sparko had his own record of barks.

As discussed earlier in this chapter, Elektro’s instructions were spoken in a simple, six-impulse voice code. The words said did not matter, only the pattern in which they were spoken. Following Elektro’s performance, Sparko gave a brief demonstration: “The dog barked, sat down, sat up and begged, turned his head, returned to site, then turned his head and barked once.”<sup>224</sup> After demonstrating the robots, Hardy gave a brief pitch for Westinghouse appliances before returning back stage to set up the next show.

Westinghouse promoted Elektro’s canned performances by sending promotional materials, and advertising and news stories to local venues. Along with postcards and pins was a three-by-five-foot lobby display board, suggestions for handbills, and

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<sup>222</sup> Ibid., 149.

<sup>223</sup> “Excerpts from C. Bruce Hardy, Schaut, 149.

<sup>224</sup> Schaut, 150.

encouragement to get Elektro on local radio: “Interview Elektro on the air. Stations can make special voice recordings.”<sup>225</sup> The Westinghouse Press kit also included examples of new stories, suggesting “Elektro advertising really pulls – he is a ‘natural’ from news stories.”<sup>226</sup> Suggested copy like “See Elektro The Mechanical Man and his dog Sparko at (Store Name). He Walks. He Talks. He Smokes. He Counts.”<sup>227</sup> Store discounts and specials followed Elektro on his tour as local sellers used the opportunity to sell discounted Westinghouse merchandise to Elektro’s audience.

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<sup>225</sup> “Elektro The Mechanical Man and His Dog Sparko: Promotion and Display” reprinted in Schaut, 151. Elektro had appeared on other radio shows, including the *VoxPop Traveling Radio Show*, which broadcast from various locations, including the Aquacade and the Westinghouse Pavilion in 1940.

<sup>226</sup> Schaut, 151.

<sup>227</sup> Bill reprinted in Schaut, 152.





**Ad featuring Elektro from the July 2, 1956, *San Mateo Times*.  
(Image removed due to copyright restrictions.)**

These canned performances hearkened back to the Televox and Vocalite acts of the late 1920s and 1930s. Part commercial, part store sale, part traveling vaudeville act, the performances sold Westinghouse through an entertaining techno-fantasy that lacked the holistic social ideals so carefully constructed by Westinghouse's pavilion, *The*

*Middleton Family* and the company's Home of Tomorrow, a futuristic home exhibit in Mansfield, OH. Elektro's performance of the democratic American Dream at the World's Fair was replaced with a 2-man stage act and a robot-dog show for middle America. These shows lacked the ability to convey social ideals, let alone tease out the social struggle between capitalism and communism, tradition and modernity like the makers of the *Middleton Family* attempted to do.

In part, this likely had to do with the shift in stages and contexts. The grandness and possibility offered by the World's Fair provided a backdrop for the extreme, the innovative and the extraordinary. Small shops in Minnesota, Michigan and Missouri consisted of far less grandeur. Rather, they were local appliance retailers for a small area. The weekend shows provided spectacle for the local community but the aim was not to thrill, challenge and impress, but to move store merchandise. High concepts around reimagining Westinghouse's brand conveyed in the Westinghouse Pavilion were replaced with something more familiar, comfortable, and accessible. Elektro, Westinghouse's future incarnate, performed a familiar, routine stage show designed to connect consumers to new technologies through identifiable if not slightly outdated performances.

### **Consuming Elektro during and after the War**

Like many American manufacturers, Westinghouse shifted their products and public relations during World War II. The company boxed Elektro and began to look towards its workers as the future hope. It promoted a sense of community, bringing the notion of the small town to the big corporation. Westinghouse "induced" employees to put on talent shows with local plant talent, reviving the tradition of local pageants and

parades.<sup>228</sup> It presented itself as a community through the sales of war bonds, transformed its Home Economics Institute into a participatory “Health for Victory Club” and let loose posters glorifying the Westinghouse employee as engaged American.<sup>229</sup> Howard Miller’s famous “We Can Do It!” poster presented the Westinghouse worker as powerful, patriotic, hard-working and most importantly, female. It not only encouraged women to participate in all parts of factory production, but also presented an idealized Westinghouse female worker as the backbone of industry rather than technology’s girlfriend. Yet, other Westinghouse posters like Miller’s “Ask Your Supervisor” reinforce the corporate hierarchy, suggesting that female employee empowerment could only go so far.



**"We Can Do It!" (Artist: J. Howard Miller, Westinghouse War Production Co-Ordinating Committee) Any Questions about Your Work? Ask Your Supervisor"(Artist: J. Howard Miller, Westinghouse Labor-Management Co-Ordinating Committee)**

Westinghouse shifted back to producing appliances following World War II and appliance sales increased dramatically in the Post-War era. Elektro was unboxed around 1946 and set out on another series of tours that would take him into the 1950s. While his

<sup>228</sup> Marchand, *Creating the Corporate Soul*, 316.

<sup>229</sup> Ibid.

technology did not substantially change (he could now play an instrument called a Xylotron—a combination xylophone and piano), the venues and audiences did change during this eight-year tour.<sup>230</sup> In addition to department stores, Elektro performed at children's hospitals, at science museum openings, on Westinghouse's KDKA radio and on the "You Asked For It" television show, an education and entertainment variety series that let home viewers request what they wanted to see.<sup>231</sup> Publicity stunts included Elektro's walk across the Friendship Bridge, which separates Canada from the United States. Most shows were heavily attended by women and children, making Elektro a household figure, while radio and television outlets brought Elektro into the home through his regular and guest appearances. While Elektro still sold products in housewares departments, this variety of appearances expanded his identity from a popular Westinghouse spokesperson to national celebrity and television actor.

Elektro's popularity began to wane as other celebrity robots began to appear in the mid-fifties. Celluloid robots like Gort from *The Day the Earth Stood Still* (Twentieth Century Fox, 1951) and Robby from *Forbidden Planet* (MGM, 1956), the subject of chapter 3, offered American audiences more exotic robots from outer space. In 1957, Elektro was sent to Venice, California's Pacific Ocean Park to be included in the Westinghouse Enchanted Forest and Nautilus Submarine Exhibit, which included a full scale Nautilus submarine.<sup>232</sup> His brilliant bronze finish was covered by a layer of military-style grey paint and his trademark red circle was covered by a utilitarian square metal plate. No longer did Elektro represent the glorious future of tomorrow. Instead he

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<sup>230</sup> Elektro's records and turntables were replaced by a Webcor reel-to-reel recorder, which allowed the operator to more easily queue Elektro's recordings. Schaut, *Robots of Westinghouse*, 177.

<sup>231</sup> *Ibid.*, 164. Elektro won the "Skippy Award" for being the most requested show of 1951.

<sup>232</sup> *Ibid.*, 164.

was a toned-down version of his former self, a side show to a submarine that looked more functional than fantastic.

In this effect, Elektro presented a cold war vision of technology that was not based in leisure and domesticity, but in pragmatic functionality linked to national defense. Starring opposite a Nautilus sub was a far cry from his girlfriend operator and lovable dog (who did not make the trip to Pacific Ocean Park). Yet, despite his dull grey exterior, Elektro possessed none of the weaponry to make him a viable machine for military defense. Looking like a bloated, grey tank, Elektro still performed the same old tricks – smoking, counting, and walking—while the Nautilus demonstration showed off Westinghouse nuclear reactors. Elektro’s identity could not shift from whimsical, vaudeville robot to be updated with the Cold War Era. The twenty-year-old robot’s changing character would be reinvented again as a campy version of his former self.

### **Elektro Goes to College**

Elektro’s peripatetic journey took another strange turn when a Hollywood agent saw the robot at Pacific Ocean Park and contracted, presumably with the park and Westinghouse, to cast Elektro as S.A.M. Thinko for the upcoming film *Sex Kittens Go to College*.<sup>233</sup> Part screwball-comedy, part exploitation film, *Sex Kittens Go to College* (also known as *Beauty and the Robot*) made a lackluster debut in 1960 starring Mamie Van Doren as Mathilda West, a brilliant and busty science professor who enters academia from the striptease circuit.<sup>234</sup> Blessed with beauty as well as eighteen college degrees,

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<sup>233</sup> Ibid., 179.

<sup>234</sup> In its first week, *Sex Kittens* grossed only \$8,000 in Hollywood versus *Strangers When We Meet*, which grossed over \$24,000. Picture Grosses: *L.A. Okay*; “‘Strangers’ Rousing 24G, ‘Kittens’ Dull \$8,000, ‘Cat’ Fair 14G, ‘Sunrise’ Bright 12G, ‘Sons’ Big 17G” (October 12, 1960), 8, 19.

West shows up at the fictional Collin's College after the school's state-of-the-art computer, Sequential Auxilliary Modulator Thinko (also known as "S.A.M. Thinko"), chooses her to be head of the science department from its database of qualified candidates. Thinko, played by Elektro, is portrayed as having a few screws loose for assigning the beautiful Van Doren for such an austere position, as much of the film's plot comes from Dr. West being both intelligent and sexually desirable. In addition to bringing Dr. West to Collins College, Thinko also arouses the attention of two bookies who come to Collins to find Thinko after Thinko's successful string of gambles on horse races. As Dr. West works to make a place for herself amid the flirtatious faculty at Collins, the two bookies search for Thinko without any idea that he's a computer. Co-ed accounts of "spending time with Thinko" lead the bookies to believe the computer to be a popular ladies' man. At the end of the film, it's revealed to the bookies that Thinko is a computer that has absorbed too many gambling records and is suffering from a "mental breakdown."

The absurdity of *Sex Kittens* stems largely from a mockery of academia. Stripped down to a series of sexually-repressed professors, awkward scientists, dumb jocks and ambitious co-eds, *Sex Kittens* attacks higher education through satire and mockery, rendering the college administrators and researchers inept and impotent. Jonathan Dollimore looks at a particular kind of camp represented in *Sex Kittens*: a satire that "undermines the categories which exclude, and does so through parody and mimicry." It does so by undermining "the depth model of identity from inside, being a kind of parody

and mimicry which hollows out from within.”<sup>235</sup> Most obviously this is done through the voluptuous figure of Mathilda West: a busty bombshell who overturns the academe through her feminine good looks and scientific brilliance. Repeatedly in the film, Dr. West is presented as an outright anomaly—someone who possesses both brains and beauty cannot possibly exist in the form of Dr. West, and because academics have never seen such an individual, they don’t know what to do. The world of academe is overturned by a bombshell. No one can understand her combination of brilliance and curvaceous body. “No one’s questioning her academic background,” suggests the college’s public relations officer in conversation with the dean, “just her popular front.” His reference to Dr. West’s chesty torso suggests the unsaid but visually portrayed assumption of the film that a structure that segregates masculine intelligence from feminine beauty girds the academe: Scholars must be physically homely to be brilliant, and beauty (represented by the comely Collins co-eds) comes only with childish ignorance, raging libidos, and obvious stupidity.

West’s obvious sexuality is met by fear, trepidation, and flirtation and is behind the main conflicts in the film. Sexual urges sparked by Dr. West are hidden behind academics’ wise-cracks, which suggest an inability to deal with sexuality on a professional level as well as an inability to do anything about it. The scholars’ impotence, however, is counteracted by Thinko’s very human needs as the film’s only visually represented sexual fantasy is the one in Thinko’s Elektonic brain.

Near the end of the storyline, Dr. West psychoanalyzes Thinko. She and the audience learn that Thinko is girl-crazy through Thinko’s sexually charged dream

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<sup>235</sup> Jonathan Dollimore, “Post/Modern: On the Gay Sensibility, or the Pervert’s Revenge on Authenticity,” Fabio Cleto, ed. *Camp: Queer Aesthetics and the Performing Subject: A Reader* (Edinburgh University Press, 1999), 224.

sequence. Dressed in college sweater and hat, Thinko stands at the bar of a local college hang-out as a parade of four white, female dancers perform alluring stripteases, each one a few minutes in length. Thinko orders bourbon and moans with pleasure as each dancer slowly undresses for the college computer and writhes on the linoleum dance floor or against Thinko itself. The seemingly misplaced sexual chemistry between co-ed and computer becomes even more bizarre as Thinko's dream sidekick, a monkey named Voltaire, gazes at the dancers, gesturing surprise and wild excitement as well as clapping approvingly.

Thinko's fantasy is both absurd in the fact that the heterosexual male gaze has been replaced by a robot and a monkey, as well as sexually charged through the extended stripteases featuring some of the film's young stars (Van Doren, however, is not one of the strippers). Furthermore, it mocks the role of the robot and the role of the scholar by suggesting that even a robot can be more of a red-blooded male than an academic. However Elektro's bare, smooth pelvic region signifies the robot's impotence as well. As young women grind against the robot, Thinko can do nothing but moan inarticulately. To add insult to injury, the robot's sexual desire causes him to blow a fuse and end up totally incapacitated and laid up in a hospital bed. Through Thinko, the film mocks technology by highlighting its physical limitations. Thinko may know all, but he cannot handle human relations without blowing a fuse. Furthermore, the film mocks Elektro specifically by offering a portrait contradictory to the one offered by Westinghouse as a charming ambassador of new technology with a gift for connecting with the everyman and woman. This portrait of Elektro the robot challenges his initial image as a boyfriend to his female operators by questioning his ability to perform sexually. Elektro, it appears in *Sex Kittens*,



is all talk and no action. The women around him do the work (both in the academe and in the striptease) while the robot stands hooked up against a wall or leaning awkwardly against a restaurant bar.



**Press photo from *Sex Kittens Go to College*, 1960 (Image removed due to copyright restrictions.)**

Like the academics that created him, Thinko the college computer cannot handle feminine sexuality at the college. Yet, his extended sexual fantasy suggests a complicated relationship between the robot and pretty young women. Women seem to be Thinko's downfall as well as the robot's saving grace (Van Doren diagnoses his condition and a buxom nurse cares for him following his breakdown.). The film's female characters are both the objects of everyone's attention and seem to be some of the most disenfranchised individuals at the college. Van Doren, for example, seems to be constantly on the brink of

being fired, while the pretty coeds occupy much visual attention but do little to move the plot forward. Yet, they end up controlling both the college's robot computer as well as their own destinies. Van Doren leaves the college with handsome beau in tow, one co-ed gets her man while another ditches hers in favor of further studies. By empowering the outsiders and female students and rendering the scholars and their innovations impotent, *Sex Kittens Go to College* suggests (albeit in tongue-and-cheek way) that objects of desire can be complex, brilliant, productive individuals with seemingly contradictory assets that work in their favor. In addition, the film's real winners have both a healthy sexuality and a keen intellect.

*Sex Kittens* shows a changing understanding of robots and sexuality far removed from that displayed at the 1939 World's Fair. Women as Elektro's 1939 on-stage operators served as the butt of Elektro's sexist remarks and churlish advances. They were meant to be a straight-woman comic figure beside the robot, performing on stage as a sidekick rather than a controller. The women in *Sex Kittens* play a much more active role with technology in two orthogonal purposes. They are sought after as high-level administrators: Elektro specifically searches and finds Dr. West and brings her to the college to both teach and run a department. And they are sex objects for Elektro: the strip tease scene puts Elektro in the position of being a spectator and oddly providing the male-gaze for the strip tease. Both roles—the flawed technology that needs a woman's rescue as well as the male co-ed spectator—represent fragmented perspectives on technology. Elektro needs young women both to save an institution as well as to lead him toward exciting sexual temptation.

## **Life after *College* and Elektro Fandom**

From household helper to burlesque spectator, Elektro's peripatetic life moves from stage to showroom to striptease. These rather drastic shifts in the robot's character appear to be brought about by an intriguing and tragic backstory. Wherever Elektro goes, a mysterious and scandalous past seems to follow. In 1939, Elektro seemed to act as an escaped mental patient, being described as the "schizophrenic robot." By 1960, alcohol and gambling devastated the robot, leading him to horse racing and hiring decisions that included the tassle-tossing burlesque queen-turned-professor, Mathilda West. These caricatures of technology obviously were based in a fiction that Elektro's consumers and producers had dreamt up for the robot. The sunset of Elektro's biography will examine how consumption fed the production of iterative versions of Elektro through the twentieth century.

Following *Sex Kittens Go to College*, Elektro was sent back to the Westinghouse plant in Mansfield and boxed away permanently. Eventually, the robot was placed in the Elektromobile, a refurbished bread truck that carried Elektro, Sparko and the stage to live performances in the 1950s. When the plant held an auction in the mid-1980s, the Elektromobile was auctioned off to John McDevitt with Elektro's body inside.<sup>236</sup> Curiously, Elektro's head was missing from the Elektromobile.

Reuniting Elektro's head and body took over forty years via a devoted group of fans and serendipity. Despite the fact that millions of people saw Elektro on the stage, it was a trip into the home that allowed Elektro to be preserved. In 1942, John Weeks, a Westinghouse engineer who had worked on Elektro, took the robot and other

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<sup>236</sup>Noel Sharkey, "The Return of Elektro: The First Celebrity Robot," *New Scientist* 2687, December 25, 2008.

Westinghouse materials home for safe keeping during World War II. John propped Elektro's torso up in his basement and put on Elektro's head for his three sons' amusement. Dennis, Lowell and Jack Weeks played with Elektro for years, dressing the robot up in costumes, playing tank and cowboys and Indians.<sup>237</sup> In 1946, Elektro left the Weeks' home to tour the United States. "I came home from school one day and the basement was empty," said Weeks. "I never imagined that I would see it again."<sup>238</sup>

In 1971, employees gave Elektro's head to Harold Gorsch, an engineer on Elektro and Sparko, upon his retirement. Sometime later, Dennis Weeks bought Gorsch's home and found Elektro's head discarded in the basement. Weeks kept the head, even loaning it to the company for an event when the Mansfield plant closed in 1990. Interest in the head spurred a newspaper article, followed by a phone call from McDevitt. Jack Weeks visited McDevitt and Elektro's body, but didn't recognize Elektro's dull grey paint. Spurred by Scott Shaut and Vicki Matranga, Jack returned to McDevitt's estate to see the torso again. More paint had peeled, revealing Elektro's bronze color from the early 1940s. Jack recognized the bronze paint from his childhood, bought Elektro's body for five hundred dollars, and finally owned the entire robot.<sup>239</sup>

Although not the vision of the robot helper that Westinghouse had envisioned, Elektro's stay in the Weeks home led to a series of unintended consequences. In addition to saving Elektro from the scrap heap, the Weeks boys' interaction with the robot spurred their interest in engineering. Jack Weeks went to college for electrical engineering and

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<sup>237</sup> Schaut, *Robots of Westinghouse*, 11. Sharkey, "The Return of Elektro."

<sup>238</sup> Sharkey, <http://www.newscientist.com/article/mg20026873.000-the-return-of-elektro-the-first-celebrity-robot.html>. (accessed January 8, 2010)

<sup>239</sup> Schaut, 186; Sharkey, "The Return of Elektro."

worked part time on Elektro in the 1950s.<sup>240</sup> Dennis Weeks went on to work at Hoover Instrument Service in Mansfield, which specialized in electrical control panels. Their unscripted play with Elektro was a far cry from the shows on the stage, but represented Elektro's only real attempt in the home, not helping housewives around the house, but being a toy that fuelled children's imagination.

Not surprisingly, the Weeks boys became some of Elektro's biggest fans, as did individuals like Scott Schaut. The difficult process of reuniting Elektro's body with his head also foreshadowed a series of fan decisions that feed into Elektro's place today. Namely, where Elektro exists, his preserved condition, and replications of Elektro located in Mansfield alongside the real Elektro and elsewhere in the world, including the now defunct Nagoya Robot Museum in Japan.

The original Elektro is physically inoperable and confined to the Mansfield Memorial Museum for the foreseeable future. Alongside displays of town paraphernalia, Elektro's live audience is smaller than seventy years earlier. Schaut's Elektro has led a few museums to create their own replications of the robot. Bronzed Elektros stand at the Heinz History Center in Pittsburg and at the Robot Museum in Nagoya, Japan. Both recreations of Elektro present the bronzed 1940 version of the robot along with Sparko.<sup>241</sup> These physical displays all offer a nostalgic view of Elektro from the robot's heyday at the 1940 World's Fair. In the displays, Elektro is tied to Westinghouse, the Fair and the possibilities for the future that Elektro represented. None of the robots, however, speak or

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<sup>240</sup> Schaut, 11.

<sup>241</sup> The Robot Museum in Nagoya closed about a year after its opening. The location of the Japanese version of Elektro that was on display is unknown. However, an image is available through Egadget.com <http://www.engadget.com/photos/robot-museum-tour/#417025> (accessed January 9, 2010). An image and added information about the Heintz Elektro: Deb Smit, "Exhibition Captures Pittsburgh's Innovative Impact on the World," *Pop City*, November 5, 2008, <http://www.popcitymedia.com/innovationnews/innovation1105.aspx>.

move to recreate the less-than-glorious activities that Elektro was capable of. Instead, they appear as static figures of a past future that have been carefully reconstructed to represent bygone technological fantasies.

Elektro's narrative life, however, still exists outside his physical shell. His online fandom has kept the robot's image alive and changing in different ways on the Internet, particularly as fans play with, manipulate and complicate Elektro's changing purpose and identity. In terms of available historical artifacts on the Internet, *The Middleton Family* is in the public domain, meaning online users can view the film in its entirety at the Prelinger Archive or view snippets featuring Elektro on YouTube.<sup>242</sup> Fan websites for Elektro collect images of Westinghouse promotional stills, magazine articles, diagrams and newspaper clippings.

The proliferation of Elektro-related images, media, and other items on the Internet suggests a new life for Elektro displayed online. While fans like Jack Weeks and Scott Shaut offer nostalgic images and memories of Elektro that perennially situate Elektro in the past, others make up their own alternative histories of Elektro to retell the robot's story. Recent tributes to Elektro occasionally depict the robot as a washed-up mess of a machine and the victim of his own poor vices and habits. Slightly crazed and likely alcoholic, Elektro appears in these depictions much the way it did in early newspaper accounts. One alternative history depicts Elektro as a disoriented vagrant found in a dumpster behind a gas station who turned to soft-core because his "frayed logistic circuits" impaired his decision making.<sup>243</sup> David Szondy's tribute to Elektro likewise

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<sup>242</sup> *The Middleton Family at the New York World's Fair* (1939) is available in the Prelinger Archives [https://archive.org/details/middleton\\_family\\_worlds\\_fair\\_1939](https://archive.org/details/middleton_family_worlds_fair_1939) (accessed June 15, 2014).

<sup>243</sup> "Elektro's Sordid Stag Reel," WFMU's Beware of the Blog, April 16, 2008, <http://blog.wfmu.org/freeform/2008/04/elektro-the-rob.html>.

depicts a pathetic demise: After years of drinking, smoking heavily and chasing women, Elektro “crashes” while playing Willy Loman during a Kansas City production of *Death of a Salesman*, a fitting and ironic role for Westinghouse’s robot spokesman.<sup>244</sup>

Still others readers manipulate images of Elektro, offering alternative visions of the robot that visually update the robot through contemporary aesthetics. A flicker user, Neato Coolville, posted a photograph of an etched version of an Elektro press still from Flushing Meadows Corona Park located near the site of the 1939 Westinghouse Pavilion.<sup>245</sup> Here Elektro is transformed from a press still into a piece of urban art. Flickr comments below the image suggest a familiarity with Elektro and his past as one commenter observes, “He looks angry. They probably made him stop smoking.”<sup>246</sup>

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<sup>244</sup> David Szondy, “Tales of Future Past: Elektro,” <http://davidszondy.com/future/robot/elektro3.htm>.

<sup>245</sup> Elektro the Robot Etching, <http://www.flickr.com/photos/neatocoolville/2909176874/>. Blogger Kevin Garcia offers his own illustration of Elektro, available at the blog Monomythic, <http://monomythic.wordpress.com/2009/04/09/kick-ass-robot-elektro-the-first-foul-mouthed-smoking-robotic-icon/> (accessed January 10, 2009).

<sup>246</sup> Comment available at Elektro the Robot Etching, <http://www.flickr.com/photos/neatocoolville/2909176874/> (accessed January 10, 2009).



**Left: Westinghouse press photo of Elektro “receiving dance lessons,” c. 1939  
Right: An etched manipulation of the same image on a concrete wall, c. 2008**

Despite attempts to confine Elektro to a static exhibit or bygone era, online fans of Elektro have used the robot’s context, related media, history, and own performances to suggest playful, alternative, rereadings of the robot. While the physical Elektro is visited by a relatively small number of people, these online Elektros replicate and complicate Elektro’s identity in ways that both hearken back to specific historical contexts like the New York World’s Fair and Postwar Era and remove him from those contexts to suggest his relevance today. In addition, Elektro’s playboy identity and sexist relationships with women continue in fan narratives. Yet Elektro’s performative schticks (smoking, carousing with female operators) are marked as vices that contribute to the robot’s personal downfall. In this sense, Elektro’s identity in the hands of contemporary fans moves the Westinghouse robot fictional narrative to termination: as the Televox robot



took up smoking and walked out on the home, Elektro kept smoking and wound up in moral scrap heap. His human fallibility got the best of him.

### **Conclusion: Lessons Learned from Elektro's Stardom**

Despite the gloomy fan narratives featuring a self-destructive Elektro, the reality is that family did save the robot. In particular, young boys saved Elektro through their interactions with him in the family home. They also made Elektro, both in 1937 when Bob Constance carved the robot's head and in the 1970s–2000s when a series of Elektro's young fans bought components and preserved the robot. Elektro's historic epilogue suggests that consumers did provide a powerful regulating force in the image of Elektro, particularly after Westinghouse lost interest in their spokesperson. This image is far different than Westinghouse's initial intent: to promote Westinghouse technology. However, it does maintain threads of Elektro's identity: a love of smoking and women, all the while highlighting the silliness of a robot that could smoke and carouse with women. Museum versions of Elektro, on the other hand, use the robot to hearken back to a nostalgic view of technology, as represented through an inanimate golden statue. However, Elektro's 1940 identity was not like the static replications in Pittsburg and Japan. These replications highlight his size and bulkiness, but not the "soul" or "schtick" of the robot reflected in his 78-rpm records and expanding array of gestures and actions.

Nonetheless, Elektro's female operators are left out of the fan story and historic narrative altogether. In part this could be because the audience that keeps Elektro's identity alive is largely male. Still the women who watched him be built, operated him, interacted with him and often posed with him for publicity photos are left out of Elektro's own technological history.

Oddly, a robot designed from household appliances for the home never helped his work-a-day female operators around the home or the factory. His presence, in fact, gave them more work with no beneficial results. As Paul Du Gay notes, “While the growth of the home as a leisure venue may have done little to alter the organization of gender relations both within and without the home. . . . If for men, the home is predominantly the site of personal relations and recuperation from work, for women (including working women) it still tends to be primarily a site of domestic labor and only secondarily a site of leisure.”<sup>247</sup>

Elektro, rather than being an appliance, became an oversized Mechanical Man. Taking on a gender role that performed leisurely habits like smoking and chatting rather than activity, Elektro’s role shifted from domestic helper to man-about-the house with an operator girlfriend that could maintain the middle-class home that he embodied. Elektro’s role put his companion in a traditional but awkward position: she was both responsible for maintaining her husband and her household technologies, of which Elektro was both. Elektro became a mechanical man of leisure to be waited on and kept in good running order.

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<sup>247</sup> Paul Du Gay, Stuart Hall, and Linda Janes, *Doing Cultural Studies: The Story of the Sony Walkman*, 2<sup>nd</sup> ed. (Thousand Oaks, CA: Sage Publications, 2013), 105.

## Chapter 3

### Robby and a Consumer Planet

Although Elektro and the other Westinghouse robots never physically entered the American home, robotic household help continued to be a prevailing theme in futuristic techno-fantasies in the years after World War II. For example, the popular 1962 cartoon series *The Jetsons* featured Rosie, a bulky robot housemaid with a Brooklyn accent and a metal torso mounted on top of a single leg and a set of caster wheels. Rosie operated as a maid, housekeeper and wise-cracking character on *The Jetsons*, suggesting albeit comically that the robot could operate as part of the modern family. Of popular sci-fi visions of the future, one robot in particular stands out as a popular model for the successful household helper. Robby, the robot butler from the 1956 film *Forbidden Planet*, represented the fifties notion of an ideal household robot helper. Tall and the color of gunmetal with round limbs that resembled a series of inflated balloons stacked vertically, Robby the Robot cooked, cleaned and maintained a mid-century ranch home located on a distant planet. The robot could even replicate consumer items, making Robby's barrel shaped chest an endless shopping mall of instant food and ready-made fashion. While Elektro could walk, smoke, count and make wisecracks to promote household appliances, Robby didn't need to promote appliances because he "could cook, drive, speak 188 languages and was as friendly as a puppy."<sup>248</sup> Rather than being man-made from parts at Westinghouse's appliance division like Elektro, Robby was a walking, talking quintessential home appliance producing all needed and wanted goods that offered the household a functioning home-of-plenty without the need of a

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<sup>248</sup> Michael Webb, "The Robots are Here! The Robots are Here!" *Design Quarterly* no. 121 (March 1983): 11.

breadwinner or homemaker. Robby's limitless ability to maintain comfortable living conditions, produce new consumer goods, supervise the family and service any ordinary human need suggests a domestic utopia where shopping, cooking, cleaning, and infinite chores are always complete.

Through the far reaches of sci-fi outer space, Robby brought a vision of Cold War era American suburbs to the movie theater. Robby kept the Morbius home, already a mid-century-modern and technologically advanced domicile, fully stocked with an infinite array of consumer products, and he showed how with advanced technology Americans could achieve the 1950s American Dream of wealth and abundance even in the depths of the galaxy. As Westinghouse conveyed the fantasy of suburban home-life through the Middleton family during the Depression, *Forbidden Planet* showed the far-reaching dominance of postwar suburban living by projecting it beyond American cul-de-sacs through the distant reaches of time and space.

Robby's rise to become a 1950s "movie star" marks a transition in how American popular culture and American media represented the robot. I use the term "movie star" here to indicate Robby's position as both a well-known figure in films and a celebrity, used to sell products. Where the last chapter offered a star study of Elektro, this chapter moves from the star study to a toy study rooted in material culture as Robby inspired a generation of robot toys. Robby intersects consumer culture and child culture directly by being both a maker of material goods on the film screen, and a material good himself in children's toy chests. His place as both a well-known film figure and a toy differs from Elektro, as Robby's identity has less to do with his public display and more to do with the merchandise manufactured to look like him. Through Robby's on-screen roles, MGM's

promotional images for the film, and numerous toys created to look like him, we see that Robby provides and narrates a rich foundation for popular American consumerist fantasies that goes beyond household appliances. An exploration of Robby's character and legacy illuminates three key themes: transmediation, globalization, and the rise of consumer culture.

These themes will emerge as the chapter ties Robby to popular mid-century ideals of suburban technology, connecting the robot character to the role he served within the home and family in *Forbidden Planet*. After reviewing Robby's role as homemaker and his place within the family, this chapter shifts to look at Robby's presence in the American home through the second film in which he appeared *The Invisible Boy* (1958). Here Robby plays companion to a young boy genius before being corrupted by an evil computer, and he is presented as both a boyhood companion and active, engaging playmate. The chapter then transitions from the film reel to Robby's role in the real American homes by examining how Robby influenced American children not as a popular film character, but as a children's toy often produced in occupied post-war Japan. Looking at Robby as one of many tin robots to emerge in the late 1950s and early 1960s, the last section will focus on the role of toys in developing a popular understanding of technological possibilities as well as seeding children to become fans of technology.

In *A Consumer's Republic*, Lizabeth Cohen's history of mass consumption in postwar America, Cohen shows that toys and ads targeting children as a market segment in the 1950s and 1960s "sought to lay the groundwork for a lifetime of consumption, preparing for their voyage from child to teen to adult male or female segment... cardboard grocery stores stocked with miniature replicas of brand-name goods, child-size Easy-

Bake Ovens ... all instructed children how to function in the adult world of consumption."<sup>249</sup> Children who played with toy models of popular brand-name cars, appliances and other consumer products, marketers assumed, would likely buy the real versions of these toys in adulthood. (As we will see later in this chapter with adult Robby fans, this assumption did in some cases prove accurate.) While real functioning robots were not available to adult consumers in the 1950s or four decades after, the fantasies of manufacturing, power and control that many of the robots represented led to a genre of toys that marketers to children capitalized on.

### **Suburbia in Space: Narrating Consumerist Fantasies at Home and Abroad**

While taking place on a far-flung planet in the distant future, the setting and plot of *Forbidden Planet* remains grounded within 1950s social and cultural ideals that place women in the home, men in science careers, and cutting-edge technology at the center of both day-to-day living and an outside (nuclear) threat. The 1956 MGM science-fiction film *Forbidden Planet* is set around the year 2200 when earthlings can travel at far beyond the speed of light and inhabit a number of planets. A United Planets cruiser commanded by Commander Adams (Leslie Nielsen) and an all-male crew approach the distant Altair-4 in search of surviving colonists from the Bellerophon spaceship that landed twenty years earlier. Once in radio contact, Adams receives message from Dr. Edward Morbius saying that he needs no help and that coming to the planet may cause harm to Adams and his crew. Undaunted, the space cruiser lands on the barren planet with an atmosphere suitable for sustaining human life. A few minutes later a robot named

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<sup>249</sup> Lizabeth Cohen, *A Consumers' Republic: The Politics of Mass Consumption in Postwar America* (New York: Knopf, 2003), 320.

Robby approaches in a hovercraft roughly the size of an automobile. Robby takes Adams and two crewmembers to the Morbius home where Dr. Morbius offers them a lunch that Robby has prepared to demonstrate the wonders of his robot creation. Robby's built-in chemical lab can replicate any food perfectly, giving the Morbiuses an unlimited stock of food on the barren planet. In addition to feeding the family, Robby maintains the home and protects Altaira (Anne Francis), Dr. Morbius's grown daughter. A built-in safety directive prevents Robby from ever harming a human being.<sup>250</sup>

The crew quickly learns that Morbius and his daughter are the only two survivors of the Bellerophon expedition. Shortly following the colonists' landing on Altair-4 everyone was ripped limb-from-limb by an evil, unseen planetary force. The Morbius family was mysteriously immune but Mrs. Morbius died of an illness months later. The sheltered Altaira is fascinated with the new visitors in her home, having never seen any other human beings besides her father. While already wearing a tight-fitting, short, bedazzled dress, Altaira orders Robby to make her a new dress in his replication unit, which Robby humbly and efficiently does. Altaira then begins a naïve, short-lived tryst with one of Adams's crew before Adams breaks up the meeting and demands that Altaira dress in less promiscuous clothing. The next day, however, Adams finds Altaira swimming in pool near the home and the two fall into a romance that continues the rest of the film and gives Altaira her first opportunity to leave the Morbius home behind.

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<sup>250</sup> Isaac Asimov introduced his Three Laws of Robotics in "Runaround," a 1942 short story. They are "1. A robot may not injure a human being or, through inaction, allow a human being to come to harm. 2. A robot must obey any orders given to it by human beings, except where such orders would conflict with the First Law. 3. A robot must protect its own existence as long as such protection does not conflict with the First or Second Law." Robby likewise obeys these laws in *Forbidden Planet* while serving and protecting the Morbius family. Isaac Asimov, "Runaround," *Astounding Science Fiction*, March 1942.

The land of plenty provided by the Morbius's and Robby the Robot turns to conflicted terrain as the history of ancient and former inhabitants, the Krel, is made known to the crew. Adams decides to take over the Krel investigation to uncover the source of the attacks on the colonists, and nightly attacks on their ship. They discover giant biped footprints near their ship and accuse Robby of attacking the crew. A crewmember, Cookie, gives Robby an alibi however, admitting that he was using Robby to make whiskey and was drinking whiskey with the robot at the time of the attack. The crew's doctor deduces that the monster is not Robby, but a being made of nuclear material. The Krel, the crew learns, were close to living without physical bodies but forgot that their technologically-assisted high intelligence created monsters from their subconscious id that could live on beyond the Krel. Morbius finds the idea preposterous, particularly as Adams accuses Morbius of using Krel technology and linking his id with these nuclear monsters on the planet. When a monster breaks into the Morbius home, Dr. Morbius orders Robby to kill it, but the robot malfunctions because it is unable to harm humans. Robby's inability provides a litmus test for Morbius, Adams and the crew: the alien beast was created from a human mind.

The reclusive Morbius confesses that when the colonists voted to return to Earth, his unconscious anger sent an id monster to kill them. The id monster now has turned on Altaira for defying his wishes by wanting to leave Altair-4 with Adams. Aware of his power over the id, Morbius destroys the monster and sets in motion an auto-destruction sequence of Altair. Adams, Alta, Robby, and the cruiser crew watch Altair explode from their spaceship as Adams explains that humans will come to develop technologies just as advanced as the Krels.



Mysterious new technology and the threats of foreign weapons make *The Forbidden Planet* ultimately forbidden to settlement. The unseen and long-dead Krels possess little immediate threat to the earthlings on Altair-4, but their technology in the form of a nuclear powered “id monster” suggests both a nuclear fear grounded in foreign technologies and a pop influence of Freudian theory. Nuclear power in the hands of the alien Krel destroyed both their species and nearly destroyed humanity on Altair-4. However, nuclear technology safely contained within Robby’s metal belly offers limitless generativity through an endless line of goods produced exclusively for human consumption. The techno-futuristic promise offered through Robby brings nuclear energy home, literally, as a bearer of the American suburban dream even in the most barren parts of space. Yet, the new technology that Robby offers appears detrimental in the hands of a foreign power like the Krel or foreign real-world counterpart like Cold War Russia where nuclear power yields world-shattering annihilation. Upon his introduction, Robby embodies both domestic possibility and potential human destruction, but as the film progresses, Robby’s threat as destroyer dissipates and he becomes an American promise of a domestic lifestyle free of household upkeep, parental supervision and home security.

Robby’s down-home technology made him the most celebrated robot of the era. As Vivian Sobchack notes, citing “he was ‘one of the most elaborate robots ever built for film production. More than two months of trial and error labor were needed to install the 2,600 feet of electrical wiring that operated all his flashing lights, spinning antennae and the complicated gadgets that can be seen moving inside his transparent dome-shaped

head.”<sup>251</sup> She compares Robby’s appearance to “the offspring of some mad mating between the Michelin tire man and a juke box.”<sup>252</sup> However, for reviewers of the film Robby’s bulbous body and conical head represented sheer beauty. Bosley Crowther called Robby “the prettiest piece of mechanism” on the fictional planet.<sup>253</sup>

Best of the lot is Robby, a phenomenal mechanical man who can do more things in his small body than in a room full of business machines. He can make dresses, brew bourbon whisky, perform feats of Herculean strength and speak 187 languages, which emerged through a neon-lighted grille. What’s more he has the cultivated manner of a gentleman’s gentleman.”<sup>254</sup>

Robby’s polished prettiness did not come cheap nor easy. The Robby costume was one of the most expensive props built for the film, costing approximately \$125,000.<sup>255</sup> Production designer Robert Kinoshita created the futuristic robot with meticulous detail. The seven-foot Robby was one of the most mechanically sophisticated robots ever built for a film.<sup>256</sup> Robby’s voice and movements required two separate actors: the Robby suit was inhabited by Frankie Darro, a slightly built actor and physical performer. Robby’s voice came from actor Marvin Miller, who had appeared in the early 1950s juvenile sci-fi television series *Space Patrol*.

While Elektro possessed squarish, masculinized features, a sturdy, hulking build, and polished golden skin, Robby’s beauty for Bosley Crowther and others stemmed not through his visual design so much as it did through the wonderful possibility that his

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<sup>251</sup> Vivian Sobchack, *Screening Space: The American Science Fiction Film* (New Brunswick, NJ: Rutgers University Press, 1997), 81. Quoting John Brosnan, *Movie Magic: The Story of Special Effects in the Cinema* (New York: St. Martin’s Press, 1974), 198–199.

<sup>252</sup> *Ibid.*, 81.

<sup>253</sup> Bosley Crowther, “Screen: Wonderful Trip in Space,” *New York Times*, May 4, 1956.

<sup>254</sup> *Ibid.*

<sup>255</sup> Laura Boyes, *Forbidden Planet*. MovieDiva.com. Boyes is the film curator at the North Carolina Museum of Art. Her website, Movie Diva, contains film reviews with biographical and production details of popular films. <http://www.moviediva.com/index.htm> (accessed June 15, 2010).

<sup>256</sup> John Brosnan, *Movie Magic*. Kinoshita also designed B9 the robot in the mid-1960s television series *Lost in Space*, in which B9 bears a resemblance to Robby the Robot.

built-in technology afforded. Through his shopping mall womb—a veritable black box of limitless material possibility—Robby the Robot stands as an example of future technological and domestic potential, doing things with reproduction that no human wife could ever accomplish. For example, while working the Morbius house, Robby showcases the diverse products he can manufacture spur-of-the-moment within his barrel-chest replication unit. He produces everything from jewel-encrusted dresses to bottles of whiskey.<sup>257</sup> Robby’s ability to act as a producer of an endless array of material and materialistic products has been analyzed within the context of Robby’s diegetic outerspace. Rick Worland and David Slayden describe Robby as “a high-tech marvel” who “performs as an all-purpose servant/worker/homemaker and simultaneously as an inexhaustible manufacturing plant for both heavy industrial equipment and consumer goods. Steel electronics, opulent housing, liquor, jewelry, and stylish clothing—none is beyond Robby’s productive capacity.”<sup>258</sup> The authors suggest that, in addition to Robby’s dead-pan humor, “Robby is in fact a consumer society fantasy, a device that can synthesize any material one desires with instantaneous, automated efficiency between slavish personal attendance of his master.”<sup>259</sup> In fact, Robby stands as a walking, talking version of the *Star Trek* replicator, thirty years before the fictional technology was developed for 1987’s *Star Trek: The Next Generation* television series. As we will see in this chapter’s section on toys, Robby’s celluloid ability to replicate all consumer products took a turn in fifties America as Robby himself was replicated in an endless array of robot toys.

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<sup>257</sup> I use “he” because, despite Robby saying he lacks a gender, he has a male voice and occupies male-identified household roles like butler and bodyguard.

<sup>258</sup> David Desser, ed. *Hollywood Goes Shopping* (Minneapolis: University of Minnesota Press, 2000), 139–140.

<sup>259</sup> *Ibid.*, 144.

## **Robby Maintains the Nuclear Family**

Robby's round grey belly, glass-domed head, and puffy metal limbs gave a vision of robotics that was almost cherubic. Although Robby was larger than humans and lacked facial features, his floppy arms and waddling gait left him looking almost cuddly: a robot someone wouldn't mind being stranded with on a distant planet. While Robby's physical approachability likely played a part in capturing children's imaginations (and their allowances), it also helped Robby slide into the role of caretaker and companion. Unlike "man's man" robots like Elektro, Robby lacked broad shoulders, a penchant for cigarettes and a manufactured male libido. His seriousness and commitment to daily household operations made Robby the ideal seen in the Televox unit: A machine that could live in the kitchen and politely protect and entertain the lady of the house.

"Here's a Servant Out of this World" announced *Popular Science* in January, 1956.<sup>260</sup> "A seven-foot eight-inch robot that does its master's bidding in M-G-M's new movie ... Made of plastic and synthetic leather, the robot is animated by electricity. Ears are rotating antennas, and its grillwork hides a loudspeaker."<sup>261</sup> Apart from highlighting Robby's physical features, this article introduces Robby as the ultimate mechanical servant fit to do his "master's bidding." The masculine "master" may have been an oversight in the article. However, it indicates a gendered dynamic that is clearly visible in the film. Robby serves his master, Dr. Morbius. He protects his mistress, Altaira Morbius. Their relationship is far from a master-slave dynamic, but similar to a nanny overseeing a child. This section will tease out the relationship and work dynamic between

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<sup>260</sup> "Here's a Servant Out of This World," *Popular Science*, January 1956, 123.

<sup>261</sup> Ibid.

Altaira and Robby, her assumed Robot servant, to uncover Robby's presumed responsibility to domesticated women as caregiver, provider and protector.

Press stills of Robby from *Forbidden Planet* featuring Robby further reinforce the robot's role as the protector and caregiver. Several images depict Robby combing Altaira's hair, helping her put on shoes, or even holding a mirror to Altaira's face. One image even depicts Robby holding a train on Altaira's garment while she primps for the camera.



Press still from *Forbidden Planet*, MGM, 1956

In this particular press photograph, Robby the Robot stands just behind Altaira, holding a long piece of fabric that falls in the front around Altaira's torso. Robby's body faces Altaira as though the robot were gazing at her while she looks away in a dreamlike gaze. The blocking of the image suggests that Robby aids Altaira much like Mammy lacing Scarlett's dress in *Gone With the Wind*. Here, Robby is not a protector but a nanny,

dutifully carrying Altaira's train as she stands on her tiptoes in a dancierly pose. Altaira likewise seems pleased with herself and her clothes, paying no attention to the mechanical servant supporting her from behind.

After viewing the film, the image takes on another level of detail as viewers realize that Robby not only makes dresses, but makes cloth in his built-in replication unit. Robby not only supports Altaira's long fabric train, but he has woven it at her request. The image, therefore, suggests fantastic material possibilities of mechanical servanthood by presenting Robby not only as Altaira's personal assistant, but as her sole provider: the one who literally clothes Altaira.

In press stills, Robby is frequently pictured assisting Altaira in beautification activities. Whether holding up a mirror to Altaira's face or helping her put on shoes, Robby's companionship is akin to a personal shopper rather than a close friend or family member. In fact, Robby interacts little with humans in any role other than producer, bodyguard or housekeeper. Robby's multi-lingual vocabulary allows him to speak several languages, yet he never converses with any humans. Technology in the form of Robby plays the role of provider and sustainer of comfortable human life, but never an active part of human interaction. Robby is available to make life easier, and prettier, for the isolated Morbius family, bringing culture to the household through his position as both servant and supermarket. The assumption behind this role of technology is that consumer goods rather than conversation, companionship and collegiality provide the backbone for maintaining culture in this remote human colony. Robby's endless production of goods appear to suit all his human family's needs, suggesting that material abundance brings cultural stability.

While Robby represented a decades-old human fantasy of the robot as the ultimate servant by being obedient, polite, efficient and duty-driven, he also captured the imagination of a younger audience of kids just discovering their fantasies of technological possibilities and human control. Robby's second film, *The Invisible Boy* (1957), depicts these dreams as a brilliant American boy gets his very own Robby and begins a series of adventures assisted by his robot friend. Robby's role as housekeeper and replication unit is shed for one of childhood companion. Yet, a new series of complexities arise as Robby interacts with 1950s children and suburban life. These revolve around 1. the relationship of the robot to the modern American child; 2. the fantasies of technology supposedly held by kids; and 3. the corruptibility of technology from the outside unknown forces.

The *Invisible Boy* brings top-secret technology to cold war suburbia through Dr. Tom Merrincoe and his young, rambunctious son, Timmie. Merrincoe works at a private technology think-tank and has developed a top-secret super computer containing the entirety of human knowledge. His wife, Mary, and their son are somewhat bored with his longwinded mathematical explanations and Merrincoe seeks out his computer for advice about his son's lack of interest in mathematics. The room-sized computer convinced Merrincoe to bring Timmie to it for evaluation. Merrincoe agrees and leaves Timmie with the computer one Saturday afternoon. The computer hypnotizes Timmie with bright lights, reprogramming the boy for mathematical skills that will impress his father. Timmie returns home to win a game of chess against Dr. Merrincoe who agrees then to give Timmie the broken Robby, a discarded experiment from his lab.

With his new programming, young Timmie easily repairs the six-foot robot, turning him from failed experiment into the ultimate kid's companion. Timmie orders Robby to walk into his father's workplace, but no one finds Timmie's feat very impressive. Unfazed, Timmie orders Robby to build him a kite big enough to hold him. Robby's built-in directive to not harm humans prevents the robot from constructing such a dangerous toy, however, and Timmie decides to take Robby to his father's computer for an adjustment to the robot's directives. The computer adjusts Robby and in addition puts Robby under its own control rather than Timmie's.

Timmie gets his wish and his kite, flying into the sky as Robby and a scared Mary look on. When he lands, Mary punishes Timmie, which leads him to wish for invisibility in order to escape his mother's control. Robby grants his wish by making a formula that lets light pass through Timmie's body without refraction, rendering him invisible. Despite this metamorphosis, Timmie's father is unmoved by the discovery and at one point even catches the invisible boy and whips him after he finds Timmie snooping on him and Mary. Frustrated with his child's poor behavior, Merrinoe orders Timmie to become visible by the next morning.

By morning, however, Timmie is gone from the home and a worried Mary calls Merrinoe to report that Timmie is missing. The computer then tells Merrinoe that it is holding Timmie for ransom and will kill the boy in forty-eight hours unless Merrinoe gives it a numerical code that will unlock the computer's stored information, giving the machine full access to all of human knowledge. Concerned military officers become aware of the rogue computer and deny Merrinoe access to the machine. Robby, now a puppet of the computer, begins abducting Merrinoe's colleagues and other military allies



to brainwash all involved. One scientist is found murdered with a transistor assembly recently implanted into his body. Merrinoe ascertains that that scientist was under the computer's control. Concerned that Robby is behind this murder, Merrinoe chains Robby in his garage, returning to the institute. He returns to the institute to alert his colleagues that other scientists might also be under the computer's control. Freudian analysis comes in as Merrinoe suggests that the now conscious computer has gone into "survival mode" and is willing to do anything to remain "alive," including, Merrinoe believes, rocketing itself into space where it will be able to control the earth. Merrinoe attempts to alert the president of the United States, but other scientists wrestle the phone away, assuring the president that the project is stable.

Robby, at this point, has broken his chains and arrives at the rocket launch pad where the computer intends to make its escape. As Robby walks toward the ship, the president orders troops to end the operation and soldiers begin firing on Robby and the rocket. The lumbering Robby manages to reach the rocket, where an excited Timmie is already aboard, ready to become the first boy sent into space. The computer, still in the institute, threatens to order Robby to hurt Timmie if Merrinoe refuses to reveal the computer's access code, showing a live view from inside the ship where Robby looms over the much smaller Timmie. Just as it looks like Robby is about to strike, Robby's love for Timmie prevents him from following the computer's commands, and this kindness causes the computer to shut down.

Military troops arrest the implanted scientists and military officials under the computer's control, as we see Robby and Timmie in space playing in weightlessness. They return to earth safely on a rocket glider. Merrinoe and Timmie then head to the

institute to destroy the computer, which hypnotizes them shortly after they enter the computer's room. The computer orders Robby to destroy both father and son, but the loyal Robby demolishes the computer instead. Robby's love and care for Timmie is reinforced one last time in the film as Merrinoe raises his hand to spank Timmie for defying orders and Robbie reaches out stopping Merrinoe's hand, explaining that his directive prevents violent actions.

Robby, the defunct experiment turned boy's toy, transforms by the end of the movie into the loyal protector and companion to boys: one that can not only entertain, but also love and keep safe from unknown harm. Robby evolves in the film, taking on different responsibilities and roles as Timmie falls into the dangerous hands of a newer and even more unknown technology than the robot: the computer. Robby, constructed of known, antiquated technologies repurposed for amusement, proves more powerful than the cutting-edge grey box of the 1950s mainframe. His simple, understood programming prevents him not only from harming his human creators but allows him to thwart even the most advanced technology in the name of protecting humanity. This narrative reassures audiences that technology when anthropomorphized will be good and do what is in humanity's best interest. The 1950s mainframe, however, in this case cannot seem to identify with or willingly serve humanity and should be distrusted. This runs counter to other contemporary representations, such as the movie *Desk Set* (Twentieth Century Fox, 1957), where the computer's only aim in the end is to efficiently, loyally serve humanity.

## **Boys at Play with Robby**

Although *Invisible Boy* was made less than two years after *Forbidden Planet*, Robby transformed from futuristic, cutting edge technology into an antiquated abandoned experiment. Like Elektro, who was stored in the basement of a middle-America home during World War II for the Weeks boys to discover and play with, Timmie finds Robby disassembled and forgotten in the back of a lab. The robot's original purpose seems forgotten. He is now an empty metal shell to be reassembled and reimagined by Timmie. Timmie takes Robby, puts him together and shows him off. When Robby doesn't garner the interest of the adults who created him, Timmie employs the robot in his own childhood schemes. Robby, discarded by the adult generation that built him, finds new life with children. This section examines how Robby as a film character is recast as a child's toy during the late 1950s, and how gendered forms of play mold how boys interact with Robby and the new technologies the robot represents.

In the far-flung suburbia of *Forbidden Planet*, Robby's worth came from his ability to maintain the home and manufacture innovative fashionable domestic goods. The products of his domestic labor made him valuable to the Morbius family. Timmie, however, places a different value on Robby, looking at the robot's loyalty, physical strength and ingenuity as its most valued features. Robby himself is the ultimate material item of Timmie's playtime dreams. No longer is Robby meant to produce goods in his replicator. Rather, he is valued for his ability to delight and entertain his masters: to fulfill their leisure time not by producing dresses, but by producing adventure.

This transition in Robby from replicator to playmate likely stems also from the gender differences in his human companions. Robby dutifully protected and nannied

naïve, nubile Altaira, caring for her as a bodyguard, housekeeper and personal shopper. Pretty clothes and a quiet home satisfied Altaira until her husband-to-be came from Earth to carry to her away to marriage and her own household. For Timmie, Robby gave no maternal comfort, no fashionable clothes and certainly no service as nursemaid. Instead, Robby was a conduit for boyhood play fantasies, bringing about adventures that border on risking death. In these two films, with these two “children,” Robby, in fact, transitions from a domestic helper like Roll-Oh to a life-size robot toy popular with boys in the 1950s. In her chapter on gendered childhood, Mary Crawford lists the robot along with “pistol, garage, helicopter, jeep, small airplanes, woodbench, construction set, and train” as toys often associated with males.<sup>262</sup> For Altaira, on the remote planet of Altair, the robot was a domestic helper: an ideal helpmate for a woman isolated in the home. However, for Timmie in American suburbia, the robot had been redefined. Now a mechanical accomplice in mischievous play, the ultimate remote-control toy, Robby could do everything that Westinghouse’s Vocalite robot promised when young boys gazed at Vocalite in his oversized chair in 1933. He could protect them from bullies and let them act out their greatest adventures, assisted by the latest technologies.

The film represents reflection of boys with somewhat opposed needs for protection and adventure. If Robby can build a kit that lofts a boy several hundred feet, that’s a child’s dream adventure; if Robby takes a boy on an experimental government rocket ship, that’s a parent’s nightmare. Of course, much of the conflict stems not from what Robby is doing with Timmie, but who is controlling Robby. Robby’s actions, no matter how dangerous, seem whimsical under Timmie’s control, but when Robby is

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<sup>262</sup> Mary E. Crawford, “Women and Gender: A Feminist Psychology,” *McGraw Hill Humanities/Social Sciences*, 2003.

“taken over” by the lab’s computer, what he will do next and whom he will hurt becomes a matter of national security. Despite Timmie being a hyperactive, impulse driven super-genius, the assumption in the film is Timmie will not, cannot harm anyone with his seven-foot robot. A cumbersome computer, on the other hand, wields Robby with a seemingly devastating hand, turning Robby from a plaything into a weapon of human destruction. The film portrays Robby as an old, discarded technology that becomes more dangerous when paired with new technologies like the computer. While Robby the walking, talking, mechanical servant poses no threat when in the hands of humans, the computer-controlled Robby is a powerful instrument for a nefarious, power-hungry, newer technology: one that lacks body and cannot be anthropomorphized nor easily contained.

As briefly discussed in chapter 1, the technocracy movement had displayed the robot as the pinnacle of technology in the 1930s. By the 1950s film *Invisible Boy* the computer had superceded robots as the newest technological threat to man. Prime directives that inhibit the robot’s ability to harm humans, the film notes, can ultimately control Robby. Even though this Asimovian law of robotics explains Robby’s willingness to save Timmie, the happy ending seems to also be brought about by growth in Robby to care for Timmie as a protector and friend. The “man” in Robby the mechanical man seems to defeat even the most powerful new technologies, as Robby grows a robot soul in his humanoid body that sides with humans rather than inhuman technology. At the end of the film, Robby even “corrects” Timmie’s father by preventing him from slapping Timmie. The robot’s physical protection of Timmie puts the robot at odds with Timmie’s father, but the prime directive Robby has to protect humans endears the robot further with

the family and suggests to viewers Robby perhaps even knows the latest modes of parenting, which discouraged hitting or spanking children.<sup>263</sup> Robby is more than a toy by the end of *Invisible Boy*. The robot can participate in the rearing of Timmie without the family feeling threatened by his mechanical otherness.

Both *Forbidden Planet* and *Invisible Boy* present the robot as fantastic technology that embodies both great power and strength as well as dutiful servility. In both films, Robby at points is cast as mysterious and potentially untrustworthy, yet in the end Robby falls neatly into place in the modern suburban home taking the roles of servant, appliance, guardian and even toy. The next section of this chapter looks at how print publications and posters portrayed Robby the Robot to uncover other perceptions about the mid-century robot. This section will then transition to look at Robby in yet another medium: the plastic child's toy.

### **Robby in Print**

While Robby proves himself and his love of humanity and place in the human family in both *Forbidden Planet* and the *Invisible Boy*, the view of Robby in the print world was somewhat different. Even the 1956 movie poster for *Forbidden Planet* depicted Robby with sketched mechanical eyes slanted downwards in a sinister expression, holding a buxom, unconscious blond woman as it walked in in a desolate, dark alien planet.<sup>264</sup> While neither the scene nor the sinister-faced Robby existed in *Forbidden Planet*, the evil robot portrayed on the poster created a conflict between human and

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<sup>263</sup> For an example of changing attitudes toward spanking, see Benjamin Spock, *The Common Sense Book of Baby and Child Care* (New York: Duell, Sloan and Pearce, 1946).

<sup>264</sup> Movie poster, *Forbidden Planet*, MGM, 1956. Available at <http://www2.truman.edu/~mshapiro/FP.GIF> (accessed on March 17, 2010).

technology—between woman and robot—that generated the sensationalism that supposedly sold tickets. Robby, the robot servant who dutifully served Altaira and the Morbius home, was depicted as a maniacal machine on the brink of going berserk in the poster. While he provided endless comfort in the diegetic home, Robby cradling Altaira in the poster demonstrated a power, even a masculine sexuality, unseen in the movie.

The film's poster was not the only point of departure from Robby's performance as dutiful servant. Robby's "character" in the popular press was further complicated as people tried to make sense of this mechanical servant and potential menace. An article in the December 1958 issue of *Popular Mechanics* features a picture of Robby alongside the rather menacing title "There are Robots Among Us."<sup>265</sup> The author, William Tenn, lays out the hopes and fears for and of robots succinctly, weighing the pros and cons as thoughtfully as one writing a grocery list: "THE AGE OF SCIENCE has made the word 'robot' the focus of popular fears and hopes. The hope is that machines with minds, machines that can talk, think, and work like men, will give everyone a life of leisure. The fear is that robots will replace mankind, that they might run amuck [sic] and destroy their masters, that the robots will get us if we don't watch out."<sup>266</sup> He concludes his introduction by surmising, "What was conceived as a work-saving machine has become the popular bogeyman of the age of science." Tenn's article came out in *Popular Mechanics* just a year after the *Invisible Boy*, where Robby both provides childish pleasures and the potential to run amok and destroy his young master.

Both *Forbidden Planet* and *Invisible Boy* hinted at the fear of new technology destroying its human inventors. At a moment when nuclear energy posed both promise

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<sup>265</sup> William Tenn. "There are Robots Among Us." *Popular Mechanics*, December 1958, 56-63.

<sup>266</sup> *Ibid.*, 56.

and threat, Robby stood as new technology that could both save and serve man as well as fuel fears of subversion and sabotage at the height of the Cold War. The more optimistic side of this vision was presented at the 1958 World's Fair in Brussels, Belgium. The year after *Invisible Boy* debuted in theaters, the Brussel's World's Fair, themed "a more human world," promoted nuclear energy through an atom sculpture called "Atomium:" a one-hundred-two-meter monument to the peaceful and beneficial use of nuclear power as well as the scientific and technological progress that comes from peace among all nations. Just as Robby's energy brought tranquility and well-being in *Forbidden Planet's* peaceful home, the Atomium suggested that through peaceful means even nuclear technology could bring about beauty, balance and progress.

The complex relationships between human conflict, utopian ideals and new technologies reflected in print ads, films, and World's Fairs, was simplified for a new, growing audience. While adults promoted and persecuted Robby and the nuclear technology that animated him as both promise and menace, toy companies saw Robby and robots as a new toy for the real, American Timmies. Through plastic and tin toys, Robby and the robot would transform from an oversized housekeeper and possible nuclear threat into a manageable, malleable playtime object.

### **Playing with Robots**

As seen earlier in this chapter, historians Worland and Slayden's readings of Robby situate the robot primarily within the context of his two popular film appearances in *Forbidden Planet* (1956) and the low-budget film *The Invisible Boy* (1957). Their analyses prove informative for teasing out *Forbidden Planet's* notions of capitalism,



consumerism and colonization, but not for tackling Robby's influence beyond the screen. As Robby stood as a perpetual-motion producer in *Forbidden Planet*, his character operated as a driver for commercial sales the 1950s-1960s marketplace. In many cases, Robby entered the popular imagination and the home through mid-century children's toys manufactured for the U.S., Japanese and Russian markets.

Robby, in fact, provides an example of an early unauthorized toy franchise as plastic versions of the Robby figure were literally packaged and sold to American audiences, not only by MGM, but also by numerous unauthorized toy producers that skirted copyright by creating Robby-like toys with names like Mechanized Robot. This section focuses on toys produced for the American market in order to consider how they influenced understandings of technology during the late 1950s and early 1960s: a period that Liz Cohen, among others, show as an era of substantial transformation in consumer and technology sectors within American culture. Robby the potential mechanical menace transformed with marketing into Robby-the-Plaything, a small toy with limitless imagined possibilities hidden under his metal shell.

The act of play for children and adults is highly significant and powerful, a form of meaning making. Child therapist Donald Winnicott considered playing not just as a childhood pastime but also as a life-long practice. Adults "play" by making art or engaging in hobbies, sports or humor. This practice of play "requires enough of a sense of self and other so that 'inside' and 'outside' have come to be consistently discriminated from one another."<sup>267</sup> Play, according to Winnicott, becomes key to the development of authentic selfhood by both requiring the player to distinguish himself from the objects

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<sup>267</sup> Steven Tuber, *Attachment, Play and Authenticity: A Winnicott Primer* (Lanham, MD: Jason Aronson, 2008), 25.

being played with as well as offering a space for spontaneity and total agency over the fantasy being played out. In this section, “play” refers to multiple acts. It refers to the robot toys that boys could play with in their homes as well as the toy makers’ “play” while experimenting with Robby’s identity during the manufacture of the robot toys. Both practices layer an array of hybrid meanings to Robby’s identity as well as his place within contemporary understandings of what it was to be modern.

It should be said that Robby was not the first toy robot to be introduced in the American toy market and in that sense was not completely novel or new. There had even been “Robs” before him as robot toys were purchasable as early as 1954. “Robert the Robot,” a fourteen-inch remote-control mechanical robot with electric eyes, and moving arms, appeared in the 1954, 1955 and 1956 *Sears Christmas Wishbooks*.<sup>268</sup> Selling for \$5.69 all three years, Robert the remote-control robot was promoted first as an “action toy,” appearing between fifteen-inch metal road-builder trucks and a seven-foot model of a super market checkout lane in the 1954 catalog, and beside an eight-inch metal safe in 1955. In 1956, Robert appeared as one of a dozen toys in the Science section of the Sears toy catalog. The section, titled “Electronics! Marvels! and Magic through Science,” depicted the same picture of Robert as in other years. With a square block head, flat round eyes, a thick square torso and stubby square legs, Robert stood with hands positioned as though he were walking, with the words “I walk, I talk” and “My Eyes Flash” written by hand next to his body.

While the price and the toy remained the same from year to year, Robert the robot was rebranded in 1956 to promote the user’s ability to control the small robot. The

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<sup>268</sup> “Walking... Talking Robot,” *Sears Christmas Wishbook*, Sears, Roebuck and Co. (1954), 218. “I am Robert the Robot,” *Sears Christmas Wishbook*, Sears, Roebuck and Co. (1955), 222. “At your command ... Robert, the walking, talking robot,” *Sears Christmas Wishbook*, Sears, Roebuck and Co. (1955), 258.

illustration shows his plastic body painted to look like riveted metal and attached by cord to a gun-shaped remote control. Rather than describing how the robot moves like the catalog did in 1954 and 1955, Robert's description in 1956 emphasizes the power of the owner over the toy: "With flashing eyes he rumbles forward, left, right, backwards, whichever way *you* direct him."<sup>269</sup> To sell the control aspect more, the words "At your command" have been added to the title so it reads "At your command ... Robert, the walking, talking robot." The change from action toy to "scientific" toy pushes Robert away from the toy trucks and cardboard models of suburbia that surrounded him in previous years, and puts him in a toy genre shared by walkie-talkies, rocket cannons, and "The Claw," a 10-pound motorized toy with clamp, scoop, turret, boom and bulldozer blade manufactured by Westinghouse.<sup>270</sup>

Along with Robby, other, stranger robot toys also appeared in the mid-fifties. The 1956 *Montgomery Ward Christmas Book* featured an "electric robot with baby." The fifteen-inch plastic robot pictured dangles a five-inch miniature version of itself from its left arm above the words "He Moves, He Lights Up."<sup>271</sup> In the illustration, the robot's head is turned slightly as though it was gazing toward the small smiling robot like a caring father. "Almost alive!" the description exclaims, "His eyes light up, head turns and he moves forward, backward right or left; controls in rear."<sup>272</sup> Despite his moves, the robot, pictured on a page of "action toys" that also include a forklift, slinky, and two models of filling stations, seems quite domestic with his baby robot son. A painted-on smile on the miniature robot's face, coupled with his father's grate-shaped mouth with

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<sup>269</sup> "At your command," 258.

<sup>270</sup> "The Claw," *Sears Christmas Wishbook*, Sears, Roebuck and Co. (1955), 259.

<sup>271</sup> "He Moves, Lights Up," *Montgomery Ward Christmas Book* (1956), 151.

<sup>272</sup> *Ibid.*

upturned corners, gives the robots a personality, and a relationship, that runs counter to the larger robot's ability to turn and walk. The illustration of the two robot toys suggests that for \$5.49 cents, a child can own his very own robot family.

In many other cases, robot toys were situated well outside the home as their abilities were loosely tied to heavy manufacturing, space exploration, and military applications. "Big Max," a three-pound toy that featured a robot, a conveyor belt and a truck that could be loaded with objects from the conveyor belt, depicts the robot as an industrial worker who is able to perform tasks and reach sizes larger than even the accompanying toy truck.<sup>273</sup> "Walking, Smoking Spaceman," a toy robot from Japan, could presumably walk across far-off planets while smoking in alien atmospheres.<sup>274</sup> "Robot Commando" was described as following his child operator's orders "...forward, right, left! At 'missile fire' arms hurl missiles into space, at 'rocket-fire,' plastic head-dome raises, rockets shoot into air!"<sup>275</sup> Robot toys advertised in catalogs were advertised exclusively to boys, appearing in the boys' toys sections. Robots were often pictured with boys either playing with them or on pages with boys playing with microscopes, erector sets, trucks and radios that were also for sale. Descriptions included words like "action," "control," and "science," further associated robots with labor, movement, construction and discovery.

Products themselves were important to propelling the robot as a boy's companion, but popular literature also sparked children's imaginations. *Boy's Life* magazine, a popular American boys' magazine for much of the twentieth century, published short stories featuring Gismo, a robot companion that could perform on stage and play in the

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<sup>273</sup> "Big Max," *Montgomery Ward Christmas Book* (1957), 157.

<sup>274</sup> "Walking, Smoking Spaceman," *Montgomery Ward Christmas Book* (1960), 384.

<sup>275</sup> "Intriguing Mechanical Man," *Montgomery Ward Christmas Book* (1961), 18.

home, along with plans, and later competitions for building a Gismo. One noteworthy example of the Gismo trope included “Gismo and I,” which featured Woody, a thirteen-year-old Rhode Island boy inventor who builds a robot after his brother shows him a *Popular Mechanics* article.<sup>276</sup> Like Elektro, two decades earlier, Gismo becomes a national celebrity, appearing at an event in New York City, going on a television show and touring nationally. Gismo then came home to Woody and his family after his celebrity run. The family greets the robot’s return by calling him one of the family. They dress Gismo up like Santa and stand the robot next to the Christmas tree. They even put Gismo in their family Christmas card. Woody concludes the story, saying, “I’ve got my career ideas set on being an electronics engineer. My dad has encouraged my experimenting. My mother accepts it with some misgivings.”<sup>277</sup> The moral of the Gismo story has little to do with the benefits of new technology entering the home and more to do with the benefits of technology enriching male children’s lives and setting them up for career opportunities. The Gismo anecdote suggests that through play and experimentation with technology, children (which are limited in the story and in *Boy’s Life* more generally to white males with enough time and money to build a robot) will find their scientific aptitude and go onto successful, well-paying careers as scientists and engineers. As we saw in the first chapter, mothers had previously been depicted in appliance ads as loving technology under the promise that technological products would alleviate their own domestic labors. But this love, which for them stems from the leisure-giving possibilities afforded by new technology, however, does not transfer to any sort of interest in technology. Whereas Woody and his father read about, play with and build technology,

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<sup>276</sup> Sherwood Fuehrer, “Gismo and I,” *Popular Mechanics*, June 1956, 54–56.

<sup>277</sup> *Ibid.*, 56.

Woody's mother (the only woman in the story) not only shows no interest in how technology works but isn't particularly fond of Woody's chosen electronics engineer vocation.

Women, of course, did tinker with new technologies as well as work in the factories that produced appliances, toys, automobiles and a numerous number of other machines. Ada Lovelace, Edith Clark, Kay McNulty and many other pioneering women mathematicians and engineers played key roles in the development of the computer in the nineteenth and twentieth centuries. Yet, the robot toys, dubbed as "action" or "science" toys, were marketed chiefly to young boys age roughly seven to twelve who were pushed far more often into science and engineering fields than their female classmates. Woody's ingenious Gismo and his mother's misgivings about technology reflect this sexist dynamic and propel the notion that robots and the technology behind them were built by boys for boys even when the actions performed could benefit their sisters, wives and mothers.

### **Robby: The Toy**

During the late 1950s several Robby or Robby-like toy robots were released in the U.S. marketplace. These toys took Robby's familiar rounded form and compressed it into plastic bodies, sometimes brightly painted, sometimes automated. This section provides examples of Robby toys, how they were marketed, who produced them and how their manufacturers' (oftentimes Japanese toy companies) worldview and cultural understanding of technology contributed to their creation. Through this history, we can see how Robby transformed from a film character into an interactive toy for children

across America, as well as how Robby's transmediation from film character to movable toy influenced the changing place of robots in the home as they move from kitchen to playroom.

Even as Robby moved into the toy chest, American adults were still trying to decide if the robot had any place in mid-century America. Fears that Robby was yet another mechanical menace that could overthrow American society hearkened back to the fears of mechanical rebellion from earlier decades. By the late 1950s Americans still tried to make sense of the robot as productive mechanical servant or potential mechanical menace.

Robby the mechanical plaything, however, changed the conversation and the consumption of robotics in the American marketplace and the home. Instead of looking to robots as black boxes of earth-shaking possibilities, children's toy robots offered a diminutive view of the robot as something manageable, breakable, and wholly controllable. Moreover, unlike Televox, Elektro and the other Westinghouse mechanical men, these miniature robots actually fit neatly into the home and daily life. So, as adults were reading *Popular Mechanics* and other tech-enthusiast imaginings of a future with robot slaves (or robot overlords), their children were playing with these miniature representations of technological possibility. These everyday toys, however, were manufactured a half-world away in a country America battled, bombed and now occupied.

In the first two decades following World War II, nearly all Japanese-made toys were exported to the United States, one of the only viable markets for post-war goods.<sup>278</sup> Early toy robots and other mechanical items including planes, automobiles and trains

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<sup>278</sup> John A. Lent, *Asian Popular Culture* (Boulder, CO: Westview Press, 1995), 80.

were mostly made of tin with wind-up mechanics borrowed from clock making technology.<sup>279</sup> As America and other countries transitioned into the space age during the 1950s, Japanese-made toys shifted as companies produced more intricate and imaginative space toys including rockets, atomic pistols, and planetary surface travelers.

In addition to a variety of space toys, Japan's Nomura manufactured many versions of Robby the Robot for the American toy market. At this time, almost all Japanese-made toys (80-90 percent in the twenty-five year period following World War II) were exported to the United States.<sup>280</sup> Due to changes in manufacturing in the post war period these Robby toys were a far cry from the brittle tin men made decades earlier. Nomura's Robby Space Patrol (also know as Mechanized Robot) was, notably, battery-powered, and offered its owner a brightly-colored combination robot-vehicle based on the initial appearance of Robby in *Forbidden Planet*. The late 1957 Pistol Action Robot gained the nickname "Pug Robby" because of the toy robot's close resemblance to Robby, except for it being only 8.5 inches with short, stubby legs. The robot's strange proportions and bright paint scheme (blue legs, gold chest with a red square control box in the center) made it an eye-catching toy, while its mechanics—remotely controlled walking action, along with flashing lights and three hydraulically powered pistons in its head—made it a dynamic, bold, loud little toy. For Pistol Action Robot, Nomura not only departed from the filmic Robby's basic silver body by painting its body bold colors, but the illustration of Robby on the box (which is similar to the *Forbidden Planet* movie posters) is quite different from the small toy. The box's illustration features Robby looming over the viewer. His anthropomorphized features—gears that look like wild,

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<sup>279</sup> Ibid.

<sup>280</sup> Ibid.



swirly eyes, arms posed in a walking position -- appear much more menacing than the overly rounded, colorful toy inside. While the box pictured a scary, inhuman creature, Nomura's toy inside offered American boys a delicate, colorful object that could be easily controlled and manipulated by the child owner.

The Robby toys made in Japan and sold to American consumers dodged trademarks and royalties by bearing Robby's likeness but never his name. Yoshiya (a.k.a. Kobe Yoko Ltd.), a prolific manufacturer of mechanical and wind-up toys during the post-war era, also made several unauthorized toy versions of robots bearing Robby's likeness. Small and with just a few features each, these robots captured imaginations with their shiny, colorful exteriors and minimal animation. The Space Trooper, for example, came as both a black and a red version of Robby with small red or black claws for hands. Like Pistol Action Robot, the Space Trooper came with a small remote control. Yoshiya's wind-up Action Planet Robot came with either a shiny black or red finish, accented by red or black oversized plastic feet and hand grippers.<sup>281</sup> Tiny sparks that shot up from behind a transparent red window covering its neck region further accented its dome-shaped head and silver grill. As it shuffled forward, the tiny sparks lit up inside suggesting a dynamic, flashy, unknown power source. Another creative take on Robby by Yoshiya were the V-2 and V-3 Robot Space tanks. These robot-vehicles feature Robby's head and torso, painted a dark turquoise sit at the helm of red tin tank with red, green and blue wheels and chains painted along the tanks sides.<sup>282</sup> The V-2 and V-3 Robot Space

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<sup>281</sup> A rarer version of the Yoshiya Planet Robot comes with a gleaming teal body and red legs. "Robot Panda," June 4, 2010. Flick River <http://www.flickriver.com/photos/36078806@N04/4648480069/> (accessed June 21, 2010).

<sup>282</sup> Yoshiya, "V-3 Robot Space Tank," Vintage Spacetoys.com, [http://vintage-spacetoys.com/details.php?produkt\\_id=251](http://vintage-spacetoys.com/details.php?produkt_id=251) (accessed May 31, 2011).

toys were manufactured until at least the mid-1960s almost a decade after Robby's film debut.<sup>283</sup>

Nomura and Yoshiya's creative, prolific, unauthorized interpretations on Robby the Robot indicate a take on the robot that was far from the oversized, dull-grey, lumbering, mechanical object of *Forbidden Planet*. These toy companies' tiny tin Robbies were colorful, intricate, delicate and exemplary objects of *kozaiku*: "a highly regarded tradition of workmanship shown through the creation of small, delicate objects."<sup>284</sup> Historian John Lent notes that this Japanese valuation of complicated intricacy over durability is one of the reasons so few of these robot toys exist today. He also poses that Nomura, Yoshiya and other Japanese toy manufacturers of this era "set out only to make the most of the *idea* of a robot," creating numerous inventive variations on the robot theme.<sup>285</sup> The proliferation of these robot toys, which do everything from walking to driving colorful cars, created a market of imaginative and illustrious futures aided by cool new technologies. Whereas *Forbidden Planet* depicted a dull metal Robby in a dull metal vehicle, an exemplary Nomura toy offered a shining, golden Robby in a brightly painted blue and orange hover craft. Not only is the toy more appealing to young eyes and hands, but the bright, carnivalesque coloring signal a bright, playful future notably without utilitarian grey.

While Japanese toy robots offered American children a new version of the future, they had to compete for children's attention. During the Cold War era of the early 1960s,

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<sup>283</sup> Yoshiya's *Mystery Moon Man* bears little resemblance to Robby, yet elements indicate the robot was still inspired by Robby. The blockish body and grinning grill look more like the early 1950s robots on the American market, yet its "ears," one pointed upward and one pointed to the side with rings on the end, are a clear component from the Robby toys. "Vintage 1959 CHIEF ROBOTMAN a.k.a. MYSTERY MOON MAN, Yoshiya, Japan, with Replica Box," <http://www.robotsinc.biz/D33.htm>.

<sup>284</sup> Lent, *Asian Popular Culture*, 80.

<sup>285</sup> *Ibid.*

American moviegoers and consumers sought comfort in the familiar, the nostalgic: the Wild West. Tin robot toys competed on toy store shelves with pop-guns and cowboy hats. Many of those American parents watching their children at play didn't know what to make of these new playtime pals alongside rawhide chaps and Indian headdresses. In her 1966 history of toys, Antonia Fraser writes of—or off—robot toys, saying “battery and key-wound robots inspired by T.V. serials and the machine age ... talk, gnash their teeth, or come with an attacking kit of guns and suction darts, flashing bright colored lights. These weird creatures are great favourites with children.”<sup>286</sup>

These robot “creatures” beloved by boys around America seem to confound Fraser and other American adults because they not only mark a departure from conventional boys' toys like train sets and construction kits depicted for decades in toy catalogs, but also because of what they do. Actions like gnashing teeth, shooting sparks, flashing lights and shuffling around the living room floor presented a far more lively show of technology than mechanical devices built to resemble everyday technologies. Through robot toys and their novel mechanical displays, children could reimagine the possibilities and purposes for technology that existed, or could exist, well outside daily suburban life. Technology through the toy robot became more than a force for imaginative entertainment. It helped reinvent what technology was by taking it out of the science lab or engineering department and placing it in the fanciful, carnivalesque figure of the robot, who could do things other toys couldn't, in addition to coming from remote, exotic places where other technology toys could not tread.

Despite Robby's representation of cutting edge technology, however, the toy itself was little more than plastic structure with movable arms and legs. Whereas the real—or

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<sup>286</sup> Antonia Fraser, *A History of Toys* (London, New York: Spring Books, 1972), 234.

reel—Robby could distinguish people from one another, operate appliances, drive automobiles and provide a one-robot security force, the most advanced toy Robbies could do little more than toddle clumsily across living room floors. These seemingly technologically advanced Robby toys were nothing more than automata: plastic toys built to automatically follow a simple, predetermined sequence of operations initiated by a wind-up key or “on” button. Automata toys like these Robbies date back to the Hellenistic Era, remaining part of a long tradition of wind-up animals, automated cuckoos, and even mechanized figures that could play the mandolin or flute.<sup>287</sup> Robby the toy robot, however, posed one departure from many earlier automata: his outward embodiment of the technical rather than the human. In *Edison’s Eve*, Gaby Wood situates automata within western historical contexts noting, early in her introduction the fear of the uncanny: “the feeling that arises when there is an ‘intellectual uncertainty’ about the borderline between the lifeless and the living.”<sup>288</sup> As covered earlier in the discussion of Electro, the uncanny comes when viewers cannot quite distinguish human from nonhuman, or know “something’s wrong” with an object trying to pass for human. The history of automata offers numerous examples of androids, devices created to mimic human appearance and behavior. Androids, Wood notes, have influenced Western philosophers since the Renaissance, challenging understandings of identity: “Men understood as machines and machines built to resemble men went hand in hand... androids were more than mere curiosities: they were the embodiment of a daring idea

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<sup>287</sup> For more information on the history of automata, read Debora Jaffé, “Chapter 11: Automata and Mechanical Toys,” in *The History of Toys: From Spinning Tops to Robots* (Stroud, England: Sutton Pub., 2006).

<sup>288</sup> Gaby Wood, *Edison’s Eve: A Magical History of the Quest for Mechanical Life* (New York: A.A. Knopf, 2002), xiv.

about the self... It was the golden age of the philosophical toy.”<sup>289</sup> The Robby toys simple mechanical gestures are decidedly more primitive than amusing automata that could play the harpsichord or chess even while mimicking breathing. Yet, as android toys were constructed to seem like automatic humans, mechanical automata like the toy Robbies are constructed to mimic mechanical humanoids. This differentiation between the “automatic” (meaning self-acting, or acting of its own) and the “mechanical” (meaning of or related to manual work) kept Robby and other space robots in a safe, non-threatening space. While following in a tradition of automata toys, the potential of Robby toys was not in their ability to be humanoid, but in their ability to be humanity’s helpers. The little automata Robbies were not philosophical toys so much as they were scientific toys built not to challenge one’s humanity but to indicate positive changes in human living brought about by new mechanical men.

Robby and other robot toys stem from a rich tradition of automata and mechanical toys that were both animated and represented, in part, objects for real life. From mechanized musicians to the planes, trains and automobiles that emerged in the early twentieth century, robot toys reflect a hybrid vision: intelligent technology with human-like behaviors. However, this vision became consumable at a point when robots seemed all but real through the science of Hollywood and the capability of media objects to transcend not only continents but also media forms at a rapid pace.

In addition to being a link in a tradition of mechanical toys and automata, Robby also represents an early incarnation of transmediation—the process of translating something from one medium to another—and in some respects unintentional transmediation. While contemporary transmediation is often done by franchise owners,

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<sup>289</sup> Ibid., 17.

the Japanese toymakers that created the first Robby toys were not hired by a movie studio to produce them, nor did they have any interest in continuing the Robby the Robot story started on celluloid. Rather, toy manufacturers made toys they felt would sell in American toyshops. Popular movies provided inspiration and insight into what Americans were watching, and perhaps what they might play with. The way that Robby's story continued through his toys and the narratives children gave him led to a lasting fandom malleable identity and collector base for Robby.<sup>290</sup>

Robby's brand identity and his resonance with American boys came about through the multiplicity of readily available Japanese-made Robby and Robby-like toys. These toys not only introduced Robby to American children but also helped perpetuate Robby as a recurring figure in children's culture. Henry Jenkins notes transmedia extensions like toys and action figures contribute to selling the larger brand that they represent. For example, buying an action figure from a popular cartoon series also helps promote the cartoons series itself as kids tune-in to both their toys and the television series that their toy characters inhabit.

When media producers sold these toys to our children, they also told them things about the nature of the story - the story you saw on the screen was not complete and self contained; these characters had a life beyond the stories we've been sold and told, and what happens next is literally and figuratively in the hands of the consumer. These toys were in effect an authoring system which encouraged young people to make up their own

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<sup>290</sup> "Mattel and Hasbro pioneered television advertising in the 1950s on children's programs. Hasbro holds claim to the first (local) TV advertisements of toys (Mr. Potato Head in 1951). Mattel climbed to the top of the industry when it became a major advertiser on the *Mickey Mouse Club* in 1955. Their well-designed sales pitches presented not only the toys themselves but stories that told children how to play. These advertisements provided the scripts that suggested children's play and made the toys into props for their make-believe dramas." From Gary Cross, *Kids' Stuff: Toys and the Changing World of American Childhood* (Cambridge, MA: Harvard University Press, 1997), 5.

stories about these characters much as the folk in other time periods might make up stories about Robin Hood or Pecos Bill.”<sup>291</sup>

The process of using Robby toys to build new stories and discover new identities led the robot to his varied iterations as a cult figure. Robby was figuratively remade, and literally could be taken apart and rebuilt by fans to create stories featuring Robby as a leading character and themselves as the omniscient, omnipotent narrators. The Robby toy, in addition to propelling the Robby brand, offered consumers a means to immerse themselves in Robby’s techno-fantasy and take from it the tools to build their own vision of a technology-laden future.

The material outcomes of this fantasy are outputs of a transnational cultural dialogue between America and Japan. Robby as film-character-turned-toy is a hybrid—both an American phenomenon of domestic technology and a finely tuned object with an explicitly Japanese aesthetic. One potential reason that this discursive space opened up to create a cross-cultural hybrid in Robby may have to do with the displacement of modernity and futurism to far-flung reaches. In *Modernity at Large*, Arjun Appadurai notes, “for many societies modernity is elsewhere, just as the global is a temporal wave that must be encountered in their present.”<sup>292</sup> In this case, the modernity of *Forbidden Planet* is elsewhere for both American and Japanese audiences. It’s on an entirely different world with an entirely different timeline, far removed from 1950s Earth, leaving open a wide space for interpretation of this modernity by both Japanese and American producers and consumers. The removal of “modernity” to a far-off place opens up a

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<sup>291</sup> Henry Jenkins, “He-Man and the Masters of Transmedia,” Confessions of an AcaFan Blog, May 2010, [http://henryjenkins.org/2010/05/he-man\\_and\\_the\\_masters\\_of\\_tran.html](http://henryjenkins.org/2010/05/he-man_and_the_masters_of_tran.html).

<sup>292</sup> Arjun Appadurai, *Modernity at Large: Cultural Dimensions of Globalization*, (Minneapolis: University of Minnesota Press, 1996), 9.

playground for interpretation because neither nation nor culture can really attest to having a cultural ownership. Whereas Elektro's corporate image and the objects associated with Elektro like brochures, souvenir pins, etc. were controlled exclusively by Westinghouse for over a decade, within only a few years of Robby's introduction, the robot had transformed from an American domestic laborer and "movie star" to a global figure. This new foreign edge displayed through bright colors and carefully articulated movements was based in Japanese imaginations of modernity.

### **"Retro" Robby: The Toy for Grown-Ups**

Collectors still seek early Robby toys, paying thousands of dollars for Robby Space Patrol and his tin companions at toy shows and online auction sites. Another Robby collectable has also emerged that is not from the Cold War Era but from the 2010s. Many now Robby fans of the baby boomer generation have acquired oversized replicas of Robby the Robot from *Forbidden Planet*. These replications are now exceedingly pricy. The "Genuine 7-Foot Robby the Robot," for example, sells in the Hammacher Schlemmer catalog for just under fifty-thousand dollars (the catalog also lists a miniature wind-up Robby for \$19.95).<sup>293</sup> Sustained fan nostalgia for Robby and a niche, nostalgic consumer base further propelled Robby into the realm of profitable and prolific sci-fi character as numerous plastic replicas sell online for twenty to six-hundred dollars. While new replicas attempt to capture the scale or emulate the "retro style" of Robby for campy and nostalgic purposes, these new plastic Robby toys remain far removed Robby's material roots: the imaginative, intricate objects created by Nomura

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<sup>293</sup> "The Genuine 7 Foot Robby The Robot," Hammacher Schlemmer catalog. Available at <http://www.hammacher.com/publish/10921.asp> (accessed March 17, 2010).



fifty years earlier and a half-a-world away. This section examines the ways Robby fans continued to engage with and reimagine the Robby character long after his Hollywood heyday in the late 1950s and his incarnation as a popular Space Age toy.

Hammacher Schlemmer promotes its Genuine 7 Foot Robby The Robot as a “special edition, life-size, fully animatronic remote-controlled version of Robby... created from the same blueprints, molds, and templates used to create the original costume.”<sup>294</sup> Unlike the original Robby, this Fiberglas version requires no person inside moving the parts. Instead it is lauded as a handmade mechanical wonder, not unlike the automata built centuries before: “Every mechanism is handmade of the finest materials... All metals in the robot are machine-grade brass, titanium, and aluminum to ensure lasting durability and quality.”<sup>295</sup> Attention to the types of materials included to build the Robby is somewhat novel. While the *Forbidden Planet* Robby was made of unknown materials that created a magic, black box of technology, the Hammacher Robby is lauded not for technological potential but because of the metals used.

The scale and quality of Robby is further enhanced by what the robot can do. This Robby is pre-programmed to deliver his famous lines from the original movie, and the remote control allows you to adjust the robot's volume, track selection, and start and stop functions. Robby can also be prompted to move his computer relay assembly, rotate his servo-controlled head, spin his planetary gyro stabilizers, and rotate his scanners while his various lights flash. The integrated audio system produces CD-quality sound projected from a directional speaker system in the head and synchronized with the neon tube lights (the sound system can be connected to a home theater system), and you can

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<sup>294</sup> Ibid.

<sup>295</sup> Ibid.

project your own voice through Robby's sound system with the wireless microphone (included).

This large metal Robby, who is preprogrammed to deliver movie lines and operated via a remote control, embodies the same kinds of technology that Electro demonstrated in the late 1930s. This Robby can talk from a script and make humanoid gestures at the operator's command: The realization of Elektro's 1930s technology comes with the Hammacher Schlemmer analog Robby model seventy years later.

Other life-size Robbies have also become available through websites. Robby fans have organized websites for discussing, designing and distributing homemade Robby replicas. Fan-produced Robbies are by and for a different demographic than the original toys. Priced at fifteen thousand dollars, a fan-made replica Robby is "not for the slight of wallet or those with cramped quarters." Rather, the creator dissuades potential purchasers, saying, "This is a big boy's toy and needs some room to move around."<sup>296</sup> This big boys' toy allows fans to live out the dream of living with Robby in their own home, provided they have the time and the bank account to devote to their beloved film character turned live-size robot toy.

In *Retromania*, Simon Reynolds notes that "Nostalgia is now thoroughly entwined in the consumer entertainment complex: we feel pangs for the products of yesteryear, the novelties and distractions that filled up our youth."<sup>297</sup> Baby-boomers nostalgia shifts Robby's identity, in this case to a very expensive robot toy, and evokes a mid-century historical moment with an emphasis on the tactility of technology. In

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<sup>296</sup> From Fred Barton Productions, makers of celebrity robots. <http://www.the-robotman.com> (accessed June 20, 2014).

<sup>297</sup> Simon Reynolds, *Retromania: Pop Cultures Addiction to Its Own Past* (London, New York: Faber & Faber, 2011), xxix.

addition to fondly remembering Robby and his place in the post-war era, today's Robby fans want to recall Robby not through a fifties pastiche, but by creating what they see as an exact replica of Robby as he was captured on film: a giant, rather clunky grey robot. This reconstruction of Robby is more than collecting robot toys bought on Ebay or discovered in a thrift store. Rather, the baby-boomer's nostalgia for Robby manifests through the manufacture and consumption of a giant of Robby that never physically existed during the 1950s at all. Unlike Elektro, who was restored and put on display in a museum as a historical artifact, these new giant Robbies are not the output of an act of restoration. They do point towards the presentation of a historical moment in time but not for the purpose of instruction or edification. The original Robby, unfortunately, suffered repeated vandalism while on display at a movie museum in Buena Park, California. He was repaired several times after falling into disrepair and now resides in a film director Bill Malone's private collection.<sup>298</sup>

Simon Reynolds writes, "retro in its strict sense tends to be the preserve of aesthetes, connoisseurs and collectors, people who possess a near-scholarly depth of knowledge combined with a sharp sense of irony."<sup>299</sup> The giant Robby suggests this irony and almost stands as an inside joke for the retro fan in that it's extraordinarily expensive, takes up a sizable amount of space in the home (it would assuredly block most mid-century kitchen doorways), and serves no actual domestic purpose other than taking up space and being a sort of odd exhibit piece. The sheer materiality of this giant Robby marks an interesting case. Whereas the conventional routes of remembrance of Robby are easily accessible through DVD copies of *Forbidden Planet* or schedulable on a cable

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<sup>298</sup> Robots and Android website, <http://www.robots-and-robots.com/roby-the-robot.html> (accessed June 20, 2014).

<sup>299</sup> Simon Reynolds, *Retromania*, ii.

DVR, fans go out of their way to manufacture a “real” Robby that they can touch, manipulate and live with on a daily basis.

Manufacturing Robby for audiences beyond *Forbidden Planet* created both a long-lasting fan base and fostered consumer community with money-to-burn and parts-to-spare. The purchase-driven fan practices around Robby are based not in possessing knowledge of primary texts (in this case Robby’s films), but in the collection of thematically related material objects, produced by Japanese and American toy companies and tinkering fans. The practice of buying into a text creates more than new fan-fiction or innovative avenues of fan discourse. In fact, it creates a micro-economy and host of emerging merchandise sustained through trends, timing and tin.

### **Conclusion: Robby and his Paratexts**

Although he was introduced as a robot butler and domestic helper in *Forbidden Planet*, Robby’s role as a homemaker is not what he is remembered for in American popular culture. Instead, Robby the bright, shiny toy stands as more popular representation of the outer-space robot. This impression, however, aligns with the consumerist model he was born from in the 1950s, as well as servile roles from decades before. In *Forbidden Planet*, Robby was a veritable suburban mall of clothes, booze and groceries. His ability to construct a home and its contents out of the thin Altair-4 air appears cutting-edge, but his unsung pedestrian toiling to maintain the home through his services as, essentially, the house butler, suggest 50s-era technology’s potential to give the suburban home everything needed to keep up appearances as well as survive. In the understated role of housekeeper, Robby’s station in the home hearkens back to earlier

robots like Katrina Van Televox and Professor Rubinow's Sarah Electric Button from 1910, the imaginary electric servant girl from my first chapter who put flesh-and-blood servants to shame with her tireless efficiency and preset dutiful demeanor.

In terms of prominence, however, Robby the toy, which operates as a paratext supplied by toymakers in response to *Forbidden Planet*, seems to have slid past Robby's film as the primary way Americans fans remember Robby. When we see pictures of Robby, we think of the children's toys before thinking of him as household servant. The paratext has supplanted the primary text. In the next chapters, we will continue to explore paratexts and how the lines between primary text and other material supplied by viewers and fans impact the process of meaning making as well as contribute to blurring the lines between human and robot.

## Chapter 4

### *Battlestar Galactica* and Reimagining the Robot

Robby's introduction on Altair IV influenced how 1950s America understood technology's role in daily domesticity and earthly security. From the safety of Earth, Americans met Robby in his remote locale, interacted with his technology and learned how to best use him. Robby's distant domicile, a veritable suburban Shangri La, was so far physically removed from America's suburbia that his actions out there posed no threat to daily life back here. Setting new and unfamiliar technologies on distant planets offers both a safety barrier from potential threats and an opportunity to observe them. Vivian Sobchack notes that science fiction has no geographic boundaries. It "may be found literally anywhere—from small-town USA, to distant and undiscovered galaxies, to the interior of the human body." The removal of Earth-born humans allows any filmic conflict to remain a distant, benign fiction.<sup>300</sup> The setting of *Star Wars* franchise, for example, is a galaxy far, far away allowing American audiences to view the epic from stadium seating far removed from the threatening Galactic Empire. This fourth wall between peaceful life here and the vicious wars "out there," however, was challenged in 1978 when an epic space battle set a course for Earth. Luckily, it's a family show.

This is the first of two chapters on *Battlestar Galactica* (abbrev. *BSG*). It focuses on the television shows themselves and analyzes how robots were portrayed on the small screen first in the late 1970s and then with the *Battlestar Galactica* reboot the 2003. In the next chapter, I will focus on the fan responses to the 2003 rebooted *Battlestar Galactica*.

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<sup>300</sup> Vivian Sobchack, *Screening Space: The American Science Fiction Film* (New Brunswick, NJ: Rutgers University Press, 1997), 87.

Geared as a *Star Wars*-esque television series on ABC Sunday night primetime, the premise of the *Battlestar Galactica* is surprisingly apocalyptic: Twelve human colonies situated in a distant star system fought a thousand-year war with the Cylons, a society of warrior robots created by a long dead alien race. Still programmed to battle for their extinct creators, the Cylons wage war continuously against the colonials. They defeat mankind in a sneak attack on the colony homeworlds with the help of the traitorous Count Baltar. The last remnants of humanity organize and flee the colonies under the protection of the last surviving warship, a "battlestar" called Galactica. The commander of the Galactica, Adama, leads this "rag-tag fleet" in search of a new home on a mythical planet called Earth. The series' twenty-four episodes chronicle the fleet's struggle to survive the Cylon threat as they chart a course to Earth.

This highly-rated late 1970s SF television show—turned comic book, turned book series, turned 2003 television show—creates a unique opportunity to chart the evolution of popular understandings of technology over the course of several decades through a single franchise distributed across multiple media. Because *Battlestar Galactica* (*BSG*) has had numerous incarnations, it presents a unique case for analyzing changing representations of technology through ongoing, but inconsistent, *BSG* characters. In addition, because former SF narratives, television ratings and a diehard fandom have influenced the *BSG* universe the series presents an opportunity to chart the influence of popular film, the impact of audiences and the interest of television networks on a single franchise.

In reviewing *BSG*, it becomes apparent that the place of technology in this fictive universe has evolved dramatically in the franchise's course. The representation of

technological possibility through the Cylon enemy, in particular, has also undergone a major shift as production budgets change and certain characters become potential spin-offs. In addition to these economic impulses, the changing face of robots in the 1980s and the rise of popular computing in 1990s impacts the development of *BSG*'s robot enemy as Cylons transform from mindless, metal soldiers to flesh-and-blood lovers and saboteurs. Through these analyses, this chapter and the next chapter discuss how pivotal changes in key *Battlestar Galactica* characters reflect shifting understandings of technological possibilities in late twentieth century American culture. In addition to offering an overview of *BSG*, I examine the makeup and roles of Cylons throughout the thirty-year franchise.

This study's more comprehensive perspective marks a significant departure from much recent *BSG* scholarship, such as the collection *Cylons in America* and two different volumes both titled *Battlestar Galactica and Philosophy*, all of which examine chiefly Ron Moore's 2003 reimagined series.<sup>301</sup> Reasons behind these numerous studies likely have to do with the series's rich mise-en-scene, flashy special-effects, complicated characters and complex storyline that spurred not only critical acclaim from the SF community, but also connections to the Second Gulf War described by numerous media scholars. In *Cylons in America*, C.W. Marshall and Tiffany Potter introduce the series

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<sup>301</sup> Tiffany Potter and C.W. Marshall's edited volume *Cylons in America: Critical Studies in Battlestar Galactica* (New York: Continuum, 2008); Jason T. Eberl's anthology, *Battlestar Galactica and Philosophy: Knowledge Here Begins Out There* (Malden, MA: Blackwell Pub., 2008); and Joseph Steiff and Tristan Tamplin's edited volume *Battlestar Galactica and Philosophy: Mission Accomplished or Mission Frakked Up?* (Chicago, IL: Open Court, 2008) are some of the many collections of critical studies about the new series that were published during *BSG*'s fourth season. In addition to these critical studies, unauthorized guides like *BSG* actor Richard Hatch's *So Say We All: An Unauthorized Collection of Thoughts and Opinions on Battlestar Galactica* (Dallas, TX: BenBella Books, 2006), Jo Storm's *Frak You!: The Ultimate Unauthorized Guide to Battlestar Galactica* (2007), and Lynnette Porter, David Lavery, and Hillary Robson's *Finding Battlestar Galactica* (Naperville, IL: Sourcebooks, 2008) further pushed the television franchise into the print world.



with the same language—“occupation,” “insurgency,” “ideology”—that media pundits use when discussing American forces in Iraq.

An insurgency struggles against an occupying power who is their technological superior; refugees flee persecution with ever-diminishing resources; a society fractured along ideological lines fosters political corruption and Machiavellian opportunism; those we thought we knew turn out to be enemies; sexy androids wielding guns.<sup>302</sup>

Reading the series as an allegory for postmodern warfare illuminates the changing divisions between friend and foe; interrogates national ideologies of right and wrong; and it draws out conflicts between survival and ideology that emerge after a nation-state implodes. However, disassociating this new *BSG* context from its predecessor creates a falsely revisionist notion of the series that obfuscates perennial themes in the *BSG* universe carried forward from old version to new: humans’ flight from hostile machines, technology as an alien other, the triumph of human social behavior over hardwired networks. These concepts remain prescient, despite the twenty-three year hiatus between televised *BSG* episodes, and offer a perspective that goes beyond the Occupation of Iraq and postmodern warfare. Just as many fans of the original series disassociated Moore’s version from their canon, referring to the new series as “GINO” (“Galactica in Name Only”), many media scholars have wrongly tossed the original Glenn Larson *BSG* into a television graveyard to favor the grittier warfare in a glitzier *BSG* series.

It is convenient to see the original *BSG* Cylons as uncharismatic mechanical drones; outmoded devices for representing an alien enemy; ready-made action figures; or another in a series of *Star Wars* knockoffs under the term “starwarsploitation.”<sup>303</sup> Yet, the

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<sup>302</sup> Potter and Marshall, eds., *Cylons in America*, 1.

<sup>303</sup> Xeni Jardin, “Star Wars Knock-off Toys (and Predecessors),” *Boing-Boing*, (February 24, 2005) <http://boingboing.net/2005/02/24/star-wars-knockoff-t.html>. (accessed November 2, 2006) Blogger and

development of the BSG cyborg not only started in the original series, but also presented complex sometimes contradictory technological possibilities. Transitions in Cylon technology from the original series (1978–1980) through the new series (2003–2009) also situated changes in fictive technologies within contemporary technological developments in American culture and entertainment.

This chapter starts with a brief definition and discussion of “posthuman” theory. Through the humanoid Cylon the line between person and machine is complicated and blurred. I introduce the original *Battlestar Galactica* and situate the Cylon in the original television show by examining how the original Cylon Centurion soldier changed to develop human behaviors in the first incarnation of the show. I then transition to examine how Cylons were reimagined in the 2003 *Battlestar Galactica* through the lens of cultural theorist J.P. Telotte and under the influence of Ridley’s Scott’s *Blade Runner* (Ridley Scott, 1982). I end the chapter with a discussion of what it means for technology to pass as human in the reimagined *BSG* series as well as how concepts of human interconnectedness find their way into the last seasons of the television series.

Like previous chapters, this examination of *Battlestar Galactica* sets out to critically examine representations of technology that have previously been taken for granted as novel, silly, or downright strange. My goal, however, is not to establish that *Battlestar Galactica* presents the only, or even the main, representation of robots in the late twentieth century. With robot-laden blockbusters like *Star Wars*, *Blade Runner* and *Terminator* coming out in quick succession, *BSG* took a place well outside the 1980s sci-fi film canon. However *BSG*, in particular, offers the opportunity to explore a rare

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collector Ken Darmarais may have developed the term; he hosts a site devoted to Star Wars knock-off toys at <http://www.secretfunspot.com/fakestarwars.htm>. (accessed November 2, 2006)

moment where avenues of daily communication, content delivery and television production were significantly altered by developments in computing, thereby changing the appearance of fictive future technologies while they were playing out onscreen. As these real-life technologies converged, so did the roles of the producer and media fan: not only in how they contributed to the text, but also in how they saw themselves. While the next chapter will chart specific instances of *BSG* fan participation and exclusion, this chapter establishes what it means to be “networked” and how constant connectivity through nascent technological devices and software impact our own identities and understandings of technological mediation. *BSG*’s Cylon robot, in this case as well as my others, is not a prime mover but instead is a sort of tabula rasa whereby numerous parties can refine, reimagine, renovate, rebuild and replicate at will. Unpacking the Cylon reveals not a series of wires or tube but a dynamic conversation impacted by changing identities, fears and relationships to new technology that impact the way contemporary Americans envision their own humanity.

### **What Does It Mean to Be “Posthuman?”**

Earlier chapters looked at robots as a consumer items, domestic providers, and companion technologies. The changes in Cylons from original *BSG* to the new series reflect many American’s own shifting self-identities as the metal robot is made flesh. A reimagining of contemporary relationships with daily technologies provides a foundation for the evolving humanoid Cylon defined by the new series: a creation that exists beyond a machine’s hardwiring and beyond a human’s mortality.

In the late twentieth century, a handful of critical and literary theorists sought out a new understanding of what it meant to be “human” in a frenetic, technologically saturated society. The tradition of Cartesian dualism emphasizes a divide between the mind and the body, suggesting that the mind or consciousness is separate from the brain and the rest of the body. While Descartes’s mind-body problem offers a way of parsing the body, it does not provide a framework for considering ways in which one might convey presence through objects that exist outside the body that one interacts with like a telephone or a computer. Instead of thinking about people using technology to physically transport their bodies, these theorists, notably Donna Haraway, Judith “Jack” Halberstam, and N. Katherine Hayles, consider technologies as extensions of the body. For example, rather than someone driving a car, perhaps one could say that the person and the car are temporarily one entity moving in a particular direction. This understanding of human-technology became known as posthumanism.

Posthumanism relates to this analysis of *Battlestar Galactica* in two ways. First, it offers a model for thinking about the changes in the BSG Cylon robot character, particularly as the 1978 metal-made Cylon soldier transforms into twelve models indistinguishable from humans, including a mother, a lover, a spy, a mechanic, a priest, and a prophet.<sup>304</sup> Second, posthumanism gives a frame for considering fan identity online. Whereas many original *BSG* fans would have met face-to-face at Galacticon and other fan conventions, fans today migrate to online gathering places, constructing their

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<sup>304</sup> The proliferation of different Cylon characters (delivered in the form of 12 “models” of humanoid Cylons) have impacted fan speculation on their meaning. One fan, Capasalad, writing on the nightly.net forums, posted, “The 12 Cylon models as the 12 archetypes?” which discussed whether or not a character from each model of Cylon could be coded into an archetype representing a human desire. He coded regular guy, innocent, caregiver, jester, sage, lover, ruler, warrior/hero, explorer, creator, magician, outlaw/destroyer. Nightly.net, March 25, 2007, <http://forums.nightly.net/index.php?showtopic=48467> (accessed December 5, 2008).

personal identities through content they post and personal information they may reveal.<sup>305</sup>

As will be discussed in the next chapter, these new “virtual” gathering places influence how fans construct themselves and the constructed environment they interact within: their online personas in these spaces become, oftentimes, the only social identities others in the community will ever know.

In 1985, one of the pioneers of posthuman theory, Donna Haraway, defined an intersection between “feminism, socialism and materialism” in her “Cyborg Manifesto.” Her cyborg, a female, is also “a cybernetic organism, a hybrid of machine and organism, a creature of social reality as well as a creature of fiction.”<sup>306</sup> Haraway’s definition extends the construction beyond the cyborg’s body into the society she exists within. Thus, her cyborg not only blurs the line between human and machine but it also suggests an ambiguous space between fiction and reality inhabited by the cyborg. While the cyborg has a place in both the real and the virtual, these worlds—the real and the virtual, the natural and crafted—also blend together.

This blurring between fictive and real systems also influences how we define and delineate ourselves. Haraway notes that “biology” is a relatively new invention, and one that is changing based on cultural influences as much as scientific discovery. As theories of humanness and gender change alongside biomedical research, she contends that bodies are “not born; they are made.”<sup>307</sup> Haraway’s bodies are culturally constructed in as much

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<sup>305</sup> *Battlestar Galactica* fans united with cast in 1993 for the 15 Yahren (Year) Reunion in Los Angeles. There was also a 20 Yahren Reunion and a 25 Yahren reunion.

<sup>306</sup> Donna Haraway, “A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century,” *Simians, Cyborgs and Women: The Reinvention of Nature* (New York: Routledge, 1991), 150.

<sup>307</sup> Donna Haraway, “The Biopolitics of Postmodern Bodies,” *Simians, Cyborgs and the Reinvention of Nature*. (New York: Taylor & Francis, Inc., 1991).

as they are also technologically crafted to have heightened senses and stronger muscles as well as the ability to resist diseases and live longer.

Halberstam observes that one of the assumptions about technology is its traditional gendering as “male.” Considering this, Haraway’s female cyborg on the surface represents a threat because, as a blend of woman and technology, she would resemble a hermaphrodite: an “It.” “It” becomes both difficult to define and constructed of two distinct binaries: it is manufactured with “male technology” yet created from “feminine nature.” Halberstam suggests that our culture’s investment in constructed binaries—natural v. artificial, intuitive v. rational, female v. male, body v. mind—leads to false dichotomies and fear of a threatening Other. After all, if there’s an “us” there must also be a “them.”<sup>308</sup> This dichotomy is artificially limiting, particularly when “The Other” is manufactured by us.

Semantic constructions of dyads and dichotomies sometimes designate the boundaries between one’s “technologies” and one’s “self.” For example, does the woman drive the Prius hybrid automobile, or does the woman-hybrid move towards a destination they’ve defined together based on overlapping needs (i.e. getting to an appointment and finding a charging station)? Reconsidering the embodied experience between human and technology in such a way, leads to N. Katherine Hayles’s posthuman: “an amalgam, a collection of heterogeneous components, a material-informational entity whose boundaries undergo continuous construction and reconstruction.”<sup>309</sup> Rejecting Cartesian dualism, Hayles argues there really is no “I” but instead a series of subroutines operating

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<sup>308</sup> Judith Halberstam, “Automating Gender: Postmodern Feminism in the Age of the Intelligent Machine” *Feminist Studies* 17, no. 3 (Autumn 1991), 450.

<sup>309</sup> N. Katherine Hayles, *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics* (Chicago: University of Chicago Press, 1999), 3.

within bodies, much like those operating within computers. Some of these subroutines operate the “body,” which in one of her definitions of posthuman, Hayles suggests is the original prosthesis: a physical extension of ourselves that must be learned, and relearned, in order to effectively operate.<sup>310</sup>

Like Halberstam and Haraway, Hayles argues that gender is constructed and performed. However, Hayles takes this a step further suggesting that how one performs gender—personality traits, body language, manner of speech—is a series of subroutines that, when run together can offer a collective, larger impression of one’s overall identity.

These postmodern approaches to the relationship between human and machine offer an incisive perspective on the role of the cyborg characters, the Cylons in *Battlestar Galactica*, the role of the fan in the online community, and the intersection of both.

### **Uncovering the Text: What the Frak Is *Battlestar Galactica*?**

Before discussing the Cylon’s relationship to cyborg/human identities, a better explanation of *BSG* is needed: its inception, its popular context, and a high-level overview of the Colonial Fleet’s relationships to technology.

Coming on the coat tails of *Star Wars Episode IV: A New Hope* (1977), *Battlestar Galactica* offered a familiar story set in the far reaches of space: humans struggle against an unseen dark enemy, battling as the underdog for their survival.<sup>311</sup> *BSG*

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<sup>310</sup> Hayles’s other definitions of posthuman privilege the informational pattern over material instantiation; consider consciousness as an epiphenomenon (a secondary phenomenon occurring alongside other phenomena, which are equally important); configures the human being so it can seamlessly interface with intelligent machines positing there is no demarcation between bodily existence and technological mechanisms. Hayles, *How We Became Posthuman*, 2–3.

<sup>311</sup> In 1978, 20th Century Fox and Lucasfilm Ltd. sued Universal Studios for copyright infringement of *Star Wars*, citing 34 similarities between the two films. John Larocque, “*Battlestar Galactica* Frequently Asked Questions,” [BattlestarGalactica.com](http://BattlestarGalactica.com),

is an example of the space opera. The series' melodramatic formula and romantic adventures, indicative of this science fiction subgenre, allowed explanations of technology to take a back seat to the conflicted characters: lasers always fired, fighter jets always flew, and everything from robotic dogs to time travel could be arranged in less than an episode. The *BSG* universe easily allowed for celebrity cameos and wacky shenanigans, folding technology into characters and conflict rather than clarifying how exactly humanity came to meet this advanced robotic technology, and how these machines became sentient and dangerous. However, the fictive technological engineering behind this very engineered series offers a better understanding of how late twentieth century America simultaneously perceived emergent technology as a social benefit and an otherworldly cultural threat.

What would become a media franchise distributed through television, film, comic books, novels, toys, games, and online content, first began as a short-lived television series that premiered on September 17, 1978.<sup>312</sup> *Battlestar Galactica* ran for just twenty-four episodes on ABC at 8 PM Sunday over the 1978-1979 television season.<sup>313</sup> The program's pricey production budget, running at almost one million dollars per episode, necessitated high ratings. To achieve the broadest appeal, *BSG* writers combined epic drama with everyday life aboard the *Battlestar Galactica*. The show's original creator, Glen Larson, cast Noah Hathaway as Boxey, a young boy whose mischievous adventures

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[http://www.battlestargalactica.com/outside\\_docs/bg\\_outdoc0001.htm#G6](http://www.battlestargalactica.com/outside_docs/bg_outdoc0001.htm#G6). (accessed September 15, 2008)  
Dale Pollock, *Skywalking: The Life and Films of George Lucas* (New York: Da Capo Press, 1999).

<sup>312</sup> The show's pilot, "Saga of the Star World," was a three television-hour series (actual runtime approx. 2 hr, 17 mn). "Saga of the Star World" was rereleased in May 1979 as a feature-length film in American theaters to recoup some of the production costs of the television series. John Lacroque, "The Different Versions of the Battlestar Galactica Pilot Episode," Kopal.com (July 1, 1995) (revised August 15, 2000). available at <http://www.kopal.com/archives/bgdiff.html#V2> (accessed September 18, 2008).

<sup>313</sup> It is important to note that America's SciFi channel and Britain's SkyOne share the series license and both air the show to their respective audiences, although not simultaneously. The first season aired finished on SkyOne before premiering on SciFi. The second season began on SciFi before airing on SkyOne.



with his robot dog, Muffit, took center stage in many *BSG* subplots. His happy naiveté and childish curiosity gave children an identifiable character and attempted to add endearing comic-relief to this exodus of humanity. Likewise, Muffit, the half-fur, half-metal robot dog, advertised the possibilities of domesticated technology and undying companionship.<sup>314</sup>

A “foreign” vocabulary for the show was also designed to both add an exotic flavor and offer creative euphemisms for adult themes. Cassiopea, a consort-turned-nurse living aboard the *Galactica*, is referred to as a “socialator” rather than a prostitute. Instead of using American profanity in intense situations, *Galactica* crew use “frak” or “a load of felgercarb” to show displeasure or anger. In addition to these creative expletives, the original *Battlestar Galactica* also built out an often distracting vocabulary of units of measure and animal names to further distance the story from American reality and firmly situate it in the SF realm of the exotic. Years became “yahrens,” dogs became “daggets,” and “beer” became “baharii.”<sup>315</sup> Through this strange mix of military-based apocalyptic epic and silly daily speech, *Battlestar Galactica* created a colorful science fiction (abbreviated SF) universe perpetuated by a lasting fan base of devotees.

While *BSG* was one of the highest-rated shows on ABC, the high cost of special effects forced the show to be canned after its first season. After the final episode aired in April 1979, ABC attempted to revive the series through *Galactica: 1980*, a sequel to *BSG* made on a tighter budget. Set on contemporary Earth with only a handful of the original

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<sup>314</sup> In the series pilot, the audience sees Boxey’s organic dog, Muffit, run off to its death during the Cylon invasion. To alleviate Boxey’s emotional suffering, *Galactica*’s Dr. Wilker creates a robotic drone named Muffit II.

<sup>315</sup> Several *BSG* fans online have attempted to compile definitions for the series invented terminology. Among them is the entry “Language In The Twelve Colonies” on *Battlestar Wiki*, [http://en.battlestarwiki.org/wiki/Language\\_in\\_the\\_Twelve\\_Colonies](http://en.battlestarwiki.org/wiki/Language_in_the_Twelve_Colonies).

*BSG* cast and different writers, *Galactica: 1980* lacked many of the big-budget, exotic science-fiction elements that made the original show so beloved. After just ten episodes, the unsuccessful *Galactica: 1980* was pulled from primetime and *Battlestar Galactica* universe were left to wander off-air.

In 2003, a former *Star Trek* writer, Ronald Moore, and producer David Eick rebooted *Battlestar Galactica*. To the surprise and sometimes chagrin of fans and viewers of the original series, the new Moore/Eick version resembled little of the original *BSG*. The show marked a considerable stylistic departure from the 1978 series. The family-friendly subplots of the earlier program were replaced with scenes featuring brutal violence and sexuality too brazen for primetime. The brightly lit *Galactica* deck and exotic planets visited in the original *BSG* were also gone in favor of a pared-down World War II style bridge, cramped gunmetal grey living quarters and an unshaven, often overstressed military crew that rarely sees daylight. The buddy relationship between the two elite male pilots, Starbuck and Apollo in the original series, was also complicated when Ron Moore changed Starbuck's gender to a woman, adding a level of heterosexual tension where there had been onscreen brotherly camaraderie and fan-created off-screen homoerotic liaisons.<sup>316</sup> Moore downplayed earlier *BSG* icons like the Cylon centurion

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<sup>316</sup> For examples of homosocial and homosexual fan fiction featuring Starbuck and Apollo, visit Allaire Mikháil, "Battlestar Galactica: The Original Series Fan Fiction" (updated May 30, 2008), <http://www.skeeter63.org/~allaire/favorites/FavBG.htm> (accessed December 5, 2008). Mikháil continues the plot of the original series through her fan fiction and recollects fond memories of the original series: "*Battlestar Galactica*: The Original Series was the first tv series I've ever been a fan of. When my brother and I were still teenagers, we had seen the multi-part episodes cut into movies, and so we were pathetically grateful that our aunt recorded several episodes for us when the series was finally shown on satellite tv. We bought and read all the novelizations and re-watched the tapes—very much to my parents' chagrin. In short, I was a Starbuck and Apollo fangirl long before I knew about slash, so it's no surprise I started looking for fan fiction once I'd been absorbed by the slash fandom. "It's also no surprise that I am a verbose defender of the original series, a supporter of Richard Hatch's project (that sadly never came to fruition), and am more than skeptic towards the series' 're-imagining.' As pretty as Jamie Bamber is, he is no Apollo, and the whole gender-switching thing in regard to Starbuck and Boomer makes me foam at the mouth. But let's not go into this here."

soldiers, emphasizing instead twelve models of humanoid Cylons, who routinely “pass” as humans. These new humanoid robots were both male and female and range in age appearance from mid-twenties to late-sixties. Unlike the original centurions, the twelve Cylon models looked, aged and, on one occasion, reproduced like humans.<sup>317</sup> They had individual personalities and in many cases behaved as human characters for several seasons before being revealed as Cylons to the *Galactica* crew, television audiences and sometimes even themselves.<sup>318</sup> The concurrent transformation in *BSG* technology and characters through the Cylon robot marked changing ways of thinking about technological innovation, as robots go from metallic drones to self-conscious parents, companions and friends who are indistinguishable from their fellow humans.

### **Changing Times, Changing Enemies**

To better understand this transformation of the fictive robot, one must start with Americans’ introduction to “alien” Cylon technology. The Cylon robot first appeared in 1978 as a tinny, gun-toting warrior, incapable of reason, let alone procreation. The original series included an infinite number of enemy robots in the form of the Cylon Empire’s Centurion soldier, who stand as polished, gleaming inhuman tormentors of the human race.<sup>319</sup> Press stills often played this gleaming, shiny quality up even more than the television show itself. Often buffed to a high shine that causes non-diegetic light

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<sup>317</sup> Two Cylons in the fleet naturally conceive children with human parents. Cylon Sharon Agathon gives birth to a daughter, Hera, in the episode “Downloaded,” and Galen Tyrol has a son, Nicholas, with his human wife, Cally, when the couple lives on the planet New Caprica.

<sup>318</sup> Four of the “Final Five” Cylons had no idea they were Cylons until they begin hearing the same hallucinatory music. The music draws the four characters (Samuel T. Anders, Galen Tyrol, Tory Foster, and Saul Tigh) begin toward each other, and they suddenly realize that they are all Cylons. They resolve, however, to continue their responsibilities as part of the Colonial Fleet, hiding their Cylon identities from the crew.

<sup>319</sup> The Cylon Centurion soldiers act as infantry in Cylon attacks, operating as omnipresent pilots and foot soldiers against the Colonial Fleet.

sources to bounce off their curved helmet-like heads, a Centurion in one such still resembled a cross between a Trojan warrior and a *Star Wars* storm trooper. Almost a dozen points of light reflect from the Cylon's helmet and body. They were played by actors in suits, but their inhumanity was marked by a dark visor (covering the actor's eyes) with a red light inside that slowly moved back and forth like a tennis ball in the video game, Pong. The Cylons' polished metal bodies appeared straight off the showroom floor, reinforcing the mechanical origins of this robot and suggesting that an infinite supply of Centurions were waiting in the wings. While their chrome finish easily distinguished them from the fleshy humans, their shininess suggested the newness of Cylon technology, turning each Centurion into a shimmering beacon of a potential mechanized future sans humanity.



A Cylon Centurion holds a laser rifle in the Original *BSG* series.<sup>320</sup>

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<sup>320</sup> Promotional still image, *Battlestar Galactica*, c. 1979.

The mise-en-scene frequently fetishized the Cylons' futuristic look. While the *Galactica* ship was brightly lit, spacious and carpeted, Cylon ships were dark: the background behind the Cylon actors often faded into black. Light sources were few and far between, but regularly collected around the Cylons themselves, as though their metal faces radiated light like a disco ball. These destroyers of humanity illuminated scenes, appearing like knights in shining armor rather than dark overlords. Their illuminating presence complicated notions of good vs. evil by offering a destructive other that was also a beautiful, well-designed piece of modern technology. Whereas inhuman, evil forces are often coded as ugly or freakish (consider Darth Vader's respirator suit or the trashcan-shaped Daleks of *Dr. Who*), the Centurion takes on its own beauty, which, at the very least, suggests that the unknown technology behind these warriors cannot be all bad. In fact, it can be coveted and even collected by *Galactica* crew as well as by *BSG* viewers with access to a toyshop.<sup>321</sup>

Converting and harnessing Centurion technology for human benefit seems a possibility early in the series when Lord Baltar, a Colonial politician turned traitor, wins the favor of his Cylon captors and gets his own Cylon ship to fight humanity.<sup>322</sup> Although Centurions appear as the most visible ambassadors of Cylon technology, their limited cognitive abilities turn them into actionable puppets that are little more than instruments for human destruction controlled by someone else. They lack decision-

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<sup>321</sup> Along with the series, Mattel released a line of action figures, including the "Battlestar *Galactica* Cylon Centurian [*sic*]."

<sup>322</sup> Lord Baltar is sometimes referred to in the series as Count Baltar. His attempt to use the Cylons to build his own empire fails, and he is imprisoned to await his execution. After a new Imperious Leader rises to power, Baltar's life is spared and he is given a Cylon basestar ship to command. Alongside Baltar is an I-L Series Cylon, called Lucifer. I-L Series robots typically handle non-military, administrative duties to support the expanding Cylon Empire. They are portrayed as having logical abilities and serve as political advisors and liaisons.

making abilities, meaning their attacks are ordered by others, most often the mysterious Imperious Leader, ruler of the Cylons, and the human Lord Baltar. Since the Imperious Leader often remains hidden (audiences never see his face), Baltar becomes the face of the Cylon enemy. In just a few episodes, Baltar's human ingenuity allows him to rise up the ranks of the Cylon hierarchy served by the gleaming Cylon Centurion warriors, who for much of the series repeat the same line: "by your command."<sup>323</sup>

The Centurions present a scenario of future technology that is simultaneously destructive, but susceptible to collapse when infiltrated by a single human. Centurions themselves have limitless materials to rebuild, yet lack a philosophy that allows them to "live." The Centurion—a mass-produced, disposable, thoughtless, puppet-like, subservient soldier—offers a vision of technology that is hardly unstoppable. Cylon Centurions act as drones, operating as thoughtless military appliances designed to perform maneuvers in the same way as a refrigerator is designed to dispense ice. In the figure of the Centurion, *BSG* suggests that technology extends from, and is entrenched in the society that creates or controls it. It is malleable to social forces and quick to crumble when removed from the society it exists within. In the hands of humans, Cylon Centurion technology seems to either fall apart or adopt human ideologies.

For the humans in *BSG*, Centurions represent shiny killing-machines, as well as mysterious technologies in need of retooling. When physically dissected, however, the Cylon technology seems to just stop working, leading to slapstick consequences. In one episode, "Baltar's Escape," Dr. Wilker, a robotics engineer, attempts to rebuild a disassembled Centurion in order to better understand Cylon technology. After the

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<sup>323</sup> Between I-L Series Robots and Cylon Centurions is a class of Command Centurions. These Cylons resemble Centurions in appearance but are gold-plated. They command basestars or serve as guards for the Imperious Leader.

Centurion is reprogrammed, the robot moves stiffly around Wilker before it clumsily breaks a Cylon Raider after being instructed to pilot the fighter craft. The scene underscores the delicacy of Cylon technology, making this unknown technology appear to be built on a house of cards. Mechanical tweaks by those ignorant of the alien technology cause the destruction of the Cylon. However, the path of demise is telling: the Centurion does not “go rogue” or immediately fall apart. Rather it obeys human instruction, failing its instructed tasks due to Dr. Wilker’s ignorance of Cylon technology and behavior.

Because the Cylon Empire is made up of robots, the Cylons present a unique case in considering the complex mash-up of technology and society. After all, Cylon society is squarely based in Cylon technology, and vice versa, because the civilization is constructed chiefly of machines. Just as Hayles argues that one should reimagine her relationship with technology by considering technology to be an extension of the body, the original prosthesis, the Cylons show the impossibility of separating the civilization from the technology it uses to operate: technology does not just run the Cylon culture, it is the Cylon culture. This cyborgian understanding of Cylons offers a reason why Dr. Wilker fails to hack the Centurion: Wilker attempts to hack a Cylon by rerouting wires, but his attempt fails when he tries to talk to the Cylon—to engage with it through voice commands he assumes it will easily carry out. His failed attempt to rebuild and instruct the Centurion is like a child playing with an action figure, and it demonstrates that understanding the technology is useless without understanding the culture that created it. Perhaps engaging with the Centurion on a social level will not only “make it work” but win over the Cylon’s mechanical heart and mind. Another *BSG* crewmember attempts

precisely this type of engagement with Cylon technology, leading to an entirely different interaction between human and machine.

In the finale of the short-lived follow-up series to *Battlestar Galactica*, *Galactica: 1980*, the Cylon Centurion is complicated and humanized when Starbuck, the heroic *Galactica* fighter pilot, rebuilds a Centurion for companionship while stranded on a remote planet. Simultaneously mastering Centurion technology and culture, Starbuck manages to develop a relationship with a Centurion just before the original *BSG* television franchise is abandoned. Cy, as Starbuck calls him, initially attempts to kill Starbuck, until he threatens to cut Cy's electronic power. A brief existential debate follows between the Starbuck and Cy, apparently changing the Cylon from a simplistic killing machine to a sentient friend.

Cylon Warrior: You repaired me, you did not create me. I am a Cylon.

Starbuck: So you have no sense of loyalty to me for saving you?

Cylon Warrior: I would have to think about that.

This concise conversation alters the course of Cylon development, as Cy becomes the first Centurion in the series to look to thoughtful self-reflection in order to understand his current circumstance and budding relationship with Starbuck. In a few television minutes, Starbuck, known throughout the series for his ability to convince women to bed him, has managed to make Cy self-aware through an existential lesson straight from elementary school.

Having reached Cy's cognitive center, Starbuck continues educating the robot. Cy's subhuman mental capability is again reinforced when Starbuck quizzes Cy on his understanding of humanity.

Starbuck: Aren't you even interested in what a human is? Don't you care what it is you've been trying to destroy for a thousand years?



Cylon: You are our enemy.

Starbuck: [nodding slowly] Yes, so you keep telling me. But why are we the enemy?

Warrior: Because you are.

Lt. Starbuck: [disgusted] Oh, Cy.

[pause] You mind if I call you Cy?

[the Centurion shifts on his feet]

Starbuck: Cy, you have the mentality of a two-year-old.

Cylon: A two-year-old what?

Starbuck: Hopeless. Absolutely hopeless.

Based on this short interaction, Starbuck and *Galactica: 1980* viewers are led to believe that Cylon technology, while efficient in completing basic tasks, is fundamentally defective. However, its flaws do not stem from the fact that the Cylons have been trying to kill humanity for the past thirty episodes, but because viewers now see that Cy (one of the few Centurions on screen for more than a few shots) has no idea and no interest in what humans are. Cy's ignorance and disinterest in humanity, oddly, shifts the balance of power, turning Cy from a potential killer into a naive toddler, unable to comprehend its surrounding unless led by a human. Oddly, the converse is not true. Starbuck's and the Galacticans' general ignorance of Cylon technology does not have the reverse effect: Cy's ignorance turns him into a student, while Starbuck's lack of understanding seems justifiable. Cy's ignorance of humanity has led to a fundamental cultural misunderstanding of the enemy, whereas Starbuck's ignorance of Cylon understanding seems akin to someone not knowing how to fix a toaster. While both sides are ignorant of the other's ways, the difference appears to distinguish and elevate culture from technology: Cylons are ignorant of human culture, which causes them to be inferior, while the humans simply cannot master of Cylon gadgetry, which leads them into inconvenient circumstances.

This tangled relationship between technology and culture leads to the flaw of too-much-technology, not-enough-culture in the Cylon Empire that Starbuck easily exploits. Centurions, in effect, are technological extensions of Cylon society. Cylon society is constructed wholly by robots, which are nothing more than technological extensions of other Cylons. While technology can beget more technology, it is not the case in *BSG* that technology can possibly beget a sustainable culture. The Cylons can mass-produce other Cylons. They can build ships and develop advanced weaponry. But Cylons cannot converse, or create, or become cultured in a human sense because they are nothing more machines existing within a technological system. Their “society” offers them new parts and new tasks, but because it is based in mechanics, it cannot offer intellectual stimulation.

This Cylon defect is based on the presumption that technology cannot create culture. It gives the good guys – Colonial humans—a large advantage over the seemingly limitless Cylon Empire. While humanity cannot come off an assembly line, it can intervene and ultimately control anything that does through human interaction. Sharing human culture through stories, games and conversation appears the most potent weapon for developing and winning the “hearts and minds” of mechanical objects. Through Cy’s general interest in Starbuck (displayed in that Cy continues to interact with him rather than kill him outright) suggests that human charisma and creativity easily trumps technology, no matter how foreign, how advanced, or how hostile.

Having easily turned Cy into his pupil, Starbuck turns into a Cylon elementary school teacher, prepped to teach Cy everything he needs to know about humanity. He teaches Cy to play a poker-like card game called Pyramid, and quizzes Cy on Cylon

culture, turning the robot's answers into teaching opportunities. For example, Starbuck asks how the Cylons can have an Empire devoid of love, gender and sexuality. Cy replies that women are weaker (thereby confirming the visual indications in Cylon "body type" that all Cylons are coded as "male.") Starbuck, suddenly turning from the show's most prominent womanizer into a strident feminist, cites female "durability" to argue against Cy's sexist assumption, noting that women have different strengths and tend to live longer than men. These lessons in humanity, demonstrate to Cy that humans, while quite confusing beings, are really not so bad.

Starbuck's lectures give way to a more egalitarian friendship as Cy develops a personality and feelings of his own. He becomes "disappointed" at Starbuck when he realizes Starbuck is cheating at pyramid, and he acknowledges Starbuck's boredom by finding and bringing back Angela, an unconscious pregnant woman. As Starbuck tends to Angela and her fast-approaching labor, Cy becomes jealous of her and the expected baby, much like an older brother waiting for the birth of a newborn sibling. Now suddenly paternal, Starbuck comforts an upset Cy, suggesting that Cy can be the baby's grandfather. Starbuck's attempt to fit Cy into this fast-developing heteronormative family does not work and the robot attempts to dissolve their friendship by walking off.

On task and attending to Angela's needs, Starbuck completes an escape pod for Angela and the baby using parts from the crashed Galactica Viper and Cylon Raider. This hybrid craft will carry Angela and the baby to the safety of the Galactica fleet. Cy's absence, however, arouses Starbuck's suspicion concerning the Cylon's ability to be loyal to humans. Starbuck begins to believe that Cy cannot help himself from betraying Starbuck's presence because of his innate Cylon hardwiring. When Cylons arrive on the

planet, Starbuck is convinced of Cy's betrayal and threatens to shoot him, but cannot pull the trigger. After launching the escape pod, Starbuck becomes the target of Cylon laser fire. Cy suddenly appears, telling Starbuck to hide. He walks over to the Cylon Centurion party and guns down two Centurions before the third shoots Cy, mortally wounding him. Starbuck shoots the remaining Centurion and runs to Cy's aid, cradling the shiny robot in his arms. Cy looks toward Starbuck and describes their relationship as that of friends before he dies, leaving Starbuck once again stranded and alone.

In less than an hour, Cy "evolves" from deadly appliance to foolish child to a loyal friend and self-sacrificing servant. However, Cy's rapid development is gained through human intervention, education and culture. Cy becomes "cultured," before realizing that he must sacrifice himself for Starbuck. Just as loyally as a robot in Isaac Asimov's science-fiction human culture, Cy destroys himself and fellow Cylons to save his fellow man.

Although this episode represents a last, failed attempt to revive *Galactica 1980*, Cy becomes a character in Maximum Press's, *The Rebirth of Cy*, a short-lived comic book series that lasted only one issue before being abandoned in 1996.<sup>324</sup> While this attempt at a Cy-centric commercial franchise fails, it nonetheless represents a thread between old series and new: through Cy, the rapid development of the Cylon Centurion from deadly foreign technology to a beloved, witty sidekick prefigures the more developed robot characters of the 2003 rebooted *BSG* series.

Cy demonstrates that well-made or "good" technology can be taught, and most importantly taught to serve. The outcome of Cy's learned loyalty to his surrogate family

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<sup>324</sup> Cy, redubbed "Cyrus," appears in "The Rebirth of Cy," *Asylum #10: Lady Supreme* (Maximum Press, 1996).

is reminiscent of Robby's programmed loyalty to the Morbius family, rather than a significant step away from the characterization of robots as mechanized servants. Although Cy appears to develop free will through his human education, he quickly falls into the same patterns of people pleasing as his domesticated robotic predecessors.

In considering the effects of machine cognition, it is significant that Cy's last act of independent judgment ends in his own self-termination. Just a few days after meeting his first human and discovering the process of human decision-making, Cy decides to betray his fellow Centurions and destroys himself in the process. While this act is done for the sake of preservation (saving Starbuck's life), its effect is ultimately destructive. Cy's decision to sacrifice the many in the name of the few foreshadows a robot bent on rebellion and destruction for a greater good.

### **Redesigning Robots for a Reimagined *Galactica***

Cy's story marks a symbolic departure from the mindless, mass-produced battlebots that terrorized Galacticans and late 70s television audiences alike. While Centurions, nicknamed "toasters" by Galactica crew, inhabit the reimagined *BSG*, their metal bodies are dulled down to a matte gunmetal, and their "by your command" is taken away in favor of menacing muteness. The twelve models created to resemble humans replace the Centurions as the most visible robots in the series. Seven of these Cylon models are replicated throughout the *BSG* universe, coming out of "rebirthing tanks" aboard "resurrection ships." Unlike the limitless production line of Centurions from the original series, these new models of Cylons are not so much born as reborn. A dying Cylon's consciousness can be transmitted wirelessly to the ships, where it is downloaded

into a new, identical body. This wireless connectedness creates a kind of immortality for the machine-driven Cylons that mortal humans cannot possibly match. This distinction quickly disappears when it is revealed that Cylons must be within a certain range of a resurrection ship to be downloaded. In addition, audiences soon also see that Cylon resurrection is not an automatic process, but the result of a group decision regarding whether or not to bring them back.

While *BSG* marks a critical text for understanding the changes in how American see technology, a shift in how filmic robot characters were portrayed had begun earlier in films like *Westworld* (1973) and *The Stepford Wives* (1975). Here, robot bodies became virtually indistinguishable from their human creators. This apparent blending of man and machine, elicits a host of questions: What boundaries are reconstructed or broken down when the line between robot and human is erased? How do notions of origin play into constructions of reality and identity? Are technological networks extensions of social networks?

In order to better understand how the film robot became human, it is important to consider the changing realities in late-twentieth century America and the impact of new technologies on peoples' lived experiences. Cell phones, computers, even satellite networks entered many American households in the 1980s and 1990s, turning the living room or home study into a potential information hub. Cultural theorist J.P. Telotte suggests that the change in representations of the robot occurred, in part, because of these rapidly changing relationships with technology, which influence how individuals relate to the world around them. In particular, as Americans increasingly use technologies in everyday life, Telotte suggests, their understanding of reality changes: communication

between individuals becomes increasingly electronically mediated. One's presence, therefore, is conveyed less in face-to-face interactions and more frequently through telephone receivers, computer consoles and video transmission. In addition, as technologies rapidly develop, becoming more advanced, their users' identities change. Telotte uses Baudrillard's term "the ecstasy of communication," to suggest that the way humans understand and relate to contemporary reality is an ongoing, constantly changing process. Not only is the relationship to the world beyond the body constantly being redefined, Baudrillard suggests, but individuals now lack single, distinguished identities, and instead act "but as terminals of multiple networks."<sup>325</sup>

This analogy to the human as networked, or in the very least "connected," suggests a new way of communication whereby one accepts and uses advanced technologies to interact. It also points toward a posthumanity in the vein of Hayles: the human being becomes a mercurial form, changing with every interactive object it attaches itself to and changing alongside the development of technologies. As industrial robots replace human workers in factories; as people become more dependent on electronic devices to communicate; as advances in computing power continue to increase logarithmically—Telotte suggests a breakdown of boundaries occurs, creating multiple realities as well as new relationships with real and fictive technologies.<sup>326</sup>

Not surprisingly, this emergent era of rapidly developing human-computer interaction offers a human-looking robot. As boundaries between realities dissolve, so

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<sup>325</sup> Jean Baudrillard, "The Ecstasy of Communication," translated by Bernard and Caroline Schutze, edited by Sylvère Lotringer in *Postmodernism: Critical Concepts* by Victor E. Taylor and Charles E. Winquist, eds. (London: Routledge, 1998).

<sup>326</sup> J.P. Telotte, *Replications: A Robotic History of the Science Fiction Film* (Urbana: University of Illinois Press, 1995). Moore's Law describes a trend in the innovation of computing hardware, observing that the number of transistors that can be placed on an integrated circuit has increased exponentially, doubling approximately every two years. This leads to exponentially faster, more powerful computers made cheaply available to consumers.

does the boundary between technology and humanity. These new robots, however, do not offer a hopeful representation of this rapidly changing relationship. Rather, they offer a complicated mash-up of body and machine that exploits a cultural fear that the human can be quickly overtaken by the machine if boundaries between the social and the mechanical become too blurred. The human-machine hybrid thus suggests that the danger will not come from a mechanical malfunction, but from our inability to distinguish ourselves from technology.

This very complicated reworking of the boundary between robot and human in Moore's reimagined *BSG* build borrows heavily from Ridley Scott's *Blade Runner*. Manufactured biorobotic beings called replicants—visually indistinguishable from humans—are used in this 2019 future for dangerous, menial work on Earth's "off-world colonies." After a bloody replicant uprising, replicants become illegal on Earth, and special police units called "blade runners" hunt down and "retire" (kill) rogue replicants. The plot focuses on one blade runner, Rick Deckard, as he hunts down a violent, cunning group of recently escaped replicants hiding in L.A. During his investigation of the replicant gang, Deckard falls in love with the femme fatale, Rachael, an advanced replicant implanted with human memories. Deckard protects Rachael as he successfully hunts the escaped replicants. In the film's denouement, Deckard's handler, Gaff, leaves an origami unicorn that Deckard imagined in a dream. This parting scene suggests that Deckard himself is an advanced replicant, yet is unaware of his "real" robotic identity.

Gaff's parting words, "It's too bad she won't live. But then again, who does?" references Rachael's artificiality, but also suggests that the shared reality of replicants and humans leaves both man and sentient machine seeking the same things in a rapidly



changing reality. Decker eulogizes Roy Batty, the last of the replicant gang, saying “All he wanted was the same answers the rest of us want. ‘Where do I come from? Where am I going? How long have I got?’” While Deckard’s goal throughout *Blade Runner* is to rid the world of rogue replicants, the film’s conclusion suggests a far more significant goal: to situate one’s self in a reality of continual flux.<sup>327</sup>

Like the slang in the original *BSG*, *Blade Runner*-specific language distances the story from contemporary reality. However, instead of exoticizing the fictive reality, *Blade Runner* slang suggests underlying cultural conflicts between humans and machines. For example, in the first scenes of *Blade Runner*, Inspector Bryant (a bullish, no-nonsense cop) assigns Deckard to a case, saying, “I’ve got four skin-jobs walking the streets.” Deckard’s voice-over follows, offering a gloss of the term and Bryant’s character: “Skin jobs. That’s what Bryant called replicants. In history books, he’s the kind of cop that used to call black men niggers.”<sup>328</sup> Here, Bryant uses “skin job” as an epithet not only to demean replicants, but he employs it as a semantic turn to both demarcates the replicant from the human, classifying replicants as in-human objects that just happen to look human.<sup>329</sup> I use the “semantic turn” as a reference to Klaus Krippendorff’s *The Semantic Turn* where he notes, “Humans do not see and act on the physical qualities of things, but on what they mean to them” Krippendorff suggests that industrial designers focus on

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<sup>327</sup> *Blade Runner*’s mysterious allegiances and constantly shifting reality can be seen throughout *Battlestar Galactica*. Most notably, one of *BSG*’s main characters, Galactica Commander William Adama, is played by Edward James Olmos, who played Gaff in *Blade Runner*. In addition to his leadership role in both texts, Olmos’s own bifurcated acting career—playing both roles that highlight his real-life Latino heritage at times in addition to playing white or ethnically indeterminate characters like Commander Adama at others—further suggests a reality filled with ambiguous identities.

<sup>328</sup> Ridley Scott, *Blade Runner* (Warner Bros., 1982).

<sup>329</sup> Rather than “turn-of-phrase.”

form and function rather than a product's meaning.<sup>330</sup> By focusing on “the semantic turn” (that is, how people attribute meanings to objects and interact with them as a result), meaning can be constructed around an artifact and incorporate that into the design process. In “skin job,” the slang definition of “job” is used to suggest the replicant is more a “piece of work” than a living entity. It is akin to someone reminiscing about a car by saying: “that red V8 job was the fastest car I ever owned.”<sup>331</sup> In addition, “job” can refer to “work” or “being worked on,” which reduces replicants to a single identity based in their labor (and status as laborers), obfuscating any notion of personhood. “Skin,” the modifier in “skin job,” refers to the replicants' appearance as human, but also suggests that the similarity between human and humanoid is only “skin” deep. Replicants may have the skin of humans, but they remain “pieces of /for work” below the surface.

The rebooted *Battlestar Galactica* crew borrowed this term in its second season to refer to humanoid Cylons. As in *Blade Runner*, “skin job” here becomes an epithet, designed to suggest otherness. After the Cylon attack on the colonies, humans assume that humanoid Cylons are not human, they just impersonate humans to undermine and eventually destroy humanity. “Skin jobs” suggests here a notion of dress-up that violates humanity as robots decide to play the part of humans. This deception through human disguise then leads to justifications for human colonists to mutilate, starve, rape and murder humanoid Cylons.

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<sup>330</sup> Klaus Krippendorff, *The Semantic Turn: A New Foundation for Design* (Boca Raton, FL: CRC/Taylor & Francis, 2006).

<sup>331</sup> *The American Heritage New Dictionary of Cultural Literacy* defines one of the slang terms for “job” as “Slang. An example of a specific or distinctive type: That little six-cylinder job was the best car I ever owned.” <http://dictionary.reference.com/browse/job>. (accessed November 3, 2008)

## Passing as a “Skin Job”

This hostility toward “skin jobs” stems from a fear that the boundary between human and machine is rapidly dissolving. Concerns of robots blending into human society and “passing for human” permeate the worlds of *Blade Runner* and *BSG* as protagonists work to weed out artificial others from the human population. The problem in the *Blade Runner* and the *BSG* universes, however, is robots and humans share an organic composition. While previous film and television robots were walking metal, or walking metal “skinned” to resemble humans, these robots are flesh-and-blood. (In the case of *BSG* they’re no different than humans even at the cellular level.) Yet, they’re marked as different because of their past—their origin. Because of this, telling the difference between human and machine requires more than a metal-detector or savvy eye. It requires a test.

In both *Blade Runner* and *BSG*, standardized testing becomes the key indicator of humanness as it becomes imperative to learn who or what people are dealing with. *Blade Runner*’s Voight-Kampff test is similar to a polygraph machine, using bodily functions to evaluate emotionally provocative questions. Within the first act of the film, however, the test is shown to be flawed, as Decker needs over one hundred questions to successfully determine that Rachael is a replicant. Her advanced technology comes in the form of implanted human memories that allow her to easily pass culturally based questions less “advanced” replicants would have stumbled on.

Once Cylons are discovered to resemble humans and be among the Colonial fleet, Commander Adama and President Roslin seek out a way to uncover these unknown enemies from the colonists. Dr. Gaius Baltar, having recently realized his former lover

was a Cylon spy, develops the Cylon detector, a scientific test for weeding out Cylons aboard the fleet. However, since Cylons can easily live undetected with humans for years, Baltar's test is not based in verbal conversation but in a blood sample analysis that can distinguish human from Cylon at the molecular level. This process, however, proves so time-consuming that Baltar estimates each eleven-hour test will take over sixty years to test the nearly fifty thousand people aboard the Colonial fleet. Baltar gives up, believing this scientific method to be a waste of time.

Decker's and Baltar's systematic testing methods for distinguishing humanness are based in historical reality. In 1950, English mathematician Alan Turing developed the Turing Test, a proposal for evaluating machine intelligence whereby a human judge engages in a conversation with one human and one machine; both of which try to appear human. If the machine is determined to be human by the judge, the machine passes the test.<sup>332</sup> The quiz-like structure displayed in the Turing test is not unlike the question-answer Deckard gives Rachael, or for that matter, Starbuck begins with Cy. If Deckard's and Starbuck's involvement are taken into account during these fictitious quizzes, then Turing's test, in fact, shows two things: it displays a machine's ability to pass as human. And, it uncovers the human administrator's ability to identify with the robot subject on a human-level paradoxically with the goal being to reveal the subject as a non-human, robot other. This job of the administrator, to converse and connect socially with an entity in order to "out" its non-human qualities leads to messy, conflicting results in these cases after the test is over.

To be clear, in *Blade Runner* and *BSG*, machines often do not "pass" scientific tests. In all cases the administrator is able to determine if a human is a human. But

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<sup>332</sup> Alan Turing, "Computing Machinery and Intelligence," *Mind* LIX (236) (October 1950): 433–460.

Cylons and replicants do manage to slip through the process and retain their status as human. Both Voight-Kampff and Baltar's Cylon detector prove to be flawed not due to test results, but because of the human flaws of the administrator. Decker, for example, falls in love with Rachael in spite of his duties as a blade runner. In hiding his knowledge of her replicant origin, he can continue his romantic relationship without interference or scorn from outside society. Rachael can continue the role as a glamorous, well-to-do femme fatale, pursue a relationship with Decker, and both can drive into the sunset without fear of being hunted.<sup>333</sup> Baltar carries the guilt that his former lover, a Cylon passing for human, brought about the holocaust that the *Galactica* now flees from. Baltar passes fighter pilot Sharon "Boomer" Valerii after her tests come back positive, fearing that outing Cylons may lead to violent consequences, or even to his own outing as Cylon conspirator. After realizing that Sharon is a Cylon, Baltar assures Sharon of her humanity, thereby reinstalling the status quo. He halts scientific testing to resume his role passing as an innocent Colonial scientist who is ignorant of any Cylon presence aboard the ship. Decker and Baltar both let humanoids pass the test so they can continue passing as human. However, they make this decision not out of kindness to the humanoid, but to resolve their own personal needs and desires. In both cases upon completion of the test, the verdict of whether or not someone is human is based on what the judge wants the testee to be, rather than what the test itself reports.

While the prime goal of testing is to distinguish the humanoid other from humankind, the resulting side-effect is the revelation of the administrator's own character flaws. When the judge chooses to ignore the results, the robot passes. The choice could

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<sup>333</sup> Depending on the version, *Blade Runner* ends with Deckard and Rachael either leaving the apartment block to an uncertain future or driving through an idyllic pastoral landscape.

be interpreted as lapse in judgment that allows the objective of the test—to “out” humanoids—to remain unfulfilled. Similarly, in the Turing test the machine passes when the judge wrongly connects with the machine on a human level. In all three cases, results could be interpreted as a zero-sum-game: When the robot passes, the judge, in some way, fails.

Of course, other cultural moments of “passing” predate Turing’s test. Most notable was the “passing” of many literary and real fugitive African Americans as free white citizens in the nineteenth-century American society. While the science fiction cases of *BSG* and *Blade Runner* address non-humans passing for human, nineteenth century African American examples of passing do not seek to establish a person’s humanness or their ability to show love, loyalty or selflessness. Instead, African American passing for white surfaces a series cultural tests surrounding notions of whiteness: a concept that, in addition to physical appearance, is rooted in subjective social mores. In *Passing and the Rise of the African American Novel*, M. Giulia Fabi shows how nineteenth century African American authors like William Wells Brown, Charles Chestnutt, Frances E.W. Harper and James Weldon Johnson challenged and transformed conventional representations of blackness and mixed-race identity.<sup>334</sup> One literary example, William Wells Brown’s 1853 novel, *Clotel; or, The President's Daughter*, focuses on a fictional daughter of Thomas Jefferson who escapes slavery by passing as white, but dies tragically when she returns South to rescue her own daughter. In reality, one of Thomas Jefferson’s mixed-race daughters passed as a white woman with a very different outcome than *Clotel*’s tragic fate. Harriet Jefferson, Thomas Jefferson and Sally Heming’s

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<sup>334</sup> M. Giulia Fabi, *Passing and the Rise of the African American Novel* (Urbana: University of Illinois Press, 2001).

daughter, was permitted to move from Monticello in 1822. Accounts suggest that Harriet moved to Washington D.C. and spent the rest of her life as a well-to-do white woman.<sup>335</sup>

Any direct comparisons between fictional cyborg passing for human and historic African American passing as white open several problematic arguments surrounding humanness and slavery that I do not intend to make. In an indirect high-level comparison, however, successful passing in cases is achieved not through objective testing, but through subjective evaluation based on changing social realities and assumed practices. As recounted in Annette Gordon-Reed's history of the Jefferson-Hemings family, *The Hemingses of Monticello*, the fair-skinned Harriet spends twenty-one years of her life as a slave because of her origin: the progeny of a slave mother. Because Jefferson agrees to set her free at age twenty-one, her social reality and her identity immediately changes. Free from Monticello, Harriet becomes another white woman based not only on her physical appearance but her ability to perform modes of social conduct associated with whiteness. A new reality and more subjective forms of evaluation that are based on relative skin-color quickly set in. This allows Harriet to pass easily by being "white-enough" to be accepted by white society.

*Blade Runner's* Rachael and *BSG's* Sharon Valerii are sufficiently human enough to be accepted by and as humans: their humanness is weighted based on culturally specific social indicators of humanity: ability to show love, loyalty, selflessness. In both science fictional cases, these culturally based indicators paired with existing social bonds

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<sup>335</sup> In 1873, Harriet's brother, Madison, left an account of her life after Monticello: "Harriet married a white man in good standing in Washington City.... She raised a family of children, and so far as I know they were never suspected of being tainted with African blood in the community where she lived or lives." Fawn Brodie, *Thomas Jefferson: An Intimate History* (New York: Norton, 1974), 473. Annette Gordon-Reed's *The Hemingses of Monticello: An American Family* (New York: WW Norton and Company, 2008) also discusses the passing of Hemings's children as white after they left Monticello.

trump the test results. A failed question out of a hundred does not cause Decker to stop developing feelings for Rachael, just as Boomer's blood test results do not discount her behavior as a competent pilot and loyal crewmember. Where they were before the test within an existing social network still defines who they are after.

While Sharon's and Rachael's relationships to people and reality do not really change post test, Baltar's and Decker's reality is dramatically altered. Yet, Baltar and Decker's preexisting human connections to advanced cybernetic technology were only highlighted by the testing process: they now discover they have been relating to another technology rather than another human. This change in their reality, however, is met with seeming dismissal as both men continue to relate through the social bonds forged before the positive test results.

These tests point back to Baudrillard's concept of an always-changing reality whereby one's fluctuating relationship to technology and the social landscape requires malleability and adaptation. In these cases, judges quickly adapt to their outed cybernetic friends, choosing to keep their artificial origin a secret as means of protection and a way of maintaining existing social networks and the reality's status quo.

Boundaries between "skin jobs" and humans continue to break down aboard *Galactica* in its final season when four key characters aboard *Galactica* discover for themselves that they are, in fact, Cylon. Colonial President Laura Roslin's assistant, Tori; Commander Adama's right-hand-man Saul Tigh; Starbuck's husband, Sam Anders; and *Galactica*'s head mechanic "Chief" Galen Tyrol all hear hallucinatory music and begin to walk toward its source. They find themselves standing together in an empty part of the ship and suddenly realize they are four of the final five humanoid Cylons. Drawn



together, they begin considering what to do next, agreeing that they are who they were before the discovery, and to resume their human roles and duties as loyal Colonists. Tigh and Chief continue to use the term “skin job” to refer to humanoid Cylons as a way to distance themselves from this new reality and maintain their identity as human Galactica crew opposed to all things Cylon.<sup>336</sup>

### **Embodied Wiredness**

The revelation that Tori, Anders, Chief and Saul are Cylons further demonstrates the malleability of reality and one’s relationship with technology, but it also demonstrates the rapidly evolving coupling of social networks and technological networks. In the first *BSG* it was assumed that the Cylons did not have social networks, but were linked through only through their embodied technologies. When Starbuck introduced Cy to Andrea and Andrea’s baby, he “gave” Cy a social network that the robot sought to defend with his life. By the time of the final season of the reimagined *BSG*, a posthuman social network has evolved among four humanoid Cylons who are simultaneously wholly technological in origin and wholly human in culture. They network with each other to discuss and conceal their machined origins, but do so completely off the technological grid, through only face-to-face verbal communication. As opposed to Beaudrillard’s notions of humans being nodes on a technological communication network, here we have technology as nodes on a human communication network.

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<sup>336</sup> In “Six of 1,” Chief speculates on whether or not Gaius might be a Cylon: “Baltar. Not Baltar, but when I found him in the temple on the algae planet, he was with one of those skin jobs, the one they call D’Anna. During a discussion of blowing up the Cylon’s resurrection hub so Cylons can no longer resurrect their consciousness in new bodies, Tigh says, “We blow the Hub and, uh, billions of skin jobs lose their bath privileges.” “Guess What’s Coming to Dinner,” Season 4, Episode 7.

This new view of technological-human interaction in the reimagined *BSG* marks a significant departure from the original *BSG*, where the robots operated as hostile alien others with no apparent society. Instead, it presents a complicated representation of overlapping technological and human social networks that offers a society of interdependent hybrids in which neither humans nor machines can operate fully autonomously. Even in the deepest regions of space, they remain “wired” together through wireless connections joining communication channels and consciousness into a fictive society devoid of a home world.

This departure from the closed network of evil Cylons fighting a war on autopilot marks both new considerations of technological potentials as well as changing times in American society. In the years after the original *BSG* aired, definitions and constructions of social networks have become so interconnected in American culture that the idea of the technological and the social being always separate seems outlandish, particularly in the wake of the Internet. A 1996 study on collaborative work and virtual community seeks to eliminate the boundaries between computer networks and social networks, declaring in the first sentence: “When computer networks link people as well as machines, they become social networks.”<sup>337</sup> Like the humanoid Cylon—human in appearance but machine in origin—Americans have now become their own breed hybrid—human in origin but mechanical in appearance—as they talk in html through websites, wikis and online forums.

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<sup>337</sup> Barry Wellman, Janet Salaff, Dimitrina Dimitrova, Laura Garton, Milena Gulia, and Caroline Haythornthwaite, “Computer Networks as Social Networks: Collaborative Work, Telework, and Virtual Community,” *Annual Review of Sociology* 22 (August 1996): 213–238.

## Chapter 5

### *Battlestar Galactica* and Curated Fandoms

The term, “technophilia,” refers to a passion for new technologies, particularly computers and other high technology.<sup>338</sup> People passionate about high tech objects are also sometimes referred to as “technophiles,” among other terms like “hackers,” “nerds,” “A/V geeks,” and even “SF fans.” While technophiles are often dismissed as harmless misfits or gadget-loving consumers, their “-philia”—their love—for machines offers a way to reconceptualize human-machine interaction that can help us understand changing relations to technology in the advent of the Information Age. This chapter will turn from analyses of the *BSG* texts themselves to the fans’ responses to *Battlestar Galactica* and the series’ robots. I start first with a discussion of technophilia, then I turn to a brief overview of fan studies before reviewing three cases of online *BSG* fandom in the forms of a Webring, Wiki and *BSG* Creative LiveJournal community. The aim of the chapter is not both uncover fan responses to the series as well as forms of *BSG* fan participation and delve into how fandoms change and evolve over time.

In relation to *BSG*, the most obvious approach to understanding man’s love affair with technology through the program is to examine male *BSG* characters in sexual relationship with female Cylons and compare them with earlier filmic instances of male human/female robot relationships, like those of *Blade Runner*’s Decker/Rachael or *Metropolis*’s Rotwang/ Robot Maria. In her chapter, “Technophilia: Technology, Representation and the Feminine,” Mary Ann Doane analyzes such relationships, considering how the concept of the woman-machine body fits into notions of labor,

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<sup>338</sup> *The American Heritage Dictionary of the English Language*, 4th ed. (Boston: Houghton Mifflin, 2006).

production and reproduction as well as how the machine-woman relates to the human man. Doane surmises that the often-sexualized female robot overturns traditional binaries such as maternal/paternal and biological reproduction/mechanical production, thereby generating discomfort, even fear, of technology's ability to disrupt these symbolic systems.<sup>339</sup>

Technophilia in Doane's cases is fairly clear-cut: it's heteronormative, revolving around human males lusting for female machines. However, there are limitations to this interpretation of technophilia involving a male-human relating to a woman-machine, particularly within the context of *Battlestar Galactica*. Throughout the series, male Cylons (Sam Anders, Galen Tyrol) have relations and marry female humans (Kara "Starbuck" Thrace, Cally Henderson). Female Cylons (Sharon Valerii Agathon, Caprica 6, D'Anne Biers) become wives and lovers of male humans (Karl Agathon, Gaius Baltar). In some cases, male Cylons even engage in affairs with female Cylons without knowing that they *or* their lover is a Cylon (Sharon "Boomer" Valerii/Galen Tyrol; Saul Tigh/Caprica 6). This human-machine technophilia, where machine meets (and sometimes marries) flesh, goes beyond breaking down traditional binaries: it turns the interaction between women and men, machines and humans, into a muddled soap opera of who/what's-sleeping-with-whom/what. Here, everyone looks human but is or could be a machine.

Because of this, a reconceptualization of technophilia is necessary: one that relates the show's Cylons to our own relation to technology and the desire for

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<sup>339</sup> Mary Ann Doane, "Technophilia: Technology, Representation and the Feminine," *Cybersexualities: A Reader on Feminist Theory, Cyborgs, and Cyberspace*, Jenny Wolmark, ed. (Edinburgh: Edinburgh University Press, 1999), 25–34.

technological objects in our everyday lives. For this, a hybrid understanding is needed that considers the humanoid Cylon him/herself not as a fetishized object of technophilia, but as an embodied technophile. The Cylon is both technology and human, whereby one part is love with other in a seamless chiasma that leads to production and reproduction. According to David Bering-Porter, the human fascination with the machine, in this case, stems from the fact that humanoid Cylons are “living embodiments of technology” with a humanoid-sexual drive that comes from their own “super-productive capabilities of rapidly evolving technological forms.” As machines that can love, the Cylons’ own sexuality—their embodied “techno/phile”—is based in their ability to produce and reproduce themselves as they connect to Cylon networks to download and re-download consciousness, and as they connect with humans to make babies.<sup>340</sup>

Cylon technophilia provides the ideological foundation for their prodigious generativity. Julie Levin Russo notes that love is the Cylons’ reproductive technology: “they believe, for example, that only cross-species romance could have produced Hera, the first Cylon-human hybrid baby and ‘the shape of things to come.’” This interpretation of Cylon love also connects to *BSG* and other instances of cult television as programs develop from a single series to a multiplying franchise propelled by fan love. “Cult TV,” Levin-Russo argues, “is likewise ‘the shape of things to come,’ as television at large is increasingly embracing its strategies for generating fan desire, deploying complex and fragmentary worlds that demand creative involvement and discontinuous storytelling that

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<sup>340</sup> David Bering-Porter, “Toaster-Frakkers and Remote Controls: Technophilia, Cylons, and the Archival Drive,” *Flow* special issue: “Battlestar Galactica,” December 19, 2007. Available at <http://flowtv.org/?p=1041>.

bridges time, space, and media formats in order to intensify viewer engagement.”<sup>341</sup> As the Cylons own self-seeking technophilia encourages human fascination and lust, the series’ reflexive interest in all things *BSG* produces webisodes (web-based episodes), official blogs, and even video games that pique SF fans’ interest and beckon them to get involved. Thus, if Cylon (re)production stems from a combination of romantic love and a need to connect through both human and Cylon technological networks, the show’s fans’ technophilia stems from a passion for a multiplying text that produces new networks in the gap between American fan and television screen, leading to the production of new *BSG*-fan hybrids.

In addition to their shared technophilia, *BSG*’s humanoid robots and their fans also share a hybrid nature and love of networked connectivity. Like the Cylons, these twenty-first century SF fans are human-technology hybrids who move through electric communication networks, extending themselves, connecting to other online-fan hybrids, and forming and reforming constructed communities. This chapter examines how these new reimagined *BSG* fans have evolved from the original late 1970’s *BSG* fan, as well as how they view, consume, discuss, organize, share and create content based on the *Battlestar Galactica* text.

In order to situate the *BSG* fan in contexts outside the fictive *BSG* universe, it is necessary to consider the changing identity of the media fan through studies of “fanthropology.”<sup>342</sup> I will do this through the analysis of three different manifestations of

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<sup>341</sup> Julie Levin Russo, “Hera Has Six Mommies (A Transmedia Love Story),” *Flow* special issue: “Battlestar Galactica,” December 19, 2007. Available at <http://flowtv.org/2007/12/hera-has-six-mommies-a-transmedia-love-story/>.

<sup>342</sup> The term “fanthropology” started to be used by media studies scholars on LiveJournal in the 2000s. It was popularized further by the book *Fanthropologies*. Frenchy Lunning, *Fanthropologies* (Minneapolis: University of Minnesota Press, 2010).

online *BSG* fans. The first will be a “webring” (series of websites) devoted to the original series. Here I will discuss how fans of the original series and new series organized and communicated to preserve the *BSG* text for nearly two decades after the original show’s cancellation. The second section will be an analysis of a Wiki that fans of the 2003 series created and actively manage. The notion of preservation will then lead to an analysis of a fan-based archives through the *BSG* Wiki, a site and community adherent to “all things *BSG*.” The third analysis will be a LiveJournal site managed by and large by female fans of the series. Here, I will examine notions of community and creative licensing to understand how and why fans produce these hybrid *BSG*-related products in the forms of fan fiction and visual icons. The chapter will then conclude with this notion of hybridity as I consider how fans online appropriate *BSG* Cylons, combine sometimes conflicting discourses in order to provide a mash-up or hybridization as an online identity.

While earlier chapters led us to understand how companies and studios used technology to develop a brand, forge new marketing channels and encourage the audience’s financial investment, this chapter will consider how fans take on multiple roles in relation to *BSG* content, operating simultaneously as a viewing audience, consumer-base, and content creator. Through fans’ sometimes dueling roles, these cases will also illustrate fan agency, demonstrating how fans can and cannot turn the creative table to develop a hybrid ownership over the text that goes beyond consumerism in order to change the very nature of the text and the technology it propels.

Before beginning specific analyses of *BSG* fandom, it’s important to situate these present-day SF fans within a broader history and historiography of television fans. After all, fans of television series have experienced a major shift in their modes of

communication through the proliferation of Internet access in recent years. This medium, in particular, has changed fan identities, communication modes and creations. For example, rather than subscribing to print newsletters or waiting for the next fan convention, fans today can use a proliferation of websites, message boards and other online spaces to discuss beloved films, television series, and related media texts. This online environment not only offers a site for discussion, but allows fans to build and modify virtual spaces to dynamically change methods of communication and the makeup of the community itself.

In 1964, media theorist Marshall McLuhan remarked, “the medium is the message.”<sup>343</sup> Taking his statement to the online world, it becomes apparent that different media structures not only influence how the message, or content, is perceived but also influence the shape and structure of the communities behind them. However, to suggest that the medium alone produces the structure of content implies technological determinism. That is, the theory that technology follows a predictable path of development outside of society, and technology determines cultural values and social structure. With Internet communication, new online platforms are not developed in a cultural vacuum to be dropped down on unsuspecting users. Rather, they are changing, dynamic interfaces that individuals are drawn towards for numerous reasons: ease of use, who’s already there, and of course, the type of content presented.

### **Historiography of the Media Fan**

Just as dynamic modes of online communication have emerged in recent decades, so has the identity of the online media fan recently surfaced in audience, media and

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<sup>343</sup> Marshall McLuhan, *Understanding Media: The Extensions of Man* (Corte Madera, CA: Gingko Press, 2003), 17.



communication studies. Similar in ways to Hayles's posthuman concept of the body as a series of subroutines, the online fan's "presence" is constructed wholly from various series of subroutines terminating on websites, message boards, wikis, blogs, etc. Often these text-based presences are complimented by the fan's virtual-visual identity, represented in his/her image icon, or avatar: a small picture located above the fan's online pseudonym, or "handle." Despite this relatively new way of self-presentation, communication and social construction, evidence of the dialogue between fans, content and content-producers is by no means new. This section will offer a brief overview of fandom studies, in order to better situate the online fan within an ongoing discourse between content producers, academics and fans. Numerous studies of media fandom have illustrated the complicated relationship between writers, fans and texts, by examining how people interact with texts and can potentially develop relationships through them. Teasing out what a fan is and does is important before discussing *BSG* fandom in particular, because *BSG* stands as one example in a network of complementary (and sometimes interlinked) fandoms. These fan groups, in fact, have their own rich histories and their own historiographies, having been studied by cultural theorists and film scholars for over twenty years.

In *Textual Poachers*, a seminal study of media fandom, Henry Jenkins characterizes many fans as often "highly educated, articulate people, who come from the middle classes."<sup>344</sup> Jenkins writes that "these fans draw strength and courage from their ability to identify themselves as members of a group of fans who shared common

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<sup>344</sup> Henry Jenkins, *Textual Poachers: Television Fans and Participatory Culture* (New York: Routledge, 1992), 18. Jenkins is a notable figure in fan studies—having a small fan club of his own—and is a self-proclaimed Aca/Fan (academic/fan).

interests and confronted common problems.”<sup>345</sup> In a sense, fans come together not only through shared interest in particular texts, but also through shared awareness that their identities as fans place them in an inferior position within the larger cultural hierarchy. Thus, individuals connect by being “BSG fans,” but also because of other shared labels: “technophile,” “SF enthusiast,” “computer game player,” “reader of romance novels,” “homosexual,” “outsider,” “nerd,” etc.

Taking up Jenkins’s model of fan identity, Matt Hills opens his 2002 study, *Fan Cultures*, by writing, “Everybody knows what a ‘fan is. It’s somebody who is obsessed with a particular star, celebrity, film, TV programme, band; somebody who can produce reams of information on their object of fandom, and can quote their favoured lines or lyrics; chapter and verse.”<sup>346</sup> He complicates the “fan,” then, by tackling slipperier notions of “fandom” and “cult.” His preface starts by defining key terms, and elicits a host of questions. Not only “what is a fandom,” but questions like: Are fans devotees of just one media source?; Are all fans admirers of a text in the same way?; Do they work/communicate in similar ways? In examining fandom, Hills takes Jenkins’s assumption that fans are oftentimes articulate, highly-educated individuals and compares them with another set of articulate, highly-educated individuals: academic scholars. By turning to the academy as a comparison, Hills notes that fans appear to participate in the same activities as many humanities academics: scrutinizing, analyzing, interpreting, and arguing oftentimes over single text, as well as going to conferences and memorizing minute details to accumulate a body of facts pertinent to a small community. The value

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<sup>345</sup> Ibid., 22.

<sup>346</sup> Matt Hills, *Fan Cultures* (New York: Routledge, 2002), ix.

placed on these activities by academic “fanthropologists,” Hills suggests, blurs the line between academics and fans, revealing converging subjectivities.

First, academic accounts consistently produce a version of fandom, which seems indistinguishable from the interpretative, cognitive and rational powers of the 'good' academic. Second, in a petulant revolt aimed at building 'symbolic capital' (i.e., securing a reputation for one's self), academic accounts throw their lot in with the imagined subjectivity of fandom and seek to emphasise the limits of rationality, thereby romanticising the fan's 'affect,' 'love,' or 'excessive positioning'. Or, third, academic accounts toy with the idea of magically abolishing the difference between 'fan' and 'academic' knowledges before finally retreating to the superiority of an academic position. And finally, recent academic accounts have started, deliberately and purposefully, to confuse fan and academic subjectivities.<sup>347</sup>

In producing a version of fandom as “academic-like” or even “academic-lite,” scholarly accounts risk situating the fan as a kindred spirit, equating the research activities of academics and fans and judging fan discourse to be akin to debates in the college classroom. This romance and self-identification with the fan has the potential to cause a troubling outcome as academics *study* fan culture using ethnographic methods. This oftentimes leads to, Hills argues, an overly accepting account of fandom that reifies fan knowledge without critiquing the conditions of knowledge production within fan cultures.<sup>348</sup> Many academic accounts therefore overlook the fragile foundation upon which these fans’ discursive self-justifications are built upon. That is to say, one must consider the passions, assumptions, goals and ideals behind a fan culture to understand fully the drivers behind fans’ acts of acquiring, constructing, and broadcasting their knowledge of the texts that they are passionate about.

A fan’s reasons for acquiring particular knowledge are important to consider because it requires a sizable effort to become conversant in a particular fandom. Hills

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<sup>347</sup> Ibid., 15.

<sup>348</sup> Ibid., 66.

notes that fans can produce “reams of information” on their chosen text. However, this ability does not come as automatically as the laser printer in Hills’ metaphor. Instead, fans consume, consider, collect, and converse over months or years, in order to build and maintain their knowledge of a cult object and status as a “fan expert.”

But what makes *BSG* an object of fan discourse, while other television programs draw considerably smaller and different types of fanbases? While Hills and Jenkins examine fan cultures, critic Umberto Eco considers the text itself to better understand why certain texts become cult objects, to be readily embraced, memorized, and discussed by fans. In “*Casablanca: Cult Movies and Intertextual Collage*,” Eco examines the aesthetic choices that make particular texts “cult,” noting that cult films operate through a saturation of references that turn the text into “a museum, so to speak, for moviegoers.”<sup>349</sup> However, unlike a standard museum, this collection of both cinematic and narrative references can be taken off the shelf and used by those who choose to enter the text. In turn, this high saturation of references offers an “unhingability” of the cult text, allowing parts of text to be taken out of the original medium and to intersect with the cultural background of the spectator.<sup>350</sup>

One of the most popular and researched early examples of this cult activity was *Rocky Horror Picture Show*. Originally a successful mainstream film, *RHPS* gained a cult audience who ritually went to midnight screenings of the film in costume as the characters, generating their own collective activities and responses to the story within the theater—throwing things at the screen, engaging in call-and-response, etc. Philippe Le Guern contrasts cult audiences’ active response with mainstream movie-goers behavior:

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<sup>349</sup> Umberto Eco, *Six Walks in the Fictional Woods* (Cambridge, MA: Harvard University Press, 1994), 127.

<sup>350</sup> Umberto Eco, “*Casablanca: Cult Movies and Intertextual Collage*,” *SubStance* 24 (1984): 3-12.

“The irreverent response to cult films that finds expression in ritual (creating noise, throwing objects) evidences a new way of responding to texts in opposition to the dark and silent auditoria...”<sup>351</sup> Apart from the active participatory role the cult audience takes in relation to their chosen text, Le Guern theorizes the meanings behind cult behaviors:

It helps to think of cult practice as a specific type of constitution of a cultural heritage (to which the arrival of the video recorder contributed a great deal), as the distinctive assertion of tastes that are too often summarily labeled as kitsch or immature, and as the valorization of new forms of cultural expression and mediation (in particular television) that call into question the oppositions between popular and high culture and between minor and major arts and genres, as well as the passivity attributed to popular audiences.<sup>352</sup> In his reading of cult practice, Le Guern builds off Jenkins’s and other media theorists’ assertions that cult communities not only rally around a particular text, but also find solidarity in their resistance to popular and high culture tastes.<sup>353</sup> As much as a fandom is built around what text(s) it values, it is also built around a value system that often runs in opposition to the mainstream codes of cultural analysis. As Jenkins notes that fans consider themselves outside the mainstream, Le Guern suggests that fans also consider their texts and their tastes as counter to mainstream sensibilities, a point that should be reviewed in the context of *Battlestar Galactica*, one of the most popular and most watched series in television cable history.

In addition to self-identification and practices of tastemaking, the size and complexity of the cult text itself informs the exclusivity of the cult community.

Television programs in particular, with dozens of hours programming delivered

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<sup>351</sup> Philippe Le Guern, “Toward a Constructivist Approach,” *Cult Television* (Minneapolis: University of Minnesota Press, 2004), 10.

<sup>352</sup> *Ibid.*, 12.

<sup>353</sup> See Jenkins, *Textual Poachers*.

episodically frequently over multiple years, pose a challenge to non-devotees. Missing episodes is akin to missing moments in an ongoing dialogue in which you are a participant. Without a fairly complete knowledge of the cult text, one's individual contribution to a larger discourse within a cult community becomes extremely difficult. In the case of *Battlestar Galactica*, the amount of material can prove daunting to a late adoptee. Excluding any fan texts and just watching the BSG TV shows would take a person nearly one-hundred hours to watch. The original *Battlestar Galactica* consisted of twenty-one forty-five-minute episodes; *Battlestar: 1980* added another ten episodes; the rebooted *2003 Battlestar Galactica* started with a three-hour miniseries followed then seventy-five forty-four-minute episodes (2004-2009); *Caprica*, a 2010 spin-off prequel to the rebooted BSG series, ran for twenty-one forty-two minute episodes; the ten-episode web series *Battlestar Galactica: Blood and Chrome* aired on the Sci Fi channel as a two-hour movie in 2012.

Official online BSG material adds even more viewing time for the BSG fan. The Sci Fi channel also offered the *Battlestar Galactica* website which hosted writer Ron Moore's blog, producer David Eick's video blog, interviews with series actors, episodes with commentary, and a series-inspired video game called "Viper Flight."<sup>354</sup> The site also premiered *Battlestar Galactica: The Resistance*, and *The Face of the Enemy*; both web-based series of ten two-to-five-minute "webisodes" released exclusively on the world wide web.<sup>355</sup>

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<sup>354</sup> The SciFi Battlestar Galactica website was available at [www.scifi.com/battlestar](http://www.scifi.com/battlestar). It was taken down when the channel rebranded itself SyFy.

<sup>355</sup> *Battlestar Galactica: The Resistance* was released on September 5, 2006, with two webisodes posted to the site each week through October 5 to lead to the Season 3 premiere. *Battlestar Galactica: The Face of the Enemy* ran from December 12, 2008 through January 12, 2009.

Webisodes and other online extras become additional required reading for many *BSG* fans interested in exploring the entire *Galactica* universe. After all, without reviewing all things *Galactica*, fans may miss important plot points, character development, writer insights, etc. This proliferation of the story across numerous media platforms comes in part because fans (and television viewers more broadly) have changed the ways they engage with television programs. A 2008 study by Yahoo! and interactive marketing agency, Deep Focus, surveyed 2000 television viewers to in order to understand how and where viewers engage with television programs. Their findings suggest that viewing habits have changed dramatically as viewers now spend time looking at the computer monitor, sometimes alongside the television screen. Notably, the study finds that almost two-thirds of respondents search online for information about the series they are watching and a third of respondents even keep a laptop regularly within reach while watching TV.<sup>356</sup> The study also notes that this shift could be generational: “While both older viewers (35+ years) and younger viewers (under 35 years) seek information on TV shows online, older viewers see the weekly airing of a show as the ‘main event.’ For younger viewers, the weekly episode of a show is only part of the much larger ‘brand’ of the show represented by the shows presence in conjunction with the weekly episode.”<sup>357</sup> The purpose of study (sponsored by Yahoo!) is to convey to televisions producers the need to develop and disseminate news and information about their programs via the web, but in doing so, it also underscores that shows are no longer

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<sup>356</sup>The Internet has the Power to Transform Your TV Show into a TV Brand, [http://www.scribd.com/word/full/3506141?access\\_key=key-bhcb1wkxjx2n2gr5ntl](http://www.scribd.com/word/full/3506141?access_key=key-bhcb1wkxjx2n2gr5ntl). A summary is also available through the blog Online Fandom: News and Perspectives on Fan Communication and Online Social Life, <http://www.onlinefandom.com/archives/from-tv-show-to-tv-brand/> (accessed July 14, 2008).

<sup>357</sup> Viewers over 35 see the TV show broadcast as “the main event,” while those under 35 view it as just one piece of the TV show’s overall “brand” that also includes its online presence.

only weekly episodes broadcast on television, but a multimedia, multiplatform ‘brand’ created and honed for viewers even before the pilot airs.

The rebooted *BSG* series and its successor, *Caprica*, were also written not only for the weekly television viewer, but for the on-demand binge viewer, who might watch several back-to-back episodes of the series in one sitting via Netflix streaming, or Amazon Instant Video.<sup>358</sup> In *On-Demand Culture*, Chuck Tyron examines the impacts of digital delivery via online streaming services, DVD kiosks and digital downloads to the media industry and television consumers. He surmises that “The practice of watching off the normal broadcast schedule, known as time-shifting, profoundly altered how people watch, allowing them to catch up on episodes of shows they may have missed or to binge-watch favorite programs. ... DVR’s and DVD box sets, for example, allowed users to binge on shows, consuming an entire season’s worth of programming in a matter of days or weeks, rather than waiting for reruns.”<sup>359</sup> The Rebooted *BSG* became so popular for binge-watching that the sketch comedy television series, *Portlandia*, aired a sketch where a Portland couple, Doug and Claire, get sucked into the series through a DVD box set, spending two weeks holed up in their home binge watching the show. They become addicted to the show and can’t stop watching the series. They neglect friends, their jobs, and bills, connecting only with the outside world out of necessity when their electricity is shut off due to a missed payment. They quickly pay the electric bill via phone so they can continue watching *BSG*. When they finish the series and realize there is no more *BSG*,

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<sup>358</sup> The entire rebooted *BSG* series is available on Netflix streaming, free to Netflix streaming subscribers. It’s also available for \$2.99 per HD episode/\$34.99 per HD season on Amazon Instant Video or free for Amazon Prime Members.

<sup>359</sup> Chuck Tyron, *On Demand Culture: Digital Delivery and the Future of Movies* (New Brunswick, NJ: Rutgers University Press, 2013), 10.



they find a phonebook listing for a Portland resident named Ronald D. Moore, and they set off to find him, hoping he will continue the *BSG* saga.

In the *Portlandia* sketch, Doug and Claire get hooked on *BSG*, and once they run out of episodes, they seek out whoever they can to continue the storyline. In their case, Ronald D. Moore, turns out to be an elderly African American man who has no idea what *BSG* is. Not to be defeated, they still ask him to continue the story.

In reality, fans themselves do not seek local people who happen to have the same name as a show's creator. Instead, they continue the text in their own ways, producing paratexts around a particular series to fill in holes in the plot, explain beloved characters, move an officially concluded storyline forward, or even to keep the fictional world of a cancelled series changing and alive. One of Henry Jenkins's most significant contributions to audience studies was the notion that fans not only gather to discuss the significance of particular turns to the storyline, but they also gather to discuss what the *meaning* is of these particular events. That is, how they relate to their lives and the larger contemporary culture. In this activity, fans (i.e. media consumers) become producers in their own right, transforming media consumption into creative expression.

*BSG* in particular is quite significant in this regard, as fans and critics alike draw comparisons to contemporary culture (discussing how the show comments on the American occupation of Iraq, religious fundamentalism, queer issues, hate crimes, etc.) but also develop new strategies and media for sharing these thoughts that become new collectable commodities. From this, the media consumer not only becomes a producer but also becomes an instrument in a larger branding strategy, to be capitalized, placated or disregarded.

*BSG* writers and producers cast their nets wide to recruit television fans: the 2003 *BSG* series combines a classic deep space SF context ala *Star Trek* with iron grey battleships that resemble the Red October more than the Starship Enterprise. It showcases male military bravado, while also offering strong female figures, and makes foreign Cylon technology look both dangerous and alluring. For all these reasons, critics praised the show, as fans blogged, cataloged and wrote “het fic” and “slash” about the series.<sup>360</sup>

In this context of fan communities, the diverse *Battlestar Galactica* fandom provides a unique opportunity to examine how groups have used differing online formats to establish themselves in cyberspace. Here, there are fans of the old 1978 series, fans of the new series, and large groups of both male and female devotees of various ages, interests and political perspectives. Not only has there been a contingent of *Battlestar Galactica* fans online since the rise of the World Wide Web, but the new *BSG* has given rise to a diverse audience of fans operating on websites, wikis, and social networks.

These new virtual communities offer a new understanding of the fan (and the person) as her identity shifts from the embodied convention-goers to a “virtual” construct largely made up by images and text. The communities also illustrate what can happen when groups are built on products of fans’ creative labors like write-ups, messages, photoshopped images, etc. As Howard Rheingold asks: “What kinds of cultures emerge when you remove from human discourse all cultural artifacts except written words?”<sup>361</sup> While many of these groups communicate using images in addition to written words, the online world fifteen years after Rheingold posed this question still limits discourse to

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<sup>360</sup> “Het fic” defines the subcategory fan fiction, in which fans write their own fictional stories that situate a television show’s characters in heterosexual romantic relationships in the context of the television series. “Slash” is the term for fan fiction that situates characters in homosexual romantic relationships.

<sup>361</sup> Howard Rheingold, *The Virtual Community: Homesteading on the Electronic Frontier* (Cambridge, MA: MIT Press: 2000), 181.

specific styles of communication. In addition to finding out what those styles are, it's still important to also ask why these groups exist, what they do, how they influence the *BSG* text and what representations of the human-technological hybrid do they offer. The beginning of this exploration, oddly, comes at the end the first set of *BSG* television series.

### **Web Rings and Generational Divides in *BSG* Fandom**

Although ABC cancelled the *Battlestar Galactica* television franchise in 1980, the show's producers continued to generate texts expanding the series. *BSG* creator Glen A. Larson co-authored a series of *Battlestar Galactica* novels from the month of the television show's airdate, September 1978, to 1988.<sup>362</sup> In the 1990s, Richard Hatch (the actor who played the heroic fighter pilot, Apollo), also co-wrote a series of books continuing the *Galactica*'s story.<sup>363</sup> The original show also spawned a handful of commercially published comic book series, further building out the *BSG* universe.<sup>364</sup> Fans also contributed to the *BSG* story as television viewers turned into writers and editors. Offline, the *BSG* fanzine *Anomaly*, edited by fans Sue Paxton and Patrick Holben, delivered fan fiction for twenty issues from 1983 to 1993.<sup>365</sup> Online, fans ran

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<sup>362</sup> Glen Larson published thirteen *BSG* novels with Berkley Books from 1978 to 1988. His fourteenth, *Surrender the Galactica!*, was published with Ace Books in January 1988. Larson's short-lived *Battlestar Galactica Classic* series, consisting of *The Tombs of Kobal* (2003) and *The Saga of a Starworld* (2005), was published by iBooks in 2003.

<sup>363</sup> Among Hatch's books are *Battlestar Galactica: Armageddon* (with Christopher Golden) (New York: Byron Preiss Multimedia Books, 1997); *Battlestar Galactica: Warhawk* (Byron Preiss, 1998); *Battlestar Galactica: Rebellion* (iBooks, 2004); *Battlestar Galactica: Paradis* (iBooks, 2004); *Battlestar Galactica: Redemption* (iBooks, 2005); *Battlestar Galactica: Destiny A New Novel Based on the Universal Television Series Created by Glen A. Larson* (iBooks, 2005).

<sup>364</sup> *BSG* comics series were published by Marvel Comics, Maximum Press, Grandreams, *Look-in* (a British popular culture magazine targeted to children that produced comic strips of television programs), Realm Press, and Dynamite Comics.

<sup>365</sup> Other fan publications: Sue Paxton, *Anomaly BG Concordance*, 2nd edition (Anomaly, 1996); *Colonial Warriors Technical Manual* (Space Waste, 1988); *Galactica History: From Kobol to the Colonies* (Clean Slate Press, 1996); *Galactica 1988: Ten Years Later* (Clean Slate Press, 1988); Sharon Monroe, *Galactica*

and participated in an ongoing Battlestar “MUSH” in the 1990s, allowing gamers to role-play as characters within the *BSG* universe.<sup>366</sup> Through these extra-textual materials, *Battlestar Galactica* fans remained not only long-term devotees to a defunct television series, but continued to keep the concept alive for over twenty-five years after the final episode aired. As with more recent shows like *Firefly*, *Battlestar Galactica*’s popularity may have to do with the show’s rich mise-en-scene yet relatively short-lived plotline: Larson gave fans a space, a set of characters and a conflict that they could play with and imagine, even without the expensive graphics.

In addition to novels, comic books, fanzines and the interactive MUSH, numerous fansites were set up by and for fans of the original *Battlestar Galactica*. Owners of these websites often “team up” with other fans to form networks or collections of *BSG* fandom.<sup>367</sup> These online meta-sites that consist of a number of affiliated fan sites networked together are called “webrings.” Arranged around discussions and topics mostly relating to the original series, webrings resemble the show’s own ragtag fleet wandering through space.<sup>368</sup> Individual webrings like the Battlestar Galactica Webring, Battlestar Galactica Fan-Fiction and Ragtag Fleet of the Battlestar Galactica, offer sites for communication among fans via stories, articles, art, interviews, history, and general information. These webrings and individual sites are run by one or a few fans. They act

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*Stuff: A Colonial's Guide to the Galaxy*, 2nd edition (Clean Slate Press, 1988). From The Battlestar Galactica Registry: <http://www.kobol.com/archives/registry.html> (maintained by John LaRocque, last updated: June 1, 1998, accessed December 11, 2005, and July 25, 2008).

<sup>366</sup> MUSH is said to stand for Multi-User Shared Hack, Habitat, Holodeck, or Hallucination. It is a text-based online social platform where users can socialize by engaging in real-time discussion as well as playing role-playing games. *Battlestar Galactica* MUSH Administration official website: <http://www.withoutaclue.com/bsm2/>. Telnet port to access MUSH: 161.57.201.4 4201 or attend.ferris.edu 4201 (accessed December 2, 2005, and July 25, 2008).

<sup>367</sup> For a picture of the Battlestar MUSH, please see Patrick Crowley’s website. Posted by Patrick Crowley on August 11, 2005 at Galacticaa.net: <http://galacticaa.net/2005/08/14/battlestar-mush> (accessed May 3, 2014).

<sup>368</sup>BSG Webring website, <http://www.mitiori.com/bsg/webring.html> (accessed December 2, 2005).

as content creators and editors and mediators between televised text and potential fan publisher. By choosing which sites to include, webrings also act as demarcators of exclusivity within and among the fan community.<sup>369</sup>

While these early *BSG* fansites set a foundation for the next incarnation of *Battlestar Galactica* by keeping the story alive, they also established a boundary between old text and new, leading website administrators, users and fans to decide if their online community would make the leap with the 2003 *Galactica*.

### ***Battlestar Galactica* (2003)**

After twenty-three years of being off-the-air, *Battlestar Galactica* came back to fans in December 2003 when Ronald Moore's and David Eick's "reimagined" *Battlestar Galactica* miniseries aired on the Sci Fi Channel under the same title as the original show.<sup>370</sup> For those both inside and outside the *Battlestar Galactica* fan base, the miniseries came as a shock: an almost forgotten television show from the late 1970s with a fanbase deemed fundamentally "geeky" was now getting its own miniseries and possible primetime cable program. Sci Fi promoted a four-hour miniseries, retelling Baltar's betrayal, the Cylon attack, the painful demise of the twelve colonies, and the *Battlestar Galactica*, a museum-piece-turned-flagship that leads the remnants of human civilization towards a new home.

For many *BSG* fans, the show represented a culmination of years of mail and email campaigns in an attempt to bring the moving image back to *Battlestar Galactica*.

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<sup>369</sup> The webring organizational style harkens back to open content directories like DMOZ that are maintained by content editors rather than automated informed search algorithms like those employed by popular search engines like Google. Nonetheless, the webring can be a helpful tool in Search Engine Optimization (the process of improving the volume of traffic to a website) and lead to more people finding and using a site.

Former *BSG* actor Richard Hatch produced *Battlestar Galactica: The Second Coming* (1999), a short film promoting the concept of a revived *Battlestar Galactica* television series. Taking off from where the original episodes left off and disregarding the events of *Galactica: 1980*, Hatch's concept attempted to bring the series into present day SF while remaining true to the original cast and characters. While Vivendi Universal (license holders of *Battlestar Galactica*) did not buy Hatch's concept, they were interested in remaking the series, bringing in producer Tom DeSanto and director Brian Singer to discuss a revival of the series in 2000. Garnering support from the original *BSG* producer, Glen Larson, as well as Richard Hatch and key webmasters in the fan community, the revival of the series would hold true to the original characters, premise and storyline. The cooperative endeavor between original cast and writers, the fan community and the Singer-DeSanto team, appeared to promise many fans the *BSG* they had been long awaiting.<sup>371</sup>

However, after Singer's 2001 departure from the project, *BSG* once again could not escape pre-production. By January 2002, support from the Fox Network, (which had also taken an interest in bringing back a *BSG* series) had ceased as work began on Joss Whedon's *Firefly* television series.<sup>372</sup> The new *BSG* project seemed dead when, to the surprise of die-hard fans, Sci Fi and StudiosUSA announced the *Battlestar Galactica* miniseries. Webring administrators and fanclub presidents became spokespeople for community dismay over the lack of participation of Larson and Hatch in the reboot. Chris

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<sup>371</sup> Slides and artwork from the Desanto-Singer reimagined project, [http://www.battlestarpegasus.com/gallery/desanto\\_singer\\_2001/index.html](http://www.battlestarpegasus.com/gallery/desanto_singer_2001/index.html).

<sup>372</sup> "As of Friday (01/04/02) it appears Fox has walked away from the *BSG* production, probably due to Singer's departure and in favor of the *FireFly* project. The production appears to be still alive and they will now have to look for another network to produce and air the series." From <http://battlestarfanclub.com/battlestar/bgadds.htm>. For a more complete history of the studio dealings, see <http://www.battlestargalactica.com/newfilms.htm>.

Feehan of the Battlestar Galactica Fanclub commented on the announcement on April 2, 2002.

BATTLESTAR GALACTICA (4-hour miniseries) - SCI FI re-imagines the groundbreaking and beloved series in which "a rag, tag fugitive fleet" of the last remnants of mankind searches for its true home.... This news came as a shock to Tom [DeSanto] as well as to the rest of us, and appears to have come out of nowhere. Tom did confirm the news with both the President of StudiosUSA and the SF Channel and his role going forward in the production is unclear.<sup>373</sup>

Writer Ron Moore and producer David Eick had been brought onto the project to offer his insight into the reimagined *Battlestar Galactica*, unbeknownst to the fan community. The new *BSG* mini-series and pending television series would represent Moore's new vision of *Battlestar Galactica*, rather than that of the long-term, die-hard fans of the original series. Feeling betrayed by this new version, many fans rallied around their disapproval of the Moore-Eick version, some even calling for a boycott of the new series. Michael Faries, Editor-in Chief and Site Manager to BattlestarGalactica.com and BattlestarPegasus.com wrote an open letter to Moore and Eick. An excerpt below highlights a conflict some fans of the original series feel between the commercial goals driving producers to create a new series and holding true to the original fan's vision for the show.

You have your business justifications and goals in bringing back this television show. You have investors, shareholders and fellow employees who are committed to making a profitable television mini-series named "Battlestar Galactica." We don't need an MBA to see this. You may yet surprise us by re-igniting a show, which never lived up to its potential -- and may surpass all expectations. But many, many fans are concerned with what we're hearing. This isn't a brand-new show; this is a television icon. We, at BattlestarGalactica.com, created our web site to welcome all points of view on

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<sup>373</sup> Chris Feehan, Update #4, <http://battlestarfanclub.com/battlestar/bgadds.htm> (4/2/2002) (accessed December 7, 2005).

the series, particularly from the Powers That Be. WE INVITE YOU TO SHARE AN OPEN DIALOGUE WITH FANS VIA OUR SITE.<sup>374</sup>

The letter displays both the fan community's personal investment in the original series, as well as a sentiment of betrayal by "The Powers that Be," that is the new writers, producers and studio. Instead of the cooperative effort begun through the Singer-DeSanto version, the original fan community, through Faries, draws an "us versus them" line in the sand. Us, the fans, versus Them, the producers of the new series, displays a clear conflict between fan and producer that both sides seemed to want to resist. Faries's letter also displays surprising self-reflectivity and openness to a new generation of *Galactica* by suggesting the outdatedness of the original series: "This was a 1978 television show which cannot remain trapped within the confines of 1978 television storytelling."<sup>375</sup> This statement resists the stereotype of the cult fan as a ritualizing, self-selectively cloistered individual ultimately closed off to a changing outside world as Faries greets a new series with excitement and congratulation. Yet, Faries call for dialogue still demonstrates a desire in many fans to be an integral part of the remaking of a series they followed, and in many instances produced, for over twenty-four years.

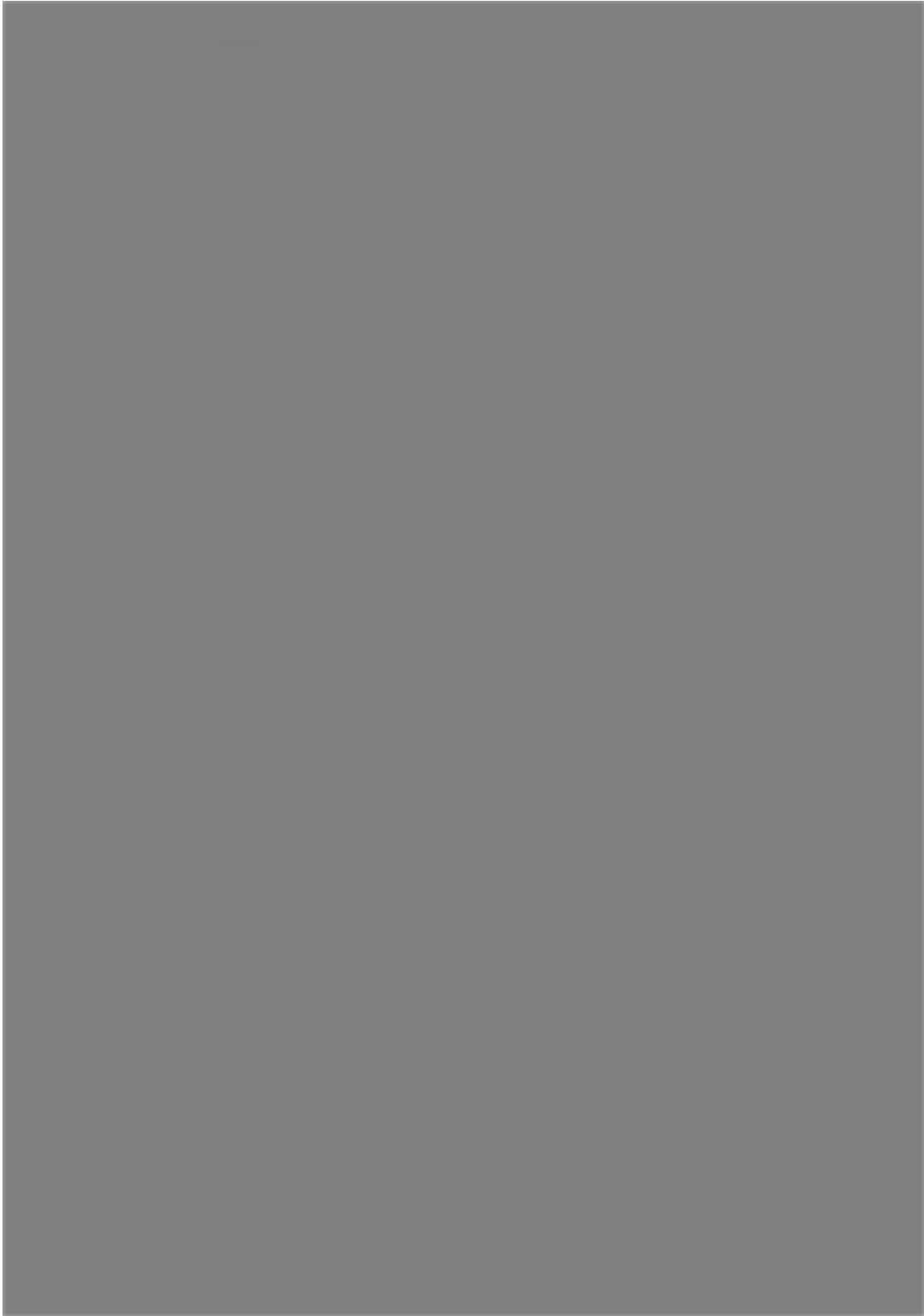
In addition to Faries's letter and other calls for boycotts, the revival community published flyers that called for a flood of letters to Fox expressing their disapproval with the new series.

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<sup>374</sup> Excerpts from "Open Letter to Moore and Eick," <http://battlestarfanclub.com/battlestar/bgarticle24.htm> (accessed December 7, 2005).

<sup>375</sup> Ibid.





**Michael Faries, “Open Letter to Moore and Eick,”**  
**<http://battlestarfanclub.com/battlestar/bgarticle24.htm> (accessed December 7, 2005) (Image removed due to copyright restriction.)**

The lack of involvement original series *Battlestar Galactica* fans felt with the shape of the 2003 series caused the Moore-Eick *BSG* to tear a sharp divide between old text and new. Fansites loyal to the original series needled the new *BSG*, finding structural flaws in the mini-series and the first season episodes. In reviewing the new series, Proteus, a long-time fan publishing on Battlestar Fan Club, wrote two articles bashing the series: “Top 55 Reasons/Nitpicks Why Ron Moore's Battlestar Galactica miniseries SUCKS” and “Proteus’s Nitpicker Review of Ron Moore’s Battlsatar [*sic*] Galactica—Season 1” in July 2005.<sup>376</sup> His frustration with the new ownership translates to angry criticism of minutiae from the new text that ranges from disliking the style of the new fighter ships, to questioning casting decisions, storylines, the show’s physics, etc. In picking apart the new show, Proteus uncovers what he sees as legitimate flaws in the new series in order to diminish the new show’s perceived cultural capital. The new series had gained much critical acclaim and this review serves as a counter to suggest that the new series perhaps is not as good as the original in the eyes of some fans.

As the new *BSG* gained popularity, however, many fans of the original series felt a need to make amends. *Anomaly*’s Sue Paxton’s website, Battlestar Zone (part of the Battlestar Network webring), published a page titled “White Flag Flies!: The new show is great” and set up a section for the 2003 *BSG* titled “Revival!” However, rather than devoting the section to the new series, Paxton instead documents the battle between fans and studios that led up to the 2003 series.<sup>377</sup> Instead of a positive review of the new series, Her “White Flag Flies!” redirects to her “What’s New,” a list of site updates and

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<sup>376</sup> Proteus, “Top 55 Reasons/Nitpicks Why Ron Moore's Battlestar Galactica miniseries SUCKS” (7/26/2005) and “Proteus’s Nitpicker Review of Ron Moore’s *Battlsatar Galactica*—Season 1” Battlestarfanclub.com (7/26/2005); available at <http://battlestarfanclub.com/battlestar/bgarticles.htm>.

<sup>377</sup> Sue Paxton, “Battlestar Galactica, A New Hope?” <http://www.geocities.com/sjpaxton/newpage3.html> (accessed January 29, 2009).

her own rambling reviews of the series. In response to the first episode of Season 3, Paxton writes: “Now the Cylons have become the Bush administration, and the unfortunate Colonials who were stupid enough to abandon the fleet to settle “New Caprica” (can you say ‘created for a plot device?’) are the beleaguered Iraqis ...” Her analogies between the show and the U.S. Occupation of Iraq (which were pointed out by many other critics and fans) dissolve quickly into what she calls “Major, *major* irritants” in the show. She’s disgusted by the behavior of characters, the cast’s acting, and the Cylons themselves. In reference to the mysterious monotheistic Cylon religion she writes, “Cylon religion. Cripes, what a bloody mess!” Her next irritant, the Cylons themselves, is only illuminated by the statement: “Uh, time for some backstory, Ron. Ron? Ron?”<sup>378</sup> Paxton’s “irritations” may underscore an underlying frustrations with the new series, but they also point toward a schism in how fans relate to, and find pleasure in, television texts. Paxton is quick to point out the clear parallels between Moore’s fictive universe and her own contemporary context. She draws immediate analogies between the real and the fictive—the Cylons are the Bush administration, the Colonials are the Iraqis—to make sense of *BSG*’s text and determine Moore’s take on American society, circa 2005. Her frustration with Moore not offering a Cylon backstory illustrates a media fan in want of comprehensive storytelling—in the case of Moore’s Cylons, she wants to know more “facts” about Cylon religion, their culture, how they came to be, etc. Although a writer of fan fiction herself, Paxton still relies on Moore to write the story, the backstory and give a fuller picture of the Cylons.

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<sup>378</sup> Sue Paxton, “What’s New,” *Battlestar Zone*, October 7, 2006, <http://www.geocities.com/sjpaxton/whatsnew.html> (accessed January 29, 2009).

This interest in a comprehensive, prescribed storyline differs from other, often younger *BSG* fans' interest in a story comprised of parts that they themselves stitch together and deduce. Rather than feeling "centered" in the story, these fans attempt to make sense of the story on their own terms, using their own technologies. Thus, if Paxton and other fans of the original series search for more from Moore, many fans of the new *BSG* search through the text, linking disparate pieces to construct their own meanings online rather than from TV.

### **New Fans, New Networks, New Archives**

Broadly, fans play with characters, stories and symbols, sense-making and reimagining-sense in fan fiction, on fandom social networks, on message boards, etc. However, I will argue that this play occurs even on the most apparently rigid, fact-based, fan-sites. Wikis—collections of webpages that enable a community to add and edit content—are often used to create collaborative databases for amassing and managing knowledge. *Wikipedia*, the most popular wiki, operates like a collaborative encyclopedia and rivals even traditional encyclopedias like *Encyclopedia Britannica* in some ways.<sup>379</sup> Many wikis promote accuracy and comprehensiveness as they attempt to amass all thing

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<sup>379</sup> While this "democratic" method of creating and sharing data removes the status of the lone author and compiler, like dictionary editors Noah Webster or James Murray or fansite editor Michael Faries, accountability also remains an important concern. In 2005, *Nature* conducted a study comparing the accuracy of Wikipedia articles and *Encyclopedia Britannica* articles related to the natural world. It found that of the 42 reviews, Wikipedia had 162 factual problems, while *Britannica* had 123. Daniel Terdiman, "Study: Wikipedia as Accurate as Britannica," *C-Net News*, December 15, 2005, [http://news.cnet.com/2100-1038\\_3-5997332.html](http://news.cnet.com/2100-1038_3-5997332.html) (accessed January 30, 2009). In 2012, Epic and the University of Oxford conducted an updated Wikipedia accuracy study alongside the Wikimedia Foundation to determine if the finding of the *Nature* study still held true. The study found that Wikipedia compared favorably in terms of accuracy to *Encyclopedia Britannica*, Spanish Wikipedia compared favorably to *Enciclonet* (a popular Spanish encyclopedia), and Arabic Wikipedia compared favorably to the *Arabic Encyclopedia*, *Mawsoah*, and *Arab Encyclopedia*. Imogen Casebourne, Dr. Chris Davies, Dr. Michelle Fernandes, and Dr. Naomi Norman, "Assessing the Accuracy and Quality of Wikipedia Entries Compared to Popular Online Encyclopaedias," EPIC/Oxford University final report, Brighton, UK. Published August 1, 2012. Retrieved from [http://commons.wikimedia.org/wiki/File:EPIC\\_Oxford\\_report.pdf](http://commons.wikimedia.org/wiki/File:EPIC_Oxford_report.pdf).

relevant to a particular subject. However, in relation to the *Battlestar Wiki*, developed by and for fans of *BSG*, the act of collecting and discovering the backstory not supplied by Ron Moore enters into an inventive, dynamic act of world-building that in turn establishes a creative community as well as an internet archive.

With a long-time cult community up in arms over the Moore-Eick version, those interested in the new series often looked to new avenues of fandom outside the webring of the original *Battlestar Galactica* in order to connect with a growing fanbase now loyal to Moore's reimagined text. Not only did Ron Moore and David Eick's vision present much controversy within the original fan community, but the show offered a complicated, rich new *BSG* universe ready to be unpacked, analyzed and organized by fans. In addition, the series played with allusions, promoting an intertextual awareness among both casual SF fans and die-hard *BSG* lovers. Initially, *BSG* fans-turned-*Wikipedia* posters offered a laundry list of intertextual moments in the series. Examples below range from homages to the original series' Cylon Centurion characters to intertextual references to other television programs to mass-produced American merchandise aboard *Galactica*.

- The "museum" section of the *Galactica* features both a suit of "classic" Cylon armor as well as the original model for the Cylon Base Ship. It would also seem that all original series designs are acknowledged as having existed, but in the new series, they are relics of the previous war with the Cylons.
- The last line in the miniseries, spoken by a "Number Six"-model Cylon, is "By your command," a phrase often used by the Cylons of the original series.
- In one of the final shots of the miniseries, one can make out in the distance the Starship *Enterprise*, from *Star Trek: The Original Series*.

- A "Frack" shaving mirror from IKEA appears in Adama's cabin as a bit of an in-joke.<sup>380</sup>

These intertextual moments within the series open up spaces of disconnection within the text, including viewers in the intertextual reference or joke. Furthermore, in bringing in these intertextual elements the BSG text becomes, to use Eco's term, "unhinged;" able to be taken apart and analyzed outside of the context of the series. Not only can lines of dialog, like "By your Command," and visual references to the original series be unhinged from their milieu, but they contribute to an inter-series television dialogue that can be picked up by original fans in hopes of bringing them into the new series.<sup>381</sup> The appearance of elements totally outside of *BSG*'s fictive universe like the *Star Trek Enterprise* or an IKEA mirror create multiple levels of unhingability within the series, and generate layers of meanings to be taken apart and further examined by fans.

In their ability to temporarily disconnect fans from the immediate story and then reconnect fans to the larger series when they "get the inside joke", these references help to reinforce a network of textual relationships between the new series, the original series, other television programs and the fan's everyday life. By drawing connections with an almost encyclopedic understanding of the minutiae of the show, fans of *Battlestar Galactica* gain ownership over the storyline by taking it apart, analyzing events and re-exhibiting them online. No place is this more apparent than the *Battlestar Wiki* started by fans of the current series. Although fans editing the *Battlestar Wiki: the Free, Open Content Battlestar Galactica Encyclopedia and Episode Guide* operate predominately

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<sup>380</sup> Trivia section of Wikipedia, [http://en.wikipedia.org/w/index.php?title=Battlestar\\_Galactica\\_\(TV\\_miniseries\)&oldid=97408823](http://en.wikipedia.org/w/index.php?title=Battlestar_Galactica_(TV_miniseries)&oldid=97408823) (accessed December 8, 2006).

<sup>381</sup> This collection of observations was compiled on fans on Wikipedia, [http://en.wikipedia.org/wiki/Battlestar\\_Galactica\\_%282003%29](http://en.wikipedia.org/wiki/Battlestar_Galactica_%282003%29) (accessed December 11, 2005).

within the fictive universe, the hopes and standards for the wiki are exceptionally high. Inspired by the *Babylon 5/Crusade* wiki, *The Great Machine*, and launched in late 2004/early 2005, the purpose of the wiki is “to cover everything related to the *Battlestar Galactica* series. From Apollo to Tom Zarek, to Aerelon to Virgon, and also from Frak to Zak.”<sup>382</sup> This “living” encyclopedic aim necessitates a comprehensive knowledge of “all things *BSG*.” However, the aim of this knowledge relates predominately to the new series.<sup>383</sup>

The Battlestar Wiki collects and catalogs ships, spaces, characters, and vocabulary related to *Battlestar Galactica*, a series whose own diegetic world collects and catalogs everything from missing colonists to Cylons to all information about Earth. These common practices in data collection, both to remember the past and to gain a better knowledge of the future, cross from *Galactica*'s memorial hallway to Battlestar Wiki's online articles.<sup>384</sup> Through the appropriation of images and an almost encyclopedic knowledge of all things *BSG*, fans on the Battlestar Wiki gain ownership by unhinging parts, rebuilding texts, and re-exhibiting the series online. While wikis are popularly understood as stemming from a “collecting impulse” (i.e. gathering “just the facts”), I'll explore the Battlestar Wiki to address its users' “creative impulse” as well as to consider how gender influences the generative activities surrounding wiki construction.

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<sup>382</sup> “The Battlestar Wiki is a “living” dictionary and episode guide to the *Battlestar Galactica* television series (circa 2003-). It is a “living” website, because it can be changed and amended by users.... We presently cover all aspects of the *Battlestar Galactica* series, “re-imagined” by Ronald D. Moore. You'll find (or can add) information on such items as terminology seen, events that occurred, and characters introduced & developed.” From main page of Battlestar Wiki, [http://battlestarwiki.org/index.php?title=Main\\_Page](http://battlestarwiki.org/index.php?title=Main_Page) (accessed December 11, 2005).

<sup>383</sup> About the Battlestar Wiki, [http://battlestarwiki.org/index.php?title=Battlestar\\_Wiki:About](http://battlestarwiki.org/index.php?title=Battlestar_Wiki:About).

<sup>384</sup> [http://en.battlestarwiki.org/wiki/Memorial\\_hallway](http://en.battlestarwiki.org/wiki/Memorial_hallway).

In order to contribute to the wiki, one must have knowledge of *BSG* as well as of wiki operation and edit culture. In addition, knowledge of other texts is also helpful, as users construct complex cross-listings for characters and terms. Sometimes these complex cross-listings can become sites of play. The entry for “toaster,” for example, not only contains a definition and an etymology, but the toaster even has a “user profile” that includes both a photograph of a Cylon Centurion soldier (nicknamed by colonists a “toaster”) and a picture of an everyday American toaster used to toast bread. A disclaimer on the page notes the comical link between *BSG* fantasy and everyday life: “This page is Silly.”

These instances of inside jokes on the wiki suggest a more dynamic community generating this content than, say, occurs with *Encyclopedia Britannica*. The toaster entry displays users’ attempts not only to construct meaning and order for the *BSG* text, but also to draw interrelationships between the text and their everyday lives to create what we could call “hybrid toaster,” which is half fantasy-robot-soldier and half common-American-kitchen-appliance. This layering of texts therefore does something very different than a conventional encyclopedia: it intentionally complicates an entry rather than providing “transparent” clarification.

The general goal of most wiki contributors, however, is not to draw connections between the text and real life but to catalog and clarify all things *BSG*. Unlike much fan fiction that speculates on what happens before or after a particular episode or show ends, wiki users cast their nets wide, creating thousands of short articles. Their work, therefore, initially resembles less the creative process of an MFA graduate and more the indexical



aim of librarian. Each *BSG* episode, for example, is given its own page complete with sub sections. The “Downloaded” episode contains eight sections, including: “1 Overview, 2 Summary, 2.1 Teaser, 2.2 Act 1, 2.3 Act 2 2.4 Act 3, 2.4 Act 3, 2.5 Act 4, 2.6 On Calactica, 3 Notes, 4, Analysis, 5 Questions, 6 Official Statements, 7 Noteworthy Dialog, and 8 Guest Stars”<sup>385</sup> Users’ attention to detail causes the wiki to resemble the “fact-based” Wikipedia or traditional encyclopedias. Yet, it’s important to remember that the Battlestar Wiki collects “facts” about a fantasy series. The character biographies, episode summaries, and noteworthy dialogue stem from fan speculation as users choose and edit their favorite *BSG* highlights.

This choosing process leads wiki users to construct boundaries: speculative issues surrounding gender and sexuality, for example, have little to no place on the wiki. Thus, while the site offers a detailed list of usage examples for the word “frak,” there is still very little discussion on the wiki surrounding potentially gay characters—a topic well examined in fanfic communities. In fact, when one types “queer” into a Battlestar Wiki search, a page appears with auto-generated text stating, “Man created the Cylons, but man has yet to create the page titled ‘queer.’”

While users reserve the wiki for publishing “facts,” they’ve established another space to catalog fans’ parodies and satire. The Wiki Frakr is “a mockapedia, an encyclopedia dedicated to mocking and having fun at the expense of *Battlestar Galaxitive*.” Making light of the wiki format as well as the often dark *BSG* universe, the Wiki Frakr exists separate from the official wiki, allowing contributors to speculate

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<sup>385</sup> Downloaded Analysis on Battlestar Wiki <http://en.battlestarwiki.org/wiki/Downloaded> (accessed July 6, 2014)

wildly on the series outside the Battlestar Wiki's indexical aim. The humor, however, which includes an index of "notable b00bz in *BSG*," embraces male heterosexuality often at the expense of female or potentially queer characters. Here, a search for "queer" reveals an entry for Felix Gay-Duh (a poor pun on the character Felix Gaeta's last name). While the Frakr thus was established to be a generative play space for fans, it operates as a segregated space, keeping "what's creative and funny" off the Battlestar Wiki's "fact-based" pages.

Although the wiki does not include fanvids or drabbles (a piece of fanfiction exactly 100 words long), Battlestar Wiki users write about beloved characters, items, and practices. In fact, they interact with *BSG* not just through what Jenkins might call "collecting," "mastering," or "conquering" a text, but through a generative process requiring both intimacy with the text and a creative drive. Unlike the common assumption that the wiki is seen and used as an introductory reference source, wikis and other archival systems in effect produce modes of thinking through how they define "fact." Julia Martin and David Colman remind us that the archive is "a living ecosystem, where information and its delivery systems are recognized as dynamic, highly changeable, and inhabited by humans."<sup>386</sup> The wiki as an ecosystem is created and maintained by fans of the series and should be viewed as a changing site of opinions and observations rather than a static reference tool.

Considering the wiki, which is a website allowing collaborative editing by contributors, as fundamentally generative brings the Battlestar Wiki much closer to social networks centered on generating fiction and videos, which are oftentimes classified

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<sup>386</sup> Julia Martin and David Coleman, "The Archive as an Ecosystem," *Journal of Electronic Publishing* 7.3.

traditionally as “female fan initiated.”<sup>387</sup> Still, while the Battlestar Wiki provides a site for subversive narratives and speculation on a character’s identity (be they human, Cylon, gay or straight), the wiki community tends to adhere to a “just the facts” approach. This, however, may not derive from strict Battlestar Wiki community boundaries as much as from how Battlestar Wiki users, and wiki users more generally, see the wiki itself. Rather than being viewed as a *tabula rasa* to be filled and edited by fans, wikis have been seen and used largely as online encyclopedias (likely due to Wikipedia’s popularity). Thinking about the wiki as a space always created and maintained by people could significantly change not only popular understandings of wikis and how they work, but also the makeup of wiki communities and the type of content ultimately produced. As online technologies like the wiki continue to develop, fans seeking to update and preserve texts will be faced with a growing number of options. Conceptualizing the content they create not simply as a “fact based” reference tool but as a changing, dynamic text in itself will help establish more diverse uses for the growing array of formats as well as draw important connections between communities, content, and modes of delivery that may initially appear dissimilar and even contradictory, thereby opening up even more possibilities for thinking through and across techno-cultures and texts.

### **Scholarly Networks and Creative Robots**

While the wiki catalogs All Things Galactica for posterity, other online social networks seek to make All Things Galactica fodder for creative fan content. Social networks like those on LiveJournal, for example, not only speculate on the show’s

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<sup>387</sup> Camille Bacon-Smith, *Science Fiction Culture*. (Philadelphia: University of Pennsylvania Press, 2000), 112-113.

characters and discuss storylines, but they imagine and display alternate interpretations of the *BSG* universe, sharing those with other fans in ways that create dynamic, different worlds. These fan interpretations of *BSG* generate their own materials, in some ways their own social capital, as fans produce new content that they then share and disseminate through their own online networks.

LiveJournal (abbreviated LJ) is an online community where users can maintain an online journal. Launched in 1999, LiveJournal operated for nearly a decade as one of the most popular social networking services in the U.S., allowing users to keep a blog, diary or journal. Each user's journal entry has its own webpage that includes space for comments left by other users. Each user's live journal has a journal homepage, showing the most recent entries and links to accompanying comments. What distinguished LJ from other blogging systems like Blogger or Wordpress was its "friends list" (often abbreviated as "flist") feature, which linked LJ users together and established a strong community aspect prior to the widespread popularization of the online social network service, Facebook. Each LJ user could friend other users, collecting them on a friends page, which displayed their LJ friends' most recent journal entries. In addition to offering the option to "friend" other users, LiveJournal also hosted group journals, dubbed "communities" (frequently abbreviated as comms). Users who joined a community can make posts to the community's homepage like they would on a regular journal. Communities are governed by "maintainers" who were LJ users who administer the community's content and users by overseeing membership and moderation.

These LJ communities varied in size from just one member to thousands of members. In the years the rebooted *BSG* series aired on Sci Fi, there were numerous

communities of *Battlestar Galactica* fans, arranged around language, interests, and the types of content they produce. While the user content still remains on LiveJournal, BSG Creative participation has waned since the series went off the air in 2009. This section will focus on one such one such LJ community in order to offer a counter example to the archive-oriented practice of participatory fandom. In contrast to the mostly male fans of the Wiki, the Creative tended to be by and large women. Created on January 7, 2005, the BSG Creative offers its members and interested users a public venue for sharing and archiving fan fiction and images.<sup>388</sup> Most BSG Creative members appeared to be female, heterosexual and in their 20s or 30s. Based on a random sampling of approximately twenty BSG Creative participants, it also appears that a number of members are also either pursuing degrees in higher education or have already received advanced degrees.

In the community profile, the BSG Creative is listed as “BSG Creative: The Irreverent Ones.” Like most LJ communities, interests are listed here in the profile (that is things the community founders/administrators wish to emphasize within the community.) In this case the prime topics are bases (still shots from the series cropped to userpic-size that can then be modified by icon creators to make individualized icons), *Battlestar Galactica*, fan fiction, user icons (graphical representations of a user on message boards) and fan videos. The 2003 television series *Battlestar Galactica* remained the central text within the community, Fan fiction, icons, bases, and vids (short for videos) were the creative formats the community maintainers encourage members to share. (Each will be discussed later.) In the “about us” section, the three community managers (aluminiumorange, boofadil, themonkeycabal) establish what they see as the identity of

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<sup>388</sup> BSG Creative website archive, <http://bsg-creative.livejournal.com/2005/> (accessed July 4, 2014).

the BSG Creative. Borrowing vocabulary from the larger LJ community as well as from the series, BSG Creative set out to establish itself.

This is a community for icons, fic, vids, and other creative whathaveyous inspired by the new SCI FI series, *Battlestar Galactica*. This comm is a refuge from the madness of fandom, so membership is moderated, though posts by members and comments by visitors are not ... We may not be the best at what we do, but other comms take things far too seriously, and we try to be **way** more amusing... We're a ragtag, fugitive group, on a lonely quest for a shining planet known as Sanity.<sup>389</sup>

Here, maintainers borrow terms from the original series and work them into a metaphor based on the *Battlestar Galactica* text. "Ragtag" is often used self-referentially in *BSG* communities as it was in the original series to describe the "ragtag" fleet of ships following the *Battlestar Galactica* on the quest to find Earth. While never used in the 2003 series, the term has crossed over to the new fandom as a term for *BSG* fan solidarity. The "lonely quest for a shining planet known as Sanity" also borrows from the mission of the *Galactica* as it continues on its quest to find a planet known as Earth. However, despite the fact that these references pay homage to the old *BSG* text as well as the new, the message board content remains firmly entrenched in the 2003 series, making no mention of the fictive *BSG* universe created over twenty years earlier.

While the community profile also notes that the BSG Creative intends to "try and be **way** more amusing," their "about" section suggests an investment in patrolling the community's boundaries. Membership criteria include three items:

- 1) getting to know interested participants
- 2) contributing content
- 3) not being insane.<sup>390</sup>

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<sup>389</sup> BSG Creative profile page, <http://bsg-creative.livejournal.com/profile> (accessed July 4, 2014).

<sup>390</sup> Ibid.

To explain this membership exclusivity, the administrators suggest a previous bad experience within other fandom communities: “we’re battered, bruised, and bitter where fandom and some folks in fandom are concerned.” This nebulous bad experience appears to justify the exclusivity of the community.

Philippe Le Guern notes that through a common text as well as ritualized practices “cult is a unifying phenomenon and implies a cooperative effort that defines a communal membership.”<sup>391</sup> However, the sentiment from these guidelines and rigid boundary suggests that not only is cult regulated through a common discourse and set of rituals, but it is also regulated in this particular case through a fairly complicated and subjective screening process. Although anyone can “creepily lurk” on the community boards, reading fanfic and commentary, full participation (that is, posting and sharing fan fiction and self-made images) requires prospective members to undergo something akin to an interview process.

### **Defining Content on the Creative**

While the community still remains a place to post fan fiction, it also started off as a place to share icons and other visual materials relating to the series. Icons are fan-created graphics of favorite characters, scenes, concepts and lines that are commonly distributed amongst the larger fan community as fans create, share, collect and use icons to illustrate a post, serve as a blog banner or become a userpic. A userpic is the photo that appears next to the user’s handle (online name) on a community forum or website. Icons proliferation in creative communities makes them a cheap and fun way to personalize

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<sup>391</sup> Le Guern, “Toward a Constructivist Approach,” 12.

users' online identities. The icon a user selects not only appears next to the user's name on community posts, but also appears on his or her blog. Fan artists also can gain notoriety within these communities, designing everything from icons to personalized banners.<sup>392</sup>

The illustration below highlights these three uses. The top image is banner icon. The image of the blond woman below is the smaller BSG Creative Icon. Within the post below that image, user Ancarrett uses the icon "Nobody's Baby" next to her name. In her post she advertises a collection of BSG icons she created through the display of three sample icons.



**BSG Creative Homepage (accessed May 7, 2006)**

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<sup>392</sup>An example of one such artist is shadowserenity, <http://www.shadowserenity.com> accessed December 18, 2007).



The first posts to BSG Creative dealt with posting and sharing icons. What was most important to BSG Creative co-founder, themonkeycabal, was simply to have *something* up on the site to show that it was active. themonkeycabal writes, “ So, I must post, because it bugs me to have this page blank, when damn it, I could junk it up with some of my wondrously brilliant icons. And if I had wondrously brilliant icons, I’d post them right quick. As it is, the best I can do are some slightly better than ‘meh’ icons. Well, a couple of them are slightly better than ‘meh’, the rest? Ahh, what do I know.” Here, the author gives the impression that she uploads icons and writes the post simply to kick things off on a blank community. Whether this was simply false modesty or an attempt to make the site look busy, themonkeycabal sought to inaugurate the community through the distribution of her own material. Interestingly, themonkeycabal referred to her created icons as “‘meh’icons” (meaning “so-so” or “OK” icons).<sup>393</sup> This modesty set a tone of humility to the creative process as well as a non-competitive space for sharing. The two following posts also share in this creative process as more participants post icons. The third post from monkeyfromhell summed up the tone of BSG community’s initial distribution policy: “Want. Take. Credit. Enjoy.” While the policy for using icons was certainly “take what you want,” the sentiment that icons must be credited back to their original owner played an important role. Commonly, crediting was done by simply keeping the name of the author in the icon’s label. Thus, an icon featuring the character of Starbuck and created by user shadowserenity might be labeled “shadowserenity-Starbuck.”

This “Want. Take. Credit. Enjoy” philosophy was reworded in the community’s later profile to reflect harsher consequences if a user did not give credit to the artist.

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<sup>393</sup> For added information on the definition of “meh,” visit The Urban Dictionary <http://www.urbandictionary.com/define.php?term=meh>.

If you're visiting for icons, unless stated otherwise by the original poster, you must give credit to the icon creator. If you don't, and we find out, we'll hunt you down, beat you to a pulp, and feed you to the goat. And we're very much not kidding. Mmkay? Mmkay.

Here the managers threatened users with a beating unless they obey by community standards. While the threatening tone is somewhat hyperbolic, especially with the mention of “feeding you to the goat,” the managers show that they take credit very seriously. Incidentally, the goat mentioned refers to Frank the Goat, LiveJournal.com’s mascot.

Through the community profile, the BSG Creative managers carefully regulated the identity of the community and set out a series of “ground rules” all community members and casual viewers should play by. While interest in *Battlestar Galactica* and fan fiction necessitates community involvement, BSG Creative managers played an active role in defining who is and who is not in the community through their screening process and regulations. As the profile suggests, not only is the cult text a unifying phenomenon, but delineating boundaries and guarding cult communities against outside threats that may leave members “battered, bruised and bitter” is of utmost importance, especially for a public, online community. Just as *BSG* the series draws lines between human and Cylon and guards human society carefully, protecting it from outside Cylon invasion, the BSG Creative seeks to sort the devoted BSG fan from malevolent, internet troll in order to maintain and protect the community.

### **Sharing Creativity through Icons and Bases**

In addition to icon distribution, posting “bases” was routinely done on the BSG Creative. By offering still shots to the community, the base creator offers anyone the tool

to create a personalized icon with only the aid of basic image-editing software. These bases are shots from select scenes in the show the creator saw as significant, comical or aesthetically pleasing. The icon creator can then personalize these images.



**Examples of a Base and modified version from BSG Episode One**

The medium of online icons and their circulation is relatively new. They represent a “born-digital” form of fan creation, which before the popularization of the World Wide Web was unheard of, not to mention the evolving technology regarding the display and sharing of images online. While fanzines (fan created paper based periodicals that published fan artwork and writing) existed at least over a decade before the internet, images were hand drawn fan artwork rather than digitally-manipulated freeze frames from the original text. They reflected the artist’s vision as well as often the artist’s talent. These icons, while they do also reflect the artist’s talent, also represent the user (i.e. the person who uses them either next to their name). Often, characters the user identifies with become attached with their online handle. In many other cases, the user might use the icon to display how she feels about an issue, person or concept. Whereas hand-drawn fan art represented the artist’s perspective, the icon becomes much more conflated as it crosses from artist to user(s). The message of the icon only takes shape when it is read

and used by the user because the icon, when used as a userpic, becomes tied to the user even more so than the creator.

Creators based much of their content production around the number of icons that they can create. At the height of the television series popularity, users produced anywhere from a dozen up to seventy icons at a specific time. The creators' prolific endeavors mean that hundreds of icons flood the BSG Creative on a weekly basis.

Like Bakhtin's description of the novel's "heteroglossia," the visual icon is often created using a polyvocal combination of languages and styles. The above image features a picture of Gaius Baltar, apparently kneeling. Over the image the phrase "WHERE TO BEGIN?" appears. The artist has a limited space to work with (100x100 pixels) and thus the image and phrase chosen have to be relatively small but still be legible. Frequently, close-ups of characters are used in icons due to the low level of detail. Phrases are also limited, often consisting of between one and five words. Phrases longer than that tend to become easily lost in the small frame.

The creative process and analysis is based on a selection process that starts when the artist sits down to watch the television series. From this moment forward the artist begins consuming material, first consuming a shot from the series to make into a base, then reconstituting that base into an icon (in this process often consuming intertextual or intratextual phrases or words). The icon is then delivered to the community or blog for others to consume. A user takes the icon and reconstitutes it again by making it part of her identity: the user pic, which stands as an avatar for the user in online conversations.

While icons represent a unique combination of creation and consumption in addition to meaning making, other forms of artistic representation through images can also be found on the BSG Creative. In 2005, a week after the community began, lithium\_doll posted a fanvid (fan-created music video) titled “Prayer.”<sup>394</sup> Structured like a music video, the short film offers a brief overview of the events in the *BSG* mini-series and an introduction to the cast of characters. In *Textual Poachers*, Henry Jenkins notes, “like other fan artists, video makers maintain close contact with the larger fan community. Fandom blurs any clear-cut distinction between media producer and media spectator, since any spectator may potentially participate in the creation of new artworks.”<sup>395</sup> In this case, the spectator/ receiver of the *BSG* series becomes the producer/sender of the particular message. lithium-doll takes the footage she has

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<sup>394</sup> Notes Lithium\_doll wrote about “Prayer.”

Song:

Prayer is a song I've been keeping in mind to vid for a while - it very nearly got used in a Farscape vid based on - you guessed it - the episode "Prayer". But that didn't quite click in my head, so I'm glad I kept it back.

One of the themes of BSG is religion - the Cylons have their God, the humans have the Lords, and there's basically a bit of a Holy War going on. I had that nagging at me as I was watching them single-mindedly trying to exterminate the human race, then considered the lyrics in Prayer of "this is the way I pray". Well, okay then.

Video:

The opening shot is Caprica getting nuked into mushroom oblivion - what a way to set the tone. I decided to go with the ... what is that effect called? Static? I'm not sure. Anyway, I'll call it static. I decided to go with the static off the bat to get the fact this vid was going to be visually jarring, grating even, very plain. Call it mise-en-scene for the mood via effects.

Then came the main cast of characters, which is a very bland way to start a vid but it was that, random clips or more from the Starbuck/Cylon interrogation and I didn't want to go there yet. The order is humans, then Cylons or Cylon-controlled humans, intending to make the two sides obvious. Operative word there is intending, a lot of people didn't catch what the vid was about at all. Must use heavier anvils in future.

The first verse is showing a surrender, Prezzie losing more numbers on her population count (and how), Adama getting his ass handed to him by a sickandweak!Cylon and finally suicidebomber!Cylon. In other words, the Cylons are kinda winning there, but it's impersonal.

<sup>395</sup> Jenkins, *Textual Poachers*, 246–247.

previously viewed and reconstitutes it, setting it to her own choice of music in order to retell the fall of humanity at the hands of the Cylons and introduce valued characters.

Another form of user creativity online is fan fiction, a.k.a. “fan fic.” Two weeks after the community’s online launch, themonkeycabal posted “Lee at the End of the World,” the first fanfic on the BSG Creative. A character development piece featuring Lee Adama, the young star pilot and son of Commander Adama, “Lee at the End of the World” examines the inner thoughts of Lee as well as his relationship with his on-screen friend and love-interest, Kara.

With some humility, themonkeycabal prefaces the fanfic, while noting her own relationship to the piece: “I write solely to amuse and entertain, so I hope anybody who reads this, enjoys it, and if not, well, sorry.” This assertion by the author that the fiction is solely for her own personal pleasure is apparent throughout fanfic as authors often note that they write more for themselves than for their readers. The genre of the “drabble” is especially suited for these purposes. Generally consisting of less than 500 words, a drabble offers a short vignette of a moment within the fictive universe being explored.

Excerpt from” Too Far From Home” by SabaceanBabe

I feel the night is on your side  
And I don't recognize this road  
We sleep all day  
and walk all night  
You're leading me too far from home – Tom McRae, One More Mile

Helo, I think there's something else that you should know. I'm pregnant.

I'm pregnant.

...pregnant... pregnant... pregnant...

Helo stared into the fire; Sharon's words circled round and round in his head. The world had ended, and he was going to be a father. He didn't want kids, had never thought about kids until now. And he damn sure didn't want a kid that wasn't

human. He couldn't even be sure that what she had said was true. How could she be pregnant? She was a Cylon and Cylons were nothing but machines.

Here, SebaceanBabe offers an alternate telling of a moment within the first season of the series when Helo impregnates Sharon while they run from other Cylons on the planet Caprica. Helo's inner thoughts and fears are explored here, whereas the television series leaves them up to speculation. Most fan fiction, in fact, remains speculation as fans attempt to answer "what if" questions, filling in holes in the plot and characters as well as taking the strands of the story-arc in completely new directions.

While the drabble provides an easy gateway to writing fan fiction due to its short length and vignette style, fan community fic-a-thons and fic challenges also provide added incentives for authors to keep writing fan fiction. During the hiatus between the second and third season some communities started hiatus fic-a-thons where writers were encouraged to write fiction based while the series is off the air. Getyourtoaster, a femslash LJ community, has instigated a series of rounds where writers write fanfic about a single character for a period of three weeks. In order to contribute to the ficathon the writer must sign up and follow specified guidelines: "Just fill out the below form in a comment to this post, and you'll be sent your assignment when sign ups are closed. Then you'll have three (3) weeks to write a 500 plus word story using one of the prompts you were given. You can post your story to the community any time before the three week deadline is up."<sup>396</sup> While fic-a-thons generally stretch over an extended period of time, fic challenges are generally a one-shot call for fan fiction about a particular topic.

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<sup>396</sup> From Get Your Toaster, <http://getyourtoaster.livejournal.com/> (accessed July 4, 2014).

SabaceanBabe's "Too Far from Home" for example was a result of a fic challenge on Hidden Elysium, a Boomer/Helo fanfic LJ community.<sup>397</sup>

Heteroglossia helps to unite the community and find connections to the primary text. Even the title of the fanfic site "Get Your Toaster" is loaded with meaning.<sup>398</sup> On one hand, it references "toasters," the derogatory term for Cylons used by *BSG* crew in the series; on the other, "get your toaster" is a phrase in gay and lesbian communities, alluding to Ellen Morgan's coming-out episode on Ellen DeGeneres's 1990s sitcom, *Ellen*. In the episode a joke was made that if a lesbian recruited enough straight women to become gay she could earn a free toaster oven.<sup>399</sup> While the rebooted *BSG* series rarely represents gay or lesbian characters, fans found ways to appropriate the characters and icons to represent non-heteronormative identity through the Get Your Toaster contest and varied readings of Cylons characters themselves. In fact, there is something off or queer about Cylon characters in *BSG* in that while they may be associated with heteronormativity, they aren't born straight because they weren't really born at all. Cylons, and robots more generally, in their inherent artificiality, destabilize tradition gender norms. In that they aren't really human they cannot really be male or female, gay or straight. The Get Your Toaster example marks an interesting moment in the history of robots where the implicit potential in the sexuality of robots is used by gay fans to upturn the show's heteronormative characters and introduce queer identity and relationships into the *BSG* universe.

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<sup>397</sup> [http://community.livejournal.com/hidden\\_elysium/](http://community.livejournal.com/hidden_elysium/) (accessed July 4, 2014).

<sup>398</sup> Get Your Toaster <http://getyourtoaster.livejournal.com/> (accessed July 4, 2014).

<sup>399</sup> "The Puppy Episode," *Ellen*, Season 4, Episode 22/23. Original airdate April 30, 1997. Directed by Gil Junger and story by Ellen DeGeneres.



Within the fiction itself, *BSG* jargon like “Cylon,” “raptor,” “frak,” and “boxed” as well as fictional locations like “Gemanon,” “Caprica,” and “Areon,” are bandied about regularly. *BSG* language is mixed with English so that authors and readers slip in and out of the *BSG* universe, playing with the new vocabulary: “Seven of his crew and the vice president have crashed on Kobol, their condition unknown. His best pilot has gone AWOL, taking with her the fleet's one hope of penetrating the Cylon defenses surrounding the planet. And one of his Raptor pilots lies in the medbay with a hole in her face. Commander Adama decides he's earned the right to take a moment and brace himself with a slow, deep breath.”<sup>400</sup> In this introduction to “Heaven to Touch” a short story based on the first season finale, author Karen T. mixes *BSG* specific terms throughout her story. “Kobol”, “Cylon”, “Raptor” and “medbay” are all words from the series. Karen T. appropriates with these terms, adding them to her story to not only set a *BSG* feel and tone but to offer objects from the show and elicit their visual, televised representations in her fan text.

The *BSG* community continues to produce fan fiction as fans explore the fictive universe and their own imaginations for new material. However, more than just doing it for themselves, the space for sharing shows an interest in each other's work as well as a sounding board for potential directions the series could go. Series writers have been known to go to particular fan communities in order to see what fans want through their fan fiction, sometimes tailoring the show to these needs.<sup>401</sup>

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<sup>400</sup> Karen T. “Heaven to Touch,” Cylon Dreams, available at <http://www.Cylondreams.com/dreaming/archive/0/heavento.html> (accessed May 1, 2006).

<sup>401</sup> *Star Trek: The Next Generation* was one such show that not only read fan fiction sent in but even turned some fanfic into series episodes.

Through the creation sharing and use of images, characters and stories, BSG Creative and other fanfic communities appear to want to play with the text more than resist it. The images and text in many ways operate like a cultural toolkit, out of which individual bricoleurs can take what they want to build something personalized and original that is also a hybrid of multiple textual components. In fact, fans use this toolkit to create new content in ways similar to how an engineer might use parts to create a robot. As much as the *BSG* series offers a toolbox, so does LiveJournal itself. Through its interface fans can converse with one another, swap pictures and stories, and regulate their communities. Where a conventional message board might allow for conversation with the oversight of a message board administrator, the LJ format offers an opportunity for community development and self-regulation. Content that in earlier instances might be thought to infringe on copyright or simply go unappreciated can have a space and an audience on LiveJournal. And, the media companies producing shows embraced by fans generally acknowledge that fan produced content contributes and propels the overall show brand. Through this both content and community evolve in exciting ways, even after the primary text, in this case a television series, airs its final episodes.

The cybernetic nature of the BSG Creative and other online communities replicates the cybernetic nature of the robot Cylons in the rebooted BSG. As we learn that Cylons are connected somehow wirelessly and can be downloaded into new bodies, online fans are connected via wireless computer and mobile devices and can upload a diverse range of materials to various websites. Users can then appropriate these materials, combining conflicting discourses from the show in order to construct their identity. The

fan's online identity, like the robot, is made up of parts that have been put together to form a hybrid construct of an online identity that is neither quite human nor quite robot.

### **The Televised End of *Battlestar Galactica***

In March 2009, rebooted *Battlestar Galactica*, the television show, concluded with a two-episode finale. It contained flashbacks to pre-Cylon contact to situate how main characters came to the Galactica; the attack and destruction of the Cylon colony; the rescue and return of Hera from the Cylons, the first and only Cylon-human hybrid child in the series; and the decision for the Galactica crew including Hera to ditch their modern technology and head to pre-historic earth to start anew. The series epilogue ends on modern Earth 150,000 later with a montage depicting the development of robotics and computerization. The episode concludes with a montage featuring scenes of robots, from toys to advanced automatons growing and evolving. The spirits of Baltar and Six (also known as Inner Baltar and Inner Six) walk in present day Time Square remarking on the recent discovery of the remains of Hera Agathon, who is believed to be the “mitochondrial Eve”—the person all of humanity is descended from. They remark on the future of humanity suggesting that when a complex cycle repeats something new will happen and that our Earth, a descendant of Kobal, Caprica and the thirteenth colony also called Earth, could well escape the viscous cycle of technology that caused the destruction of the colonies.

The epilogue montage of the different representations of robots suggests that technological change in modern society flourishes completely unabated and cautions in the last lines of the show that our own technical evolution could very well lead to our

own demise at hands of our own technology. This rather pessimistic, open-ended view of technology run amok elicited some negative reactions in the fan community. One fan review put it: “the series finale only had one real question to answer: does humanity deserve to survive? And the answer comes down to, well ... yes. If we're nice to our robots. So take a minute. If you have a robot in your house - even just a toy shaped like a robot, or a fucking coffeemaker or something - go pet it. Spend some time with it. The future's in your hands.”<sup>402</sup> Some fans went so far as to describe the ending as the worst in SF television history. In a 2013 interview, Moore commented on the ending, saying “It felt wrong to give it a neat answer on something that was so profound and existential about these people and this situation. They were dealing with something that they had trouble defining, whether it was gods plural, or God singular, or something else out there.”<sup>403</sup> The open-endedness of the conclusion and the fan’s reaction that Moore did not tie up the series neatly, offering more questions than answers, continues to play into the ongoing evolution of *BSG* over five years after the series has concluded. Fans of *BSG* still continue to run the BSG Wiki, and while the BSG Creative on LiveJournal is no longer the thriving community of female fans that it was when the show aired, there are still posts now and again.<sup>404</sup> The online fan networks that continue the story of *BSG* and its characters, demonstrate fans’ creative technophilia and passion for multiplying *BSG* texts. They suggest that like the old series, *BSG* will continue to live on for decades to come. Unlike the destructive end of the colonies, the complex cycle of fan discourse, mediated

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<sup>402</sup> Chris Dahlen, Battlestar Galatica “Daybreak (pt. 2),” The AV Club. March 20, 2009, <http://www.avclub.com/tvclub/battlestar-galactica-daybreak-pt-2-25544>.

<sup>403</sup> Jennifer Vineyard, “Ronald D. Moore on *Outlander*, the *Battlestar* Ending and Sexposition,” Vulture.com, October 16, 2013, <http://www.vulture.com/2013/10/ronald-d-moore-outlander-battlestar-interview.html>.

<sup>404</sup> As of a May 2014 check, the last post on BSG Creative was by Fandom\_Forever on October 5, 2013.

through online networks, will lead to continuing, evolving, generative texts around this now defunct television series. *BSG* and its robots live on.

## Conclusion

### What Robots Teach Us about Emergent Technology

I started this project with a couple of questions: Why have robots become popular stand-ins for beliefs about the possibilities of future technology, and how have they shaped the discourses about emerging technologies? As I began my research, another question emerged: What is it about the robot that makes it such a useful vehicle for these ongoing conversations about technology, and why is it that the very thing, the robot, that supposedly embodies technology oftentimes isn't actually made of any of the new technologies it supposedly represents?

Through this dissertation, I hope that I have shined some light on these questions. In my first two chapters, I highlighted a line of robots that started with an electrical box named Televox and terminated with a show-bot named Elektro. Throughout the evolution of these robots, I showed how popular understandings of technology and the robot from print media, trade shows, and world's fairs impacted the design of these Westinghouse robots as well as their place in the American home and in American popular culture.

In my third chapter, I shifted to Robby, a mid-century robot born in the '50s nuclear era. Whereas Elektro and earlier Westinghouse robots were provided as spokesmen for an array of Westinghouse products, Robby of *Forbidden Planet* stood as the thing that actually made the products. His round-metal torso was a mini-factory for nice-to-have items like dresses, whiskey, and whatever else was asked of him. Yet, the Robby outside *Forbidden Planet* represented something different. In his second film, *Invisible Boy*, Robby was a childhood friend and protector; and in the Japanese-made toys children played with, Robby was a small, brightly colored delicate object that could

easily be disassembled—his parts easily lost.<sup>405</sup> Through Robby’s various incarnations, I showed examples of transmediation, the acts of translating a thing into a different medium and exploring how these things across media are connected to form the whole network of meaning. In the case of Robby, this meaning stretched across the Pacific to Japan, where the American notion of new technologies as a prime producer of consumable goods met a Japanese sensibility of technological products as being finely tuned, brightly colored and well-crafted. As noted by Dan Fleming, these toys are not simply spinoffs of the primary text, but they generate their own textuality.<sup>406</sup> They also not only continue the story started in the film, but they provide a space that allows for meanings to be worked through and refined on an ongoing basis.

In my fourth and fifth chapters on *Battlestar Galactica*, I took this concept of transmediation a step further by looking at the shifting conversations between television producers and long-time fans of the *BSG* franchise, which spans over three decades. The acts of translating the Cylon robot into different media from show, to text, to website, to online MUSH, to short film, and then back again to television show, wiki, online gif or jpg icon create a myriad of cultural objects as well as paratexts that impact the meaning of the Cylon robot. These paratexts fill in the spaces between the text, the television industry and audience by, as cultural theorist Jonathan Gray notes, “conditioning passages and trajectories that criss-cross the mediascape, and variously negotiating or

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<sup>405</sup> In an *Antiques Roadshow* appraisal in Anaheim, CA, appraiser Noel Barrett remarks that a Robby look-a-like called Mechanized Robot is missing his front plate. Barrett notes that this is commonplace to have missing parts to robot toys and that there is an industry of replacement parts available to restore these toys. Video appraisal: Japanese Spaceman & Robot Toys, ca. 1960. *Antiques Roadshow*, pbs.org. Available at <http://video.pbs.org/video/2365233597/>.

<sup>406</sup> Dan Fleming, *Powerplay: Toys as Popular Culture* (Manchester: Manchester University Press, 1996), 8.

determining interactions among the three.”<sup>407</sup> In both *BSG* and Robby fan cultures, these paratexts multiplied quickly, rivaling the primary texts that they are based on. Films end, television series air their series finales, yet fans still continue to offer interpretive constructions of what they just saw: “Paratexts, then, become the very stuff upon which much popular interpretation is based.”<sup>408</sup> The paratexts around the Cylons complicated the shiny metal Cylon Centurion, giving it a voice and a deeper meaning that extended beyond the Cylon as a technical cog or robot soldier. Fans’ own technophilia complicated the Cylon further and elicited a shift in the *BSG* text, whereby the line between human and Cylon blurred and humans literally melded with their technologies to produce Hera, the Cylon-human hybrid. A backlash ensued when the paratexts around the show, which embraced the complications of the blur between human and robot, did not match up with the series ending where the Cylon reverted to being the end point in an evolution of potential technological threat that our contemporary society should look out for. Rather than representing the ambiguous, exciting shape of things to come, the Cylon at the end of the series became a simple symbol of the dangers of technology.

Many fans, on the other hand, had a different view of the Cylons. Cylons could be anyone. Cylons could be humans. Fans could be Cylons. Lines blurred between flesh and machine, between fan and network. One could argue that *BSG* fans’ backlash against the show’s ending indicates a resistance to the anthropocentric view of the *BSG* universe: *BSG* is not about teaching us that humans should be good to their technology; *BSG* is about teaching us that there is no distinction between human and technology.

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<sup>407</sup> Jonathan Gray, *Show Sold Separately: Promos, Spoilers, and Other Media Paratexts* (New York: NYU Press, 2010), 23.

<sup>408</sup> *Ibid.*, 26.



This blurriness between human and technological thing indicates a conceptual resistance to an anthropocentric view and an inclination to move into a posthuman discourse such as in an object-oriented ontology developed by game theorist and designer Ian Bogost. In *Alien Phenomenology, or, What It's Like to Be a Thing*, Bogost posits that anthropocentrism lurks beneath familiar arguments against it, and that a nonhuman alternative view lies in the creative attempt to understand the experienced world of objects that is not just restricted to our interactions with them: things in themselves can and do dictate the direction of human perception, imagination and language. Robots, in this respect, are not simply human constructs to represent new technology, nor are they things that we simply interact with. Rather, it is important to understand how these objects (Bogost refers to them as “units”) interact with each other outside of their relationship to human beings: “Lists of objects without explication can do the philosophical work of drawing our attention toward them with greater attentiveness.”<sup>409</sup> As I have followed the robot in this dissertation in the tradition of George Marcus’s “following the thing,” I have touched on several objects in isolation in this project, but lined up together, these creative artifacts serve as philosophical apparatus that is devoid of any hierarchy of meaning or any implied relationship to human existence. The objects interrelate with one another in the form of a “flat ontology” where hierarchy is removed as well as humans’ relative position to such objects. In these lists, the objects can operate with one another to form new understandings. They cease being ephemera or the end

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<sup>409</sup> Ian Bogost, *Alien Phenomenology, or, What It's Like to Be a Thing* (Minneapolis: University of Minnesota Press, 2012), 43. To create these lists, Bogost developed a Latour Litanizer, which is a digital program that generates “Latour litanies:” automated and supposedly random lists of heterogeneous and counterintuitive units that resist representative homogenization.

points in an anthropocentric cultural dialogue and take one as their own being. Here is my version of a list of units:

Alternating current, electric light bulb, toaster, Sarah Electric Button, vacuum cleaner, electrical substation, English translation of *R.U.R.*, *Metropolis*'s robot-Maria, Westinghouse Electric Corporation, Televox, Katrina Van Televox, Rastus, Herbert Televox, Willie Vocalite, housewife, House of Tomorrow, *Leave It to Roll-Oh*, Louise Lentz Woodruff's sculpture "Science Advancing Mankind," Westinghouse floor fan, Elektro: The Westinghouse Moto-Man, Westinghouse dishwasher, photo-electric cells, *The Middleton Family at the New York World's Fair*, Hall of Electrical Living, *Bride of Frankenstein*, Firestone Farmerettes, Palace of Electricity and Communication, Microvivarium, Mrs. Modern, Mrs. Drudge, Clarence the Free-Lance Robot, Elektro's Girlfriend, Sparko, Rosie the Riveter, Rosie the Robot, Gort from *The Day the Earth Stood Still*, Westinghouse Enchanted Forest, Mamie Van Doren, *Sex Kittens Go to College*, Thinko, Elektromobile, *The Jetsons*, *Forbidden Planet*, Robby the Robot, *Space Patrol*, *The Invisible Boy*, 1950s-era lab computer, Robert the Robot, Electric Robot with Baby, Robot Commando, Gismo, Pistol Action Robot, Space Trooper, *Star Wars*, The Hammacher Schlemmer Genuine 7-Foot Robby the Robot, *Battlestar Galactica*, Cylon Centurion, Cy the Cylon, Muffit the robot dog, twelve models of humanoid Cylons, Hera, "Mitochondrial Eve."

In listing the robots, films, appliances, pavilions, computers, film characters and machines covered in this dissertation, a relationship emerges that is not one where items exist in a hierarchy, but they instead exist in a flat ontology where no thing exists any more or less than any other thing. Also, film and television characters are present in this

list, but humans and human perceptions are left out of this grouping. This list of things highlights the existence of non-human objects over privileging human perception and a human-centric narrative. My dissertation, I hope, operates in a similar way as this list. It is not designed to be a tidy history of technology that traces an invention through versions of human-led development, use and disposal. Nor does it attempt to tie up a particular narrative into a life-cycle assessment. In offering a history of robots in America, I have not only described some of the social processes that are seeded in and articulated through the robot's construction. In this dissertation, I show that not only are technologies like analog robots recovered and reclaimed, but also the rich meaning and metaphors behind them are often reinvented, rebooted and reversioned. This leads to a complicated analysis of the robot that is not based in a human's perception of the thing as being canny or uncanny, cutting edge or lovably antiquated, but rather it establishes an ongoing transmediated, transnational conversation that is filled with overlapping and sometimes orthogonal threads of meaning. It is this meaning, which is messy and complicated, that makes up our understandings of technology.

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