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## Welcome to the world of tomorrow today: Matt Groening's Futurama as posthuman mediator

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WELCOME TO THE WORLD OF TOMORROW TODAY:  
MATT GROENING'S *FUTURAMA* AS POSTHUMAN MEDIATOR

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A Thesis  
Presented to the  
Faculty of  
California State University,  
San Bernardino

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In Partial Fulfillment  
of the Requirements for the Degree  
Master of Arts  
in  
English Composition:  
English Literature

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by  
Amanda Jill Taylor  
September 2009

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by  
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September 2009

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## ABSTRACT

Our interconnectedness with technology is a central tenet of posthuman theory. Donna Haraway suggests that this interconnectedness should not only be welcomed but that, through our dependence on and use of machines, we are already hybrids. Thus, we should not seek to cling to a humanist model of the human subject. Rather, we must begin to envision ourselves as the posthuman subjects we already are. Yet, because we are already posthuman, it is difficult to see what it means to be posthuman. Best known as the creator of *The Simpsons*, Matt Groening offers us a way to understand and critique our posthuman subjectivity in his animated series *Futurama*.

Set in New York in the year 3000, *Futurama* follows the adventures of Philip J. Fry and his friends. Fry is a 20<sup>th</sup> century pizza delivery boy who finds himself having to cope with life in the future after awakening from a 1000 year cryonic "nap." To this point, *Futurama* has, unfortunately, received little scholarly attention. In this thesis, I offer an explanation of posthuman theory along with a close analysis of both Fry and the robot Bender. These analyses respectively show how we are already posthuman as well as the material limitations of posthuman subjectivity.

Ultimately, I argue that through its humorous exploration of current (American) culture, *Futurama* offers us a way to both view and cope with our current posthuman state and our posthuman future.

## ACKNOWLEDGMENTS

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To my husband John for your support, help, and insights; to Holly for believing in my project; and, finally, to Matt Groening and David X. Cohen for creating such a rich and entertaining series.

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## CHAPTER ONE

### FUTURAMA AND THE POSTHUMAN

When Matt Groening's *Futurama* was originally pitched to FOX Network executives, they erroneously conceived of the series as *The Simpsons* in the future. Instead, Groening's new pet project introduced the executives to a future rife with aliens, mutants, and smart-alecky robots living side by side with humans. Despite some network resistance—mainly because Groening insisted on creative autonomy—*Futurama* debuted in 1999. *Futurama* immediately garnered a cult following amid the glut of prime-time animated series which included *The Family Guy*, *Dilbert*, *King of the Hill*, *South Park*, and, of course, *The Simpsons*. Since its early demise—greatly lamented by fans—in 2003, Groening's *Futurama*, which takes its name from the 1939 and 1964 New York World's Fair exhibits, has only grown in popularity thanks to syndication and the release of four feature-length motion pictures designed to bring the series to a "proper" close.<sup>1</sup>

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<sup>1</sup> On 8 June 2009, Comedy Central confirmed that *Futurama* will be returning to network television. Comedy Central has ordered thirteen new episodes of the series, which are slated to premiere in 2010.

Like its World's Fair predecessors, Groening's *Futurama* offers a glimpse of the future. Or, in the words of the 1939 New York World's Fair promoters, *Futurama* offers us a glimpse of the "world of tomorrow" (*Building the World* 5). The World's Fair exhibits of 1939 and 1964 assumed that the world of tomorrow would be built with—and thus retain in part—tools and aspects of the world of today. Groening's *Futurama* is no exception and capitalizes, as did its World's Fair predecessors, on the available technologies of the day. Our world now contains technologies which allow us to communicate without ever seeing a person face-to-face, purchase food, clothing, and even homes or cars online, and to attend school and receive academic degrees without setting foot in a physical classroom. Advances in biotechnology have especially blurred the lines between human and machine as pacemakers, insulin pumps, cochlear implants, and the use of prosthetic limbs have become almost routine. Biotechnology and (advanced) robotics specifically have made determining what counts as human more fluid and thus more difficult to ascertain. This difficulty, combined with both the rapid acceptance and rapid growth of technological innovations, can produce anxiety.

Francis Fukuyama both acknowledges and warns about technology-induced anxiety in his book *Our Posthuman Future*. He writes, "[The] deepest fear that people express" about technology is that "in the end, biotechnology will cause us in some way to lose our humanity—that is, some essential quality that has always underpinned our sense of who we are and where we are going" (101). Unfortunately, this quality remains unarticulated, which means that we may not recognize if the quality has been lost, though we may not be able to recognize the loss until we can name this essential quality. "Worse yet," Fukuyama continues, "we might make this change without recognizing that we had lost something of great value" (101). And yet, if we shun or reject technological advances, we may be losing something of even greater value. Perhaps our increased use of and dependence on technology will allow, and perhaps force, us not only to adapt, but to continuously reinvent ourselves as technologies advance and change. Indeed, it may be this ability to reinvent ourselves that proves to be the "essential quality" of humanity Fukuyama seeks to articulate. If so, this ability will become increasingly critical as our subjectivity becomes increasingly imbricated with biotechnology and robotics.

In his book *We Have Never Been Modern*, cultural studies theorist Bruno Latour discusses the imbrication of human subjectivity with science and technology. While Latour speaks on a general level, his claim suggests that, whether we realize it or not, we are continually shaped by our interactions with technologies such as biotechnology and robotics. This interconnectedness is a central tenet of posthuman theory. Donna Haraway argues that this interconnectedness—this hybridity—should be welcomed. She envisions a world where “people are not afraid of their joint kinship with...machines, [and are] not afraid of *permanently partial identities*” (154 emphasis added). In other words, we should not seek to cling to a humanist model of the human subject. Rather, we should “take pleasure in the confusion of boundaries,” particularly those between human and machine (150 original emphasis). To Haraway, boundaries are flexible and are created or dissolved as needed. Yet, despite N. Katherine Hayles’s insistence that we have already become posthuman, many people still cannot picture a future where we live side by side with autonomous intelligent machines, or find such a potential world frightening. What follows is a discussion of the impact and importance of the New York World’s Fair

*Futurama* exhibits followed by an explanation of posthuman theory which will show how both World's Fair exhibits and Groening's *Futurama* either anticipated or illustrate posthuman sensibilities. Ultimately, I argue in this thesis that Matt Groening's *Futurama* mediates our relationship to/with the posthuman by offering us a way to view our posthuman future which, in turn, enables us to come to terms with our current posthuman state.

The 1939 New York World's Fair was not the first in which the future was linked with technology, but no Fair before it "had been so explicitly, so self-consciously identified with the future" (Corn 45). In the official guidebook to the 1939 Fair, Fair president Grover Whalen writes, "The eyes of the Fair are on the future...in the sense of presenting a new and clearer view of today in preparation for tomorrow" (*Building the World* 36). In the spirit of this preparation, the Fair was going to "show the most promising developments of production, service, and social factors of the present day in relation to their bearing on the life of the great mass of the people" (*Building the World* 36). These developments included technological advancements, especially those in the realm of transportation, both of people and goods, that promised

to make life easier and simpler. Yet even as they looked to a technology-laden future, the Fair designers wished to glorify human accomplishments and showcase the "the picture of the interdependence of man on man" (*Building the World* 5). This interdependence was signified by the creation, sale, and exchange of machines and other technologies that would improve living conditions for all concerned. Indeed, for all of its emphasis on the future, we cannot—and should not—overlook the capitalistic undertones of the 1939 Fair. Indeed, it was the promise of expanded commerce and further technological innovations, both of which would contribute to better standards of living, which helped to sell the Fair designers' vision of the World of Tomorrow.<sup>2</sup>

Two exhibits are of particular note in the 1939 Fair: Westinghouse Electric's "mechanical man" Elektro and the General Motors exhibit *Futurama*, arguably the centerpiece of the 1939 Fair. Elektro was a seven foot tall, 264 pound walking, talking, and smoking robot with which the audience could interact, albeit in limited ways.<sup>3</sup> He responded to

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<sup>2</sup>The underlying capitalist economics of both the World's Fair exhibits and Groening's *Futurama* is worthy of its own exploration which, unfortunately, the limited scope of this project does not allow. A discussion of capitalism may, however, figure into specific discussions throughout the project.

<sup>3</sup> The gendering of Elektro suggests that even in 1939, people wanted mechanical creatures with which they could interact comfortably. Thus,

specific commands issued by an operator through a telephone and he could tell his own story via a 78-rpm record player embedded in his chest. Elektro's hands could also move enough for him to count on his fingers, though he was not completely dexterous. Elektro is particularly fascinating because he is one of the first robots to appear after the actual coining of the term by Karel Capek in his 1921 play *R.U.R. (Rossum's Universal Robots)*.<sup>4</sup> Elektro was limited, however, in his interactions and capabilities. He was not autonomous and did not react to his environment on his own. Even with these limitations, though, Elektro gave Fairgoers—some of whom would parent future roboticists—a vision of life with humanoid mechanical creatures.

As captivating as Elektro was, General Motors stole the spotlight with its transportation-themed exhibit

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Elektro needed to be gendered and then interact with "his" environment accordingly. Also, Elektro's humanoid form contributes to his approachability. To view a demonstration of Elektro's capabilities, see the DVD of *The Middleton Family at the New York World's Fair*. An excerpt from this film devoted to Elektro can be found on YouTube under the title of "Elektro the Smoking Robot: 1939 New York World's Fair."

<sup>4</sup> Capek's play highlights a relationship between humans and robots, or artificial creatures, which results in the ultimate destruction of the human race. Elektro's history is traced in James Renner's article "Robot Dreams: A Man's Quest to Rebuild His Mechanical Childhood Friend." In this article, Renner details how Westinghouse began work on robots as early as 1924, leading to Elektro's display in the 1939 New York World's Fair.

*Futurama*.<sup>5</sup> Housed in its own building, *Futurama* shuttled visitors through a fifteen minute guided tour of the World of Tomorrow on motorized, air-conditioned seats. *Futurama* visitors were told that "since the beginning of civilization, transportation has been the key to Man's progress—his prosperity—his happiness" (Saab 201).

*Futurama* took visitors, who waited up to two hours or more to see the exhibit, into the world of 1960—only 21 short years into the future. The ride culminated in a glimpse of a future city where advancements in transportation and infrastructure—primarily multi-lane highways and better, faster cars—allowed city workers to separate home life and work life. The city became the place of business; the suburbs, or more preferably the country, became the place of domesticity. Cities were optimized for automobiles and highways were straight and efficient, cutting the shortest paths possible between work and home.

It is important to remember that the *Futurama* exhibit offered only a version of the world of tomorrow. The Fair designers claimed only to offer visitors the "best

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<sup>5</sup> For more information on the exhibit itself, see the GM pamphlet *Highways and Horizons* and the official guidebook of the 1939 New York World's Fair: *Building the World of Tomorrow*. Multiple DVDs and other books are available on both GM's *Futurama* as well as the 1939 Fair itself.



available tools" with which the visitors could "build the world of tomorrow" (*Building the World* 36). According to the Fair designers, these tools—particularly technological advancements or, more importantly, the promise of technological advancements—would "result in a better world of tomorrow" (*Building the World* 36). "Yours is the choice" to build this city, the designers said, leaving it up to visitors —and us along with them—to either accept the visions of a technology-laden and dependent society or set aside current and promised innovations to maintain the status quo (*Building the World* 36).

Incredibly, some of the World of Tomorrow envisioned in the 1939 *Futurama* exhibit became reality before General Motors reprised the exhibit in the 1964 New York World's Fair. Between 1939 and 1964, automotive technologies improved, specifically those that allowed for faster speeds and increased engine power. Cars and car culture began to spread across the United States, necessitating changes in infrastructure. These changes were enacted in The Federal-Aid Highway Act, which created the Interstate system and was signed into law by President Dwight D. Eisenhower in

1956.<sup>6</sup> Since then, the interstate system “has been part of [American] culture—as construction projects, as transportation in our daily lives, and as an integral part of the American way of life.”<sup>7</sup> Another important development for transportation—or potential transportation—was entering space. The Soviet Union’s launch of Sputnik I in 1957 heralded the beginning of the space race and spurred the United States into action, resulting in the launch of Explorer I only eighty-four days after Sputnik I. Both Russia and the United States have since maintained a presence in space, leaving open the possibility of humans more permanently inhabiting space in the future.

*Futurama II*, exhibited at the 1964-65 New York World’s Fair, incorporated and capitalized on the then recent forays into space to showcase how life might be in space and other extreme habitats. Set in 2024, *Futurama II*—like its 1939 predecessor—claimed and illustrated that “mobility [is] the key to human advancement” (*Let’s Go* 3). Visitors to *Futurama II*, some of whom may have seen the 1939 exhibit

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<sup>6</sup>For more on the development of the interstate, see the Department of Transportation site: “History of the Interstate.” For a critical investigation of car culture, see Jane Holtz Kay’s 1998 work *Asphalt Nation* or John Jakle and Keith Sculle’s 2004 work *Lots of Parking: Land Use in a Car Culture*.

<sup>7</sup>This discussion can be found at the Department of Transportation’s site “History of the Interstate.”

as children or adolescents, sat in comfortable, moving chairs and were "whisked through the darkness of outer space" to view lunar exploration bases, a manned space station and finally "the outline of [Earth's] continents and oceans" (*Let's Go* 5). Once back on Earth, exhibit-goers visited various human settlements in diverse and extreme habitats. Safe in their comfortable chairs, they burrowed into the Antarctic ice caps, relaxed in underwater resorts, watched as the rainforest was tamed, and reveled in "the graceful beauty of multi-lane highways which have tunneled through towering crags and swept across awesome canyons" in the desert (*Let's Go* 7).

An underlying assumption of both *Futurama* and *Futurama II* is that without advancements in transportation, human advancement is not possible. Both exhibits showcase this assumption in the concluding portion of their show: the city of the future. In 1964, visitors glimpsed the Metropolis of Tomorrow, which was "planned and organized for the greatest utilization of space, facilities and people—with emphasis on mobility" (*Let's Go* 7). Both cities of the future were carefully planned and executed on a scale model to showcase machines, particularly GM's latest products. Residents of both cities, then, may have

lived somewhat mechanical lives, bound by the schedules of buses, trucks, cars, spaceships, etc. Technology would have dictated the pace of living. In short, humans would have to come to irrevocably rely on increasingly sophisticated machines in order to sustain their way of life. While more evident in 1964's *Futurama II* exhibit, the 1939 *Futurama* also shows, or at least anticipates, such reliance.

Our reliance on technology has only increased in the forty-plus years since the 1964 New York World's Fair. Arguably, part—if not most—of what makes us who we are as human is our relationship with science and technology. Indeed, Athena Athanasiou reminds us that we should “look at technology not as an organic instrumental totality of fulfillment or alienation, but rather as a *condition of the human* and the fractionings that form the scarred horizon of its cultural signification” (125 emphasis added). Though Athanasiou's use of “technology” seems to allow for a broad definition of the term, she quickly narrows her focus to a discussion of biotechnologies and the resulting biopolitics, suggesting that the technologies that have the potential and/or ability to augment the body are those that require both attention and regulation. Both biotechnology and advanced robotics have the potential to dramatically

affect the (re)configuration of the human subject and will, for the bulk of this project, constitute the term "technology." I argue along with Donna Haraway, N. Katherine Hayles, and Rodney Brooks, among others, that human subjectivity is inextricably and irrevocably linked with technology.

Indeed, our interconnectedness with technology is central to the posthuman, which Eugene Thacker describes as "a means of managing the human and the technological domains" (93).<sup>8</sup> Thacker continues, "Posthumanism is, in a sense, an ambiguous form of humanism, inflected through advanced technologies" (93). For the purposes of this project, the posthuman assumes that the human subject is irrevocably dependent on some form of biotechnology and/or robotics. Such an association both disrupts the liberal humanist model and signifies its imminent obsolescence. To understand more fully what this may mean, we must briefly revisit what is meant by humanism and/or the liberal humanist model.

A major assumption of the liberal humanist model is that "the human is defined by its separation from the

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<sup>8</sup> For the purposes of this project, the terms *(the) posthuman*, *posthuman theory*, and *posthumanism* can and will be used interchangeably.

world, that it has an interiority that is set off against the exteriority of the objective outside world" (Mansfield 23). Or, what makes humans human is an inner self that is or can be shielded from outside influences such as other humans and technology. By maintaining this separation, humans have the ability to observe the world and, ostensibly, remain unaffected by what goes on in it. Posthumanism does not seek to recuperate or rehabilitate this model of subjectivity, even though it may not necessarily be willing to give up some notion of what may constitute "the human." Rather, the posthuman seeks to articulate what does constitute the human subject, particularly in conjunction with biotechnology and advanced robotics. Thacker writes, "On the one hand, the posthuman invites the transformative capacities of new technologies," which would require the interaction with outside influences previously shunned by the liberal humanist model (94). In the posthuman, then, we see that technology is not something to shun or revile. Rather, technology is one of many things that can and does contribute to the configuration of the human subject.

Thacker complicates his own definition of the posthuman, however. He writes, "The posthuman [also]

reserves the right for something called 'the human' to somehow remain the same throughout [the] transformations" invited by new technologies (94). According to Thacker, then, posthumanism seeks to preserve some "essential" humanness even in the face of the (potential) transformation of what counts as human. Unfortunately, Thacker, like Fukuyama, fails to articulate what this "essence" may be, further obscuring what constitutes the posthuman subject. What may help us is to remember that in the posthuman, nothing can be labeled for certain. N. Katherine Hayles claims that the terms "'human' and 'posthuman' coexist in shifting configurations that vary with historically specific contexts" (6). In other words, we can call ourselves "human" in one context and "posthuman" in another context, dependent, perhaps, on the extent of our relationship with biotechnology and advanced robotics. Indeed, it may be this ability to continually redefine ourselves that persists as we move away from the liberal humanist model toward a posthuman way of thinking.

The cyborg, defined by Donna Haraway as a "hybrid of machine and organism," is a governing image of the posthuman (149). The cyborg blurs boundaries, particularly those between humans and machines, and this blurring

(potentially) allows us to inhabit multiple subject positions simultaneously. Haraway welcomes this hybridity and urges us to take pleasure in, or at least learn to be unafraid of, both the blurring of boundaries and a state of permanent partialness (150, 154). This permanent partialness does not have to be literal, however. Haraway does not specify that the machine and organism need to be permanently grafted together in a singular body. Rather, it is the dependence of the organism on the machine that renders the organism a cyborg. Our increasing dependence on technology in our everyday existence shows us already to be the hybrids Haraway describes. We are in some ways unable to function without our machinic parts, however simple the machine may be; this inability to function without the machine irrevocably makes us cyborgs. Thus, we have lost our organic innocence because we no longer depend solely on nature and, in some cases, have supplanted nature in our quest to optimize our functionality. We are, then, in a "cyborg world" and, accordingly, must begin to live in connection with all of our Others, especially our machinic Others (Haraway 156).

Hayles supplements Haraway's conception of the cyborg with her claim that "central to the construction of the



cyborg are informational pathways connecting the organic body to its prosthetic extensions" (*How We Became 2*). Like Haraway, Hayles does not specify that these extensions be permanently affixed to the body. Ultimately, for Hayles and Haraway, the cyborg cannot or should not be made to inhabit an either/or binary. Rather, the cyborg employs an "and" function while simultaneously inhabiting multiple spaces. This multiplicity is fundamental to the posthuman as advancing technologies, which have already made us adept multi-taskers, create even more spaces for us to inhabit.

Hayles takes issue with the described cyborg, however, because it presumes not only that information can be separated and is separable from the body but also that information can remain unchanged after the separation occurs. She writes, "This conception of the cyborg presumes a conception of information as a (disembodied) entity that can flow between carbon-based organic components and silicon-based electronic components to make protein and silicon operate as a single system" (2). While Hayles does not insist on a literal cyborg, she does insist that materiality is an integral part of subject configuration, whether that material is flesh and/or metal. For Hayles, information and the body cannot and should not be

separated; to do so fundamentally changes both the information and the body, regardless of substrate. In this vein, Hayles warns, "When information loses its body, equating humans and computers is especially easy, for the materiality in which the thinking mind is instantiated appears incidental to its essential nature" (*How We Became* 2). In other words, the conflation of humans and computers via disembodied information ignores, or worse, negates the material distinctions between the two, suggesting that information is all that matters and that a body, at best, is extraneous.

Hayles argues that in both the posthuman present and the posthuman future, human subjectivity is bound with machines. She claims that a posthuman existence "configures human being so that it can be seamlessly articulated with intelligent machines" (*How We Became* 3). This suggests at least three things about the posthuman: humans and machines could live side by side as equals; humans and machines could depend on each other for survival; the lines between human and machine are so blurred as to have disappeared. Hayles continues: "In the posthuman, there are no essential differences or absolute demarcations between bodily existence and computer simulation, cybernetic mechanism and

biological organism, robot teleology and human goals" (3). Thus, it may be difficult to tell when/where the human ends and the machine begins or vice versa. It may even be difficult to tell if a human is an "actual" human or merely a simulation. Ultimately, in the posthuman, humans will be so interconnected with machines that we will be unable to conceive of ourselves without taking machines into account. Some of these machines could be so humanlike that we will accord them human rights, equating their existence with our own. Although we already live in tandem with machines, we have yet to create a fully autonomous, intelligent machine that could co-exist with us as an equal.

For now, autonomous intelligent machines exist as our equals only in science fiction. Rodney Brooks claims that there are "machines of science fiction, and there are the machines we live with. [These are] two completely different worlds. Our fantasy machines have syntax and technology" and can thus interact with us on a level to which we are accustomed. Additionally, Brooks claims that "what separates people from animals is syntax and technology" (1). It would seem, then, that when our machines attain syntax, then they would, could, or should be considered, if not people, then at least artificial people. When this

happens, it will become more difficult to say with certainty what counts as human. Brooks goes on to claim that "in just twenty years the boundary between fantasy and reality will be rent asunder. Just five years from now [2001,] that boundary will be breached in ways that are as unimaginable to people today as daily use of the World Wide Web was ten years ago" (5). Breaking this boundary depends on how easily humans will interact with advanced robots. This interaction depends at least in part on robots that are both embodied and situated. For Brooks, situatedness and embodiment are fundamental to a robot's successful interaction with their environment: "Having a body provide[s] a natural grounding" for robots to interact with their world and allows the robot to be situated, or to "exist in an environment and react to it" (67, 69). Robots that are both embodied and situated have more potential for autonomy. The more representations we have of helpful and/or benign autonomous machines—such as those in Matt Groening's *Futurama*—the greater the chance of accepting the realization of these creatures, should they ever come to be.

To further emphasize both the importance and consequences of situated embodiment, Brooks discusses the

work of George Lakoff and Mark Johnson. According to Brooks, Lakoff and Johnson "have argued that all of our higher-level representations of language and thought are based on metaphors for our bodily interactions with the world" (67). For example, we can speak of the warmth of someone's love because we have felt someone's body heat in an embrace; we can discuss the passage of time because we are mobile. Brooks claims, "Each [of our] time metaphors is rooted in an understanding of the physics of the world and how we can move about in it" (67). Thus, not only does a body matter but the *form* of a body also matters, particularly if we desire an artificial creature who shares our understanding of the world around us, which our "fantasy machines" would. To this end, Brooks argues that our fantasy machine "will have to develop the same sorts of metaphors, rooted in a body, that we humans do. For this reason, it is worth exploring the building of a robot with human form" in addition to other types of robots to perform other, perhaps less interactive but nonetheless important, functions (67).

Like Brooks, Hayles insists that embodiment and situatedness are important aspects of being, particularly if we can shift from "human" to "posthuman" dependent on

context (*How We Became* 6). One of Hayles's concerns is that the "posthuman view privileges informational pattern over material instantiation" (*How We Became* 2). The privileging of the informational over the material may imply that changes in the body would not affect informational patterns or flows. A missing limb, for example, would make no difference to the body's flow of information because the limb never contributed to the flow of information. Rather, the limb was simply an appendage carrying out instructions. Hayles, however, contends that information changes from body to body. Thus, the loss of a limb profoundly affects the body's informational flow because the limb was providing sensory input to the body. Instead, the body (and individual) becomes hyperaware of the missing limb because the information provided by the limb is no longer available. Indeed, the situation becomes more complicated when a prosthetic limb is substituted for the "natural" limb.

Though a prosthetic arm could take the place of a "natural" arm, for example, its use requires concentrated effort and careful attention. The prosthetic arm disrupts the inward flow of information to the body because the user must consciously direct the movement of the prosthetic arm

and must ensure that the prosthesis does its job, where the use of a "natural" limb would require no such effort. Hayles does allow, however, that we can learn to use a prosthetic limb as smoothly as a natural limb, and, perhaps even come to see the prosthesis as natural. This is possible if we subscribe to another assumption which Hayles claims undergirds a posthuman view. She writes, "The posthuman view thinks of the body as the original prosthesis we all learn to manipulate, so that extending or replacing the body with other prostheses becomes a continuation of a process that began before we were born" (*How We Became* 3). Hayles maintains that materiality and information cannot be separated without consequence; the presence of a new prosthesis will change the flow of information through and around the body.

We, then, are not separable from our environment as the liberal humanist model would suggest. Rather, we are simultaneously material and informational beings, ultimately rendering us permanently partial and, thus, already the cyborgs and posthuman beings Haraway and Hayles claims that we are. For Hayles and Haraway, the loss of the liberal humanist subject is not something to mourn. Rather, it is something to first acknowledge and eventually

celebrate. Both Hayles and Haraway see machines as our future. Additionally, they see a progressive interaction of humans and machines, perhaps to the point where Hayles's vision of a seamless articulation between humans and intelligent machines occurs (*How We Became* 3). Indeed, Haraway hopes that we will "take *pleasure* in the confusion of boundaries" as we advance in(to) the posthuman (150 original emphasis).

We may not realize it, but we already engage in the pleasure Haraway anticipates. We spend much of our discretionary time with interactive machines, particularly videogames and computers. Indeed, we are so accustomed to our interactions with machines and the pleasure we derive from them, that it takes something like Matt Groening's *Futurama*, which depends on our immersion into the world of machines, to make us realize what we already have and where we may be headed. In *Futurama*, for example, robots—a staple of science fiction which often acts as a metaphor or stand-in for humans—are ubiquitous and are even treated as world citizens; this citizenship includes the right to vote, provided the robot is not a convicted felon.<sup>9</sup> Rodney

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<sup>9</sup> In the episode "A Head in the Polls" Bender is not allowed to vote in the upcoming Presidential election. Fry assumes Bender cannot vote



Brooks writes, "Many people have thought about the consequences" of robots that are more intelligent than humans, and "in general there have been two sorts of prominent views of what the future may hold: one is damnation" or dystopia and "one is salvation" or utopia (198). A dystopian or damnation paradigm contains machines that can repair and reproduce themselves, that have intelligence but no emotions and thus no empathy for humans, that have a desire to survive and control their environment to ensure their survival, and that, ultimately, we will be unable to control when they make decisions (Brooks 200). This paradigm is featured in such films as *Blade Runner* and *The Terminator* series. The utopian or salvation paradigm, on the other hand, holds that "intelligent robots will provide a path to immortality" (Brooks 204). This paradigm also offers scenarios in which robots will explicitly seek to become more like humans and achieve equal standing with humans. We see this paradigm in such films as *Artificial Intelligence: A.I.*, and *I, Robot*.

Matt Groening's *Futurama*, on the other hand, illustrates a third paradigm which Brooks calls the "null

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because Bender is a robot. Bender corrects Fry's assumption: "Nope. Convicted felon." This suggests that robots, at least in *Futurama*, are subject to law.

alternative" (209). In this alternative, "not much is going to happen that is different than the past. The foreseeable future will be much like the recent past. The very increasing pace of innovation and change that we have all experienced will just continue" though it may slow down to something more manageable (Brooks 209). In depictions of this alternative, the future is not frightening. On the contrary, the future is familiar, underscored by many elements of today, ranging anywhere from government to economic and social structures, but always including some level of technological dependence. It is even possible that we would forget that we are seeing the future. Brooks claims that under the "null alternative, the third millennium will be rather like the second, but with even better plumbing" (210). In this vein, perhaps the fourth millennium which we see in *Futurama* will be much like the third with out-of-this-world plumbing.

*Futurama* follows the (mis)adventures of Philip J. Fry, a 20<sup>th</sup> century pizza delivery boy who was cryogenically preserved by accident after stumbling into a preservation chamber during a New Year's Eve delivery. He wakes up 1,000 years later on December 31, 2999 to a new New York "that is equal parts George Jetson and George Orwell" (Hamilton 1).

In this new New York, "the cross-town bus is no more; in its place is a pneumatic tube that whisks commuters to their destinations—and slams them into walls when they get there" along with Radio City Mutant Hall and Madison Cube Garden instead of Radio City Music Hall and Madison Square Garden (Hamilton 1). Upon his waking in the future, Fry becomes our vicarious link to this future. By watching Fry adapt to his surroundings—and he adapts with surprising aplomb and enthusiasm—we adapt to Groening's vision of a world of tomorrow built with and incorporating the tools of today.

One of Fry's first tasks in this new future is to find a job, which he eventually does at Planet Express, an intergalactic delivery company loosely based on FedEx. It is at Planet Express, and through its varied delivery jobs, that we see the extent of Groening's future. In this future humans coexist not only with robots, but with mutants and aliens. Fry's friends and coworkers at Planet Express include all four categories of beings. Along with Fry, the human contingent consists of Hermes Conrad, an anal-retentive bureaucrat and Jamaican Olympic-class limbo player, who manages the office; 160-year old inventor Professor Hubert Farnsworth, Fry's (30x) great-nephew, who

owns Planet Express; and Amy Wong—a Martian engineering intern of Chinese descent whom the Professor employs because “she has the same blood type” as he does (“The Series Has Landed”).

Mutants, aliens, and robots are represented by Leela, Dr. Zoidberg, and Bender respectively. Turanga Leela is the pilot of the Planet Express delivery ship. She is a cyclopean humanoid mutant whose parents abandoned her at an orphanarium (a cross between an orphanage and sanitarium) so she would have a better life.<sup>10</sup> Dr. John Zoidberg, staff doctor, is a bipedal, lobster-like crustacean from the planet Decapod 8 and suffers from an inferiority complex and lacks knowledge of basic human anatomy.<sup>11</sup> Finally, Bender Bending Rodriguez is a walking, talking, smoking, womanizing robot, possibly descended from Elektro, the walking, talking, smoking robot from the 1939 New York World’s Fair. Like all robots in *Futurama*, Bender requires

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<sup>10</sup> In *Futurama*, mutants live underground in New New York’s sewer system and are not allowed up on the surface except when granted a once-in-a-lifetime one-day pass as seen in the episodes “Leela’s Homeworld” and “Less Than Hero.” This segregation is one way that *Futurama* demonstrates that even in a technological future, racism or a similar type of discrimination will endure. In fact, the perpetuation of these types of problems illustrates *Futurama*’s resistance of utopian ideals as well as the fact that *Futurama* mirrors the problems of today.

<sup>11</sup> Executive producer David X. Cohen claims that Dr. Zoidberg is an inversion of “Bones” McCoy from *Star Trek*—a human who often had to work on alien life forms with little or no knowledge of alien anatomy. For more parallels between *Futurama* and *Star Trek*, see Chris Baker’s “Back to the *Futurama*.”

alcohol to function and is supposed to adhere to strict programming, though this programming can be altered. In Bender's case, this alteration is usually due to surges in his electrical input, both unexpected and self-inflicted.<sup>12</sup> Also, like many robots in *Futurama*, Bender has a distinct personality that, if not for his metallic body, we could almost call human. Fry's interactions and friendships with all of these characters gives us a glimpse of not only how easily navigated the posthuman future may be, but also how pleasurable it may be.

Although primarily a comedy, *Futurama* has a serious purpose. Describing his vision for *Futurama*, Groening says that he is hoping to "nudge people, jostle them a little, wake them up" to what is going on around them (qtd. in Doherty). "And in my amusing little way," Groening continues, "I try to hit on some of the unspoken rules of our culture, and by setting the show in the future, maybe we can get away with pretending the comments on our time" are merely elements of a time not too far distant from us (qtd. in Doherty). Groening also says that his work, including *Futurama*, is all about trying to "provide another

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<sup>12</sup> Robots can, in fact, take pleasure from free-flowing electrical sources and can "jack in" to them at leisure. This is more fully explored in the episode "Hell is Other Robots."

way of looking at stuff" and helping viewers "try to deal with... all the external things we're being bombarded with" (qtd. in Doherty). My project is to illuminate how Groening helps viewers recognize, cope with, and anticipate both our arrival at and progression within a posthuman culture.

A specific issue *Futurama* helps us deal with is the increasing "humanity" of machines which Brooks describes. He claims that machines are "now becoming autonomous in the areas that bypassed them in the industrial revolution. We are starting to see intelligent robots that can operate in unstructured environments, doing jobs that are usually thought to still require people" (11). While this could be interpreted as a dystopian "machines take over the world and eliminate humans" outlook, Brooks reminds us that these robots are "artificial creatures," not simply machines (11). The use of "creatures" suggests that the coming robots are not merely automatons; rather, they are separate, distinct beings, akin to humans but no longer subject to them. Brooks further contends that our "relationship with these machines will be different from our relationships with all previous machines. The coming robotics revolution will change the fundamental nature of our society" (11).

Brooks, Hayles, and Haraway claim that a new humanity awaits us as we progress in our posthuman state. We are not losing ourselves; rather, we are changing, evolving, adapting, and perhaps even *improving*. If this is the case, the posthuman is nothing to fear, especially if—as Hayles insists—we have already become posthuman. Many do fear the posthuman, however, due to the blurring and dissolution of boundaries perpetuated and embodied in (the image of) the cyborg. Because cyborgs can claim membership across and between boundaries, the creation of new boundaries must include the promise of their dissolution. Boundaries, then, become temporary at best because as we progress in (to) the posthuman, fitting into neat categories will become both increasingly impossible and increasingly impractical.

The inability to fit into neat categories is a burden of posthuman citizenship and a source of anxiety. I argue that *Futurama* mediates this anxiety and allows us to come to terms with it as we watch Fry's relationships with Bender and other technologies. Fry is our proxy in the 31<sup>st</sup> century. Studying Bender gives us insight into an autonomous and interactive/interacting robot that has yet to be perfected but is very much desired. A separate, more in-depth examination of these two characters will help us

see not only how, indeed, we may become more like machines and machines become more like us but, more importantly, what it means to be a posthuman subject.



## CHAPTER TWO

### WE ARE ALREADY CYBORGS:

#### FRY, BIOTECHNOLOGY, AND ROBOTICS

Life in the 21<sup>st</sup> century would be difficult, or at least inconvenient, without machines and other technologies. In the United States particularly, we have, as Donna Haraway indicates, grown accustomed to both the ubiquitousness and the invisibility of machines. In fact, due to our dependence on machines and technology, we are, as Haraway indicates "chimeras, theorized and fabricated hybrids of machine and organism; in short, we are cyborgs" (150). The hybrid nature of the cyborg lends itself to continuous reconfiguration, as Haraway notes: "The cyborg is a kind of disassembled and reassembled, postmodern collective and personal self" (163). The cyborg, then, is a paradox; it incorporates disparate physical components and inhabits multiple spaces at once. Indeed, multiplicity is an essential marker of the cyborg. Haraway writes, "The cyborg is resolutely committed to partiality" and "has no truck with...seductions to organic wholeness through a final appropriation of all the powers of the parts into a higher unity" (150, 151). In other words, the cyborg's

multiple components do not, cannot, and will not resolve into a unified whole. Rather, the cyborg will remain the constituent of its disparate but cooperative parts.

Haraway describes three "crucial boundary breakdowns" or "leaky distinctions" which make the cyborg both literally possible and useful as a trope (151). First is the distinction between animal and human. Haraway argues that "[b]iology and evolutionary theory over the last two centuries have simultaneously produced modern organisms as objects of knowledge and reduced the line between humans and animals to a faint trace" (152). As we have come to see ourselves as (distant) kin to animals, we have also rethought our relationships to animals. In many American households, for example, pets are considered members of the family instead of "mere" animals and are, accordingly, often assigned human emotions; this is a cyborg way of thinking. Haraway writes, "Far from signaling a walling off of people from other living beings, cyborgs signal disturbingly and pleasurably tight coupling" (152). Tight couplings ensure the multiple natures of cyborgs; the addition or removal of a coupling fundamentally affects cyborgs.

The second and third "leaky distinctions" are related. The second distinction is that between "animal-human (organism) and machine" (152). We used to be able to tell when a machine was a machine, or when a machine had a human either in it or behind it. Haraway writes:

Now we are not so sure. Late twentieth-century machines have made thoroughly ambiguous the difference between natural and artificial, mind and body, self-developing and externally designed, and many other distinctions that used to apply to organisms and machines. (152)

Indeed, the collapse and/or loss of these distinctions has ensured that "the certainty of what counts as nature...is undermined, probably fatally" (Haraway 152-53). In other words, we can no longer rely on our senses to tell us if something is a machine or not.

The third and corresponding leaky boundary is that between physical and non-physical. Haraway reminds us that "[m]odern machines are quintessentially microelectronic devices: they are everywhere and they are invisible" (153). If machines are everywhere and invisible—and they are—we will have even less of a chance of determining what is machine and what is not. What we think is a dog may not be

a dog. What we think is another human may not be another human. Indeed, "People are nowhere near so fluid" as cyborgs, Haraway writes, because people are "both material and opaque. Cyborgs are ether, quintessence" (153). It would seem, then, that Haraway prefers cyborgs to people, particularly if cyborgs are more inclusive than people. Ultimately, Haraway's cyborg "is about transgressed boundaries, potent fusions, and dangerous possibilities" which already surround us and still await us (154). Tools such as biotechnology and robotics will help us transgress boundaries and achieve the fusions Haraway envisions.

As indicated in Chapter One, Rodney Brooks argues that advances in robotics will fundamentally change our society. Brooks argues that biotechnology will "change the fundamental nature of us" as humans (11). According to Brooks, biotechnology will transform not "just our own bodies, but also that of our machines," enabling the concurrent humanizing of machines and mechanization of humans (11). It will, then, become increasingly difficult to draw the line between human and machine, a difference already blurred by cyborgs. Fortunately, Matt Groening's *Futurama* helps us see both the creation and the blurring of these boundaries. *Futurama* assumes that we are cyborgs

while simultaneously jolting us into recognizing both our current cyborgness and that which makes us cyborg—biotechnology and robotics particularly—has larger implications for our future than we may realize. An examination of select Fry-centric episodes of *Futurama* will not only show how we are already cyborg, but will also explore the implications of the transformative potential within cryonics, nanotechnology, and robotics for both our contemporary posthuman state and our posthuman future.

The *Futurama* episode "Space Pilot 3000" introduces us to both Groening's world of tomorrow and the science of cryonics. We start, as did the New York World's Fair *Futurama* exhibits, with the familiar: Fry's world of 1999. We can sympathize with his distaste for a dead-end job and even the indignity of working on a holiday. We follow him on his delivery to Applied Cryogenics—a cryonic preservation facility—only to find out that the order was a crank call. We watch as a disgusted Fry slams the pizza down on a table and leans back in a chair to enjoy a cold drink. Just as he toasts to "another lousy millennium," he loses his balance and falls into a preservation chamber. He remains there for the 1000 years programmed into the chamber's timing mechanism. When Fry wakes and realizes

that he is no longer in 1999, he exclaims, "My God, it's the future! My parents, my job, my girlfriend, my friends, they're all gone... Yahoo!" Although his preservation was accidental, Fry is pleased with the second chance the future offers him. Indeed, at that moment, Fry is simultaneously who he was in 1999 and not at all who he was in 1999. The passage of time and the resulting changes in culture and environment have already reconfigured Fry's subjectivity, even though he is the same physically due to the viability of cryonics, one of several technologies taken for granted in *Futurama*.

Before we investigate the role of cryonics in *Futurama*, we must first distinguish between cryonics and cryogenics as the terms are often erroneously used interchangeably. Cryogenics studies the behavior of materials at ultra-cold temperatures. Depending on the coolant, cryogenic temperatures can reach almost to Absolute Zero, which is 0° Kelvin, -273.15° Celsius, or -459.67° Fahrenheit. In April 2007, the Cryogenic Society of America (CSA) issued the following statement asserting the difference between cryogenics and cryonics: "We wish to clarify that cryogenics, which deals with extremely low temperatures, has no connection to cryonics, the belief

that a person's body or body parts can be cryogenically preserved for possible revival later."<sup>13</sup> Though distinct from cryogenics, cryonics does employ cryogenic methods, which is likely the reason for the conflation of the terms.

At this point, cryonics is closer to science fiction than an actual tested science. Nevertheless, the Scottsdale, Arizona based Alcor Life Extension Foundation continues to market the potential of cryonics. Alcor defines cryonics as "the science of using ultra-cold temperature to preserve human life with the intent of restoring good health when technology becomes available to do so."<sup>14</sup> Of particular note is Alcor's rhetoric of "preservation" and "life extension" used to attract and retain potential members.<sup>15</sup> Either overlooked or accepted by

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<sup>13</sup> This definition can be found on the Cryogenic Society of America's website. In addition, Laurie Huget, Executive Director of the Cryogenic Society of America, Inc., gave an interview on 14 Sep 2008 which clarifies not only the distinction between cryonics and cryogenics, but also elucidates what it is that cryogenics studies. The interview can be found at the following site: <[http://www.cryogenicsociety.org/wp/wp-content/uploads/interview\\_huget.m3u](http://www.cryogenicsociety.org/wp/wp-content/uploads/interview_huget.m3u)>

<sup>14</sup> Unless otherwise noted, all Alcor quotes can be found on the Alcor homepage or the Membership Information and FAQ pages.

<sup>15</sup> Alcor members must first secure a means of funding the cryopreservation, usually done in the form of an irrevocable trust or insurance policy. If the Member uses an insurance policy, the policy must be enough to cover the initial cost of preservation as well as long term care. In addition to this policy, Alcor members must pay annual membership dues and expenses for Comprehensive Member Standby, or expenses for a team of cryopreservationists who are waiting for the Member's imminent death. For more information on these and other policies, visit Alcor's website at <<http://www.alcor.org>>. Particular paths of interest include Membership Info and FAQs.

Alcor members is Alcor's admission that cryonics is a "speculative life support technology" (emphasis added). This suggests that cryonics may never work, or if it does, it may take a very long time to come to fruition.

While this may be dismaying to some, Alcor says that it is committed—and thus its members are committed—to "carry the person forward through time, *for however many decades or centuries might be necessary*, until the preservation process can be reversed" (emphasis added). Cryonicists and cryonauts expect that "future medicine will include *mature nanotechnology* and the ability to heal at the cellular and molecular levels" (emphasis added). While this expectation may bring comfort to future cryonauts, the fact remains that contrary to belief and desire, cryonic preservation is *not* suspended animation. Those who undergo cryonic preservation are not frozen in time. On the contrary, current cryonic preservation is little more than cold storage of dead tissue in the hope that technology will someday circumvent or reverse death. Even so, Alcor optimistically anticipates the advent of this technology and offers two options to those interested in cryonic preservation. Neurosuspension, Alcor's preferred method, targets "preservation" of the brain, though the brain is



still encased in the head to reduce trauma.<sup>16</sup> The underlying expectation of neurosuspension is that future technologies will be available to provide new bodies of any substrate for Alcor members who have chosen this method.

Neurosuspension is considerably cheaper than full-body suspension, which Alcor calls an "inferior method."

Accordingly, Alcor charges a minimum \$160,000 for full-body suspension, almost twice the cost of neurosuspension.<sup>17</sup>

*Futurama* mediates both neurosuspension and full-body suspension. Fry experiences full-body suspension.<sup>18</sup> In "Space Pilot 3000," we discover the Head Museum—free on Tuesdays—which mediates neurosuspension. The Museum houses the heads of celebrities and other important figures from all eras. These heads—which are preserved in specimen jars and sustained in part by a watery substance invented by Ron Popeil—are able to hold conversations and, according to

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<sup>16</sup> Interestingly, neurosuspension reifies the Cartesian dualism by placing emphasis on the brain or mind over the body, assuming that because the "brain is the most important organ in the body" everything else is expendable.

<sup>17</sup> For more information on Alcor's prices, policies, and procedures, visit the following site: <<http://www.alcor.org>>

<sup>18</sup> The ease of Fry's preservation—akin to a flash-freezing—would be the ultimate dream of cryonicists and cryonauts alike. At this point, cryonic preservation is quite invasive.

Leonard Nimoy's head, "give [their] wisdom to those who seek it," resulting in "a life of quiet dignity."<sup>19</sup>

The use of cryonics in *Futurama* is what Colin Milburn would describe as a "novum" (266). Central to science fiction, a novum is a "scientific or technological cognitive innovation" or an "extrapolation or deviation from present-day realities" (Milburn 266). The novum "becomes totalizing in the sense that it entails a change in the whole universe of the tale" (Milburn 266). Indeed, without cryonics, it would have been impossible for Fry—and us by extension—to enter the 31<sup>st</sup> century.<sup>20</sup> Milburn defines nanotechnology as "the practical manipulation of atoms" or "engineering conducted on the molecular scale" (261). For some perspective, let us consider briefly the size of the nanoscale. The nanoscale ranges from 1-100 nanometers. One nanometer is a millionth of a millimeter; there are 25,400,000 nanometers in one inch. The nanoscale is important because "materials have different properties at

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<sup>19</sup> Born in New York in 1935, Ron Popeil is the founder of Ronco and inventor of such products as the Veg-o-Matic and Six Star Knives. Most of Popeil's products revolve around food processing or food storage. For more information on Popeil himself and/or Ronco's products, visit Ronco's website at <<http://www.ronco.com>>. Nimoy's head is actually voiced by Nimoy himself.

<sup>20</sup> We find out in later episodes of *Futurama* called "The Why of Fry" and part three of "The Anthology of Interest I" that Fry's preservation was essential to maintaining order and balance in the universe.

the nanoscale" and these different properties can have a major impact on a larger scale ("Nanotechnology: Big Things").

Though the nanotechnology required by cryonics is currently more theoretical than actual, there are current uses of nanotechnology. Nanotechnology exists in current industrial applications such as stain-resistant polymers in clothing and medical applications such as nano-level bandages.<sup>21</sup> Advocates of nanotechnology continue to laud its potential, claiming that nanotechnology has application in a variety of areas ranging from the production of alternative fuel sources to improving sporting goods. Indeed, as Milburn writes, nanotechnology's "bold scheme to completely dominate materiality itself" has led to prophecies that it will "accomplish almost anything called for by human desires" (262). The manipulation of materiality on such a microscopic level will "have irrevocable social, economic, and epistemological effects" and change our relationship to the world "so utterly that

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<sup>21</sup> For more information on current and possible applications of nanotechnology, visit the "Understanding Nano" website at <<http://www.understandingnano.com/nanotech-applications.html>> and/or the National Nanotechnology Initiative at <<http://www.nano.org>>.

even what it means to be human will be seriously challenged" (Milburn.263).

The most serious challenge to what it means to be human will come from nanobots, which are currently still theoretical. Nanobots are nanoscale robots that can be programmed for just about any purpose, including augmentation, repair, targeted delivery of pharmaceuticals, replication, and destruction. Indeed, if we were able to see what nanobots could do, we may, in fact, clamor for their development and subsequent integration into our daily lives even with the knowledge that nanobots may not always be used altruistically. In this vein, Milburn offers a series of "nanoscenarios," or use for nanobots, all of which suggest that "[h]uman bodies can be modified well beyond the confines of experience" (290). According to Milburn, a human could become another human, if the first human was "subjected to a herd of nanobots carrying the data set" for the second human (289). Such modification would undoubtedly affect subjectivity and could, theoretically, be inflicted unwillingly. Nanotechnology and the narratives it suggests/contains, are for Milburn an ultimate expression of the posthuman experience. He claims that, nanotechnology "undermine[s] our conceptions of

identity and origin(ality)" because it has the potential to "reproduce anything exactly, accurate in every atomic detail" (288). Thus, nanotechnology is "an active site" of "cyborg boundary confusions and posthuman productivity" (Milburn 270).

An episode of *Futurama* called "Parasites Lost" offers body-enhancing parasites as an analog to nanobots.<sup>22</sup> We watch as Fry ingests a "fresh" egg salad sandwich from a truck-stop vending machine despite Leela's advice that he not. He starts to feel funny, though he does nothing to remedy his symptoms. Later, an accident at work lands Fry at the doctor's office with a pipe through the stomach, what should be a mortal wound. As Dr. Zoidberg ponders a course of action, we hear sawing noises as the pipe suddenly breaks into two pieces and falls out of Fry's stomach. The resulting gaping and grotesque wound is quickly closed and healed before our eyes. Professor Farnsworth declares that Dr. Zoidberg must examine Fry's

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<sup>22</sup> The title of this episode is a riff on *Paradise Lost* by John Milton. Milton's poem centers around the temptation of Adam and Eve and their eventual expulsion from the Garden of Eden as now fallen creatures. At least in the Biblical text, the forbidden fruit in the Garden of Eden was supposed to make Adam and Eve like God. In a twist of the forbidden fruit, Fry's ingestion of the egg salad sandwich gives him abilities he previously did not have, rendering him, in some fashion, a cyborg. Interestingly, Haraway describes the cyborg as being "unable to recognize the Garden of Eden" and "without innocence" (151).

gastrointestinal tract, which Zoidberg proceeds to do. In the course of the procedure, we learn that not only were the eggs in Fry's egg-salad sandwich parasite eggs, but that the parasites are anything but normal. The parasites anticipate nanobots' capability to both repair and enhance on a cellular level and actually make Fry stronger and smarter. We see the worms Jazzercising his muscles, resulting in rippling biceps and washboard abs which Fry displays in a fight in the defense of Leela's honor. We see his newfound intellect while he is at lunch with Leela, with whom he has since fallen in love. He exclaims his love for her, adding that while he always has, "it's only been recently that [he's] been able to articulate [his] thoughts."

Meanwhile, Fry's friends are planning to rid him of the parasites because if they do not, they will "burrow so deep in Fry's bowel" that nothing will be able to eradicate them. Leela foils the plan, however, and admits to Fry that she "loves what [he has] become," leading Fry to suspect that she did not love the original Fry; she loved only the enhanced version. He determines to rid himself of the parasites to prove his suspicions. Using one of the Professor's inventions that allows users to create

virtually controlled micro-droids of themselves, Fry does battle with the leader of the parasites, the Lord Mayor of Colon.<sup>23</sup> In the course of battle, Fry undoes many of the enhancements the parasites have completed, especially in his brain where he severs new synapses, damages his motor-cortex, and threatens to damage the medulla oblongata. The parasites agree to leave but threaten that they will find their way back in some other food source. Though Fry is able to rid himself of the parasites, it may not be easy to rid ourselves of nanobots, should they be realized.

Nanotechnology works at such a small level that it would be nearly impossible to tell the difference between a nano-repaired cell and a "natural" cell. Nanotechnology, then, calls into question the idea of a "natural" body. Indeed, if nanotechnology lives up to its promises, we could extend the use of our bodies long beyond their "natural" life span, one of many ways we render ourselves as posthuman.

To this point, we have only seen subtle ways in which Fry is a cyborg. Fry's relationships with robots, however, more overtly mark him as a cyborg, particularly as his relationships become more intimate. Fry's first

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<sup>23</sup> The Mayor pronounces this as "cologne" but Fry insists that it should be pronounced like the body part.

significant encounter with robots is in "Space Pilot 3000" where he meets Bender while standing in line for what appears to be a phone booth.<sup>24</sup> Fry turns to Bender and exclaims, "Wow! A real-live robot! Or is that just some cheesy New Year's costume?" Fry recognizes Bender as, or presumes Bender to be, a robot due to Bender's metallic substrate, although Bender has a recognizable humanoid form. We would also expect robots to have a mechanical, emotionless voice, but Bender's reply—"Bite my shiny metal ass!"—is at once humanlike and full of recognizable emotion. It is clear that this robot, at least, has many qualities we can recognize in fellow humans, if not in ourselves. Fry responds to Bender's human qualities despite their material differences, signaling an aspect of his posthuman subject position.

A later interaction with Bender in O'Zorgnax's Pub reveals more clearly Fry's posthuman subject position.<sup>25</sup>

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<sup>24</sup> It is not until Fry is closer to the booth that we discover that it is a suicide booth, run by "Stop and Drop." For 25 cents, the standard cost of a call from a pay phone in 1999, would-be suicides can choose between a "quick and painless" or "slow and horrible" death administered by the machine. Bodies are then incinerated and the booth "cleared" for the next occupant. Thinking the suicide booth is a phone booth, Fry says he "would like to make a collect call," which the suicide booth interprets as a "slow and horrible" death.

<sup>25</sup> The 1999 counterpart to O'Zorgnax's Pub is O'Grady's Pub. There is an actual O'Grady's Pub in lower Manhattan (Tribeca), but it is unclear as to whether this is the O'Grady's in Groening's *Futurama*.



Fry excitedly insists that he wants Bender for a friend, suggesting at least two things. Fry sees Bender as an equal—at least to some degree—a step Rodney Brooks would applaud. Additionally, Fry is willing to reconfigure his subjectivity to include autonomous intelligent machines as part of his everyday world. In other words, Fry accepts—even revels in—his hybridity, something Haraway would applaud. Bender responds warily: “Well, OK. But I don’t want anyone thinking we’re robosexuals. So if anyone asks, you’re my de-bugger” (“Space Pilot 3000”). Bender’s response implies two things. First, Bender is not comfortable with any hint of physical hybridity that a more intimate relationship with Fry could entail. He desires to keep physical boundaries clear; Bender is a robot and Fry is a human. No mixing. Second, as the term “robosexual” suggests, sexual relationships between humans and robots are possible, but for Bender, such relationships are not necessarily something to celebrate.

The episode “I Dated a Robot” explores both the possibility and ramifications of sexual relationships between humans and robots. On a slow business day, the Planet Express crew is lounging around watching television. Fry berates them for just sitting around: “You’re all

sitting around like it's the boring time I came from. It's the distant future. Why aren't we out doing everything I ever dreamed of?" In the time of viable cryonics, advanced robotics, and, presumably, mature nanotechnology, there seems to be no limit to what can be done. In her desire to placate her friend, Leela suggests that the crew "take the rest of the morning off" and fulfill Fry's fantasies, which include destroying a planet, seeing the edge of the universe, and riding a dinosaur like a pony. After all of these are fulfilled, we learn that Fry has only two fantasies left: to be "invisible in a chocolate factory and be romantically linked with a celebrity." When Bender offers to pound Fry's head until Fry *thinks* he was romantically linked with a celebrity, Leela insists that it is actually possible for Fry to meet any celebrity he wants. Confused, Fry asks for clarification. Leela points to a passing blimp advertising Nappster.com and replies, "It's simple. You can download a celebrity's personality and appearance into a blank robot."<sup>26</sup> Without considering

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<sup>26</sup> Nappster is a direct reference to Napster, a music file sharing site created by Shawn Fanning where users could share MP3 files between each other without paying for the files. Napster began operation in 1999, came under fire for massive copyright violations, and was eventually shut down in 2001 under court order. Napster's logo and brand continue to be used by a subscription file sharing service which is now part of Best Buy. For information on the original Napster, see Spencer Ante's

how this could be possible, Fry enthusiastically agrees and the Planet Express crew returns to headquarters to start the process. After visiting Nappster.com, Fry decides that he wants to download Lucy Liu, which seems to be a simple procedure. Once he decided on Liu, Fry merely had to "load a blank robot into the drive" and wait for the download to finish. We watch with Fry as a previously faceless, unanimated metallic body seemingly comes to life with a projection of Lucy Liu, complete with voice and mannerisms.<sup>27</sup> Fry stutters out a greeting, to which the robot Lucy Liu—or Liubot—responds by wrapping herself around him and kissing him as they fall to the floor, reminding us of Fry's intentions in downloading Lucy Liu: a romantic, i.e. sexual, relationship with a celebrity.

The Liubot's creation presents several important things to consider. First, we must confront the fact that the Liubot is not really Lucy Liu. Indeed, the Liubot says that her "personality is mathematically derived from my

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2000 *Businessweek* article "Inside Napster." For information on the current Napster, visit the "Company Information" page of <<http://www.napster.com>>.

<sup>27</sup> Lucy Liu actually provided the voice for the Liubot in this episode. In fact, whenever possible, celebrity heads were voiced by the actual celebrities. The successful download also calls to mind Milburn's nanoscenario where a human, or in this case a blank robot, can turn into another human if the proper data set is available (289).

movies, proportionately weighted by box office receipts." In other words, the traits from the character in the highest-grossing movie were given precedence in the creation of the Liubot's personality, which clearly influences her interactions with Fry. Second, the Liubot is both gendered and was created by men solely for sexual gratification. In his 2005 book *The Souls of Cyberfolk: Posthumanism as Vernacular Theory*, Thomas Foster writes, "The mechanical woman represents a femininity safely under male control and therefore the possibility of dispensing with actual women, in a classically fetishistic operation" (98). Fry's inability to romance an actual celebrity has led him to manufacture an artificial substitute, a substitute that will be custom-made for him and programmed to respond only to him. While women could also create male robots like the Liubot, the creation of any sex-bot could serve to reify both gender and sexual boundaries the cyborg seeks to transgress.

On the other hand, the Liubot helps us acknowledge that "sexual representations...complicate the teleology of those forms of posthumanism" that, unlike Haraway's cyborg,

do not place importance on bodily experience (Foster 81).<sup>28</sup> In other words, sex (though not necessarily reproduction) remains an obstacle to the discounting of bodily experience, particularly as technologies designed to foster sexual gratification actually bring the body into sharper focus rather than allowing the body to fade into the background. We see this most clearly in Foster's discussion of teledildonics—apparatus used in cybersex. These apparatus attach to sexually sensitive areas of the body and serve to both heighten and simulate sexual stimulation. Foster writes, "Viewed from outside their shared cyberspace, it's not like [those using teledildonics] are having sex" even if their avatars are engaged in the act (86). Rather, "it's like their bodies have developed this massive state of arousal and independent sexual agency, distinct from what the persons are consciously engaged in..." (Foster 86). The people themselves are not having sex, but their bodies—via the apparatus—still go through the motions and all the accompanying sensations.

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<sup>28</sup> Chapter Three will take up the discussion of the ways in which sexual representations complicate both these teleologies and configurations of subjectivity in general.

The Liubot is an advanced form of teledildonics. Though Fry seems to be oblivious to her robotic nature, we are constantly reminded that she is, in fact, a machine running a complex program. Not only does she ask Fry to register her—as any good program operator would register a new piece of software—but she has square pupils like all robots in *Futurama*. More telling, however, is the distinct blue aura that surrounds her body. This aura persisted because Groening “wanted people to remember that she was [in fact] a holographic image projected over a metal body” (“I Dated A Robot” commentary). Despite the repeated reminders of the Liubot’s robotness, however, Fry continues to lose himself in her so much that his friends find the relationship unhealthy and decide to intervene, hoping to cure him of his fetish. Foster writes, “The defining feature of fetishism might be its belief that the interaction between subject and object” can be a give and take (90). Foster continues, explaining that “fetishism [is] characterized by a perverse and passionate belief in the ability of objects to relate back to us as much as we relate to them” (90). Fry adamantly insists that the Liubot can love him back. Just as adamantly, Leela insists that the Liubot can’t really love Fry because the Liubot is

"just a machine" that was created for Fry's gratification. Fry's indignant response, "So what if I love a robot? It's not hurting anybody," sends his coworkers into a gaping state of disbelief.

As part of their intervention, Fry's coworkers show him a "middle school hygiene video" that discusses the reasons why people should not date robots. In the video, the main objection to sexual relationships between humans and robots boils down to what is considered natural or normal and what is not. The video claims that "ordinary human dating" has a purpose—reproduction—but in a relationship between a human and an artificial mate, "there is no purpose, only pleasure." The video ends with the implication that if everyone dated robots, Earth would eventually be destroyed, a message endorsed by the Space Pope. Though ostensibly an argument against human-robot relationships, the video can also be seen as an argument against other "unnatural" or non-heteronormative relationships. The hyperbolic ending of the video mirrors the fire and brimstone arguments used against both pre-marital heterosexual relationships and, to a larger extent, any kind of homosexual relationship. On the surface, Fry's relationship with the Liubot is heteronormative—Fry is male

and the Liubot is female and thus acceptable. Their literal material differences, however, challenge the heteronormative hierarchy. Foster explains:

[To the] extent that heterosexual norms require gendered subjects to make sharp distinctions between desire and identification, the desire to have and the desire to be, the breakdown of that distinction in technofetishist cultures, the ambivalent placement of machines with respect to persons, can seem subversive.

(82)

The inclusive nature of cyborgs renders them subversive. Cyborgs do not—cannot—operate in an “either/or” binary. Rather, cyborgs employ an “and” function, which allows for both the grafting of new parts onto their bodies. Haraway writes, “No objects, spaces, or bodies are sacred in themselves; any component [of one body] can be interfaced with any other” component of another body (163). This interface already occurs in medicine with such procedures as organ and bone marrow transplants, skin grafts, and the attachment of prosthetic limbs. Indeed, our bodies do not have to “end at the skin or include at best other beings encapsulated by skin” (Haraway 178). Rather,



we are already made of disparate, interchangeable parts and as such, we are already cyborg.

In case we cannot see this interchangeability in ourselves, we can see it—and the clearest instantiation of Fry's cyborg nature—in the episode "The Devil's Hands Are Idle Playthings." In this episode, Fry is frustrated with his hands. He is trying to learn to play the holophoner, an instrument that seems to be a blend of oboe, clarinet, and futuristic dream machine. The holophoner is an extraordinarily difficult instrument to play; the holophonist must not only read and play music, but also produce the image which corresponds with the music. If the music is off at all, it will be reflected in both sound and image. For example, when Fry plays his recital song "The Grumpy Snail," we hear the melody, and then see a snail meandering its way across a tree branch. As the music becomes increasingly discordant, the image becomes correspondingly disturbing, culminating in a snarling, rabid snail described as "Too grumpy!" by a sobbing recital attendee. Fry is kicked out of the recital and his teacher labels him as unteachable. Frustrated, he stomps home to wallow. Once at home, Fry learns that Leela is attracted to musicians and he determines to do anything to be able to

play the holophoner. Complaining to Bender, Fry proclaims that he "could be the one sitting naked on [Leela's] couch if [he] could just learn to play" the holophoner.<sup>29</sup> Bender assures Fry that "You can. Although you may have to metaphorically make a deal with the devil. And by devil, I mean Robot Devil. And by metaphorically, I mean 'get your coat.'" .

In the very next frame, Fry and Bender are in Robot Hell. Fry tells the Robot Devil he has to "get really good without practicing." The Robot Devil smiles knowingly and confides, "Ah, yes. Hell is full of ten year olds who wanted exactly the same thing." After some more banter, the Devil offers Fry a pair of robotic hands from a "robot [Fry has] probably never heard of before" in exchange for Fry's hands. The robotic hands will help Fry play the holophoner and, in turn, woo Leela. Fry agrees, signs the contract, and waits for the Robot Devil to choose the robot whose hands will become Fry's. In a twist that the Devil calls irony and Bender calls coincidence, we learn that Fry will receive the Devil's hands while the Devil must make do with

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<sup>29</sup> Leela's ex-boyfriend Sean played the saxophone and used to sit naked on her couch improvising. She said that when he played, all of his faults disappeared and she could see an "incredible beautiful soul." Then she found "someone else's couch fibers on his butt" and they broke up.

Fry's hands. Fry accepts the deal and goes back to Planet Express where he boasts about his new appendages and performs a complex juggling trick to prove how much better the robotic hands are than his flesh hands.

In addition to illustrating his cyborgness, Fry's ability to manipulate the Robot Devil's hands can also be seen as a marker of his posthuman subjectivity. Hayles writes, "The posthuman view thinks of the body as the original prosthesis we all learn to manipulate, so that extending or replacing the body [or body parts] with other prostheses becomes a continuation of process that began before we were born" (*How We Became* 3). Though it takes Fry some time to acclimate to his new hands—they keep trying to kill him—they eventually lead him to his opportunity to woo Leela: Hedonismbot commissions Fry to write a holophoner opera. Fry accepts on the condition that he can write the opera for Leela.

Meanwhile, the Robot Devil has grown increasingly unhappy with his end of the deal with Fry and implements a "vastly circuitous plan" to take back his hands from Fry. The Devil tricks Bender into trading his crotch plate for an air horn, which Bender uses to deafen Leela. Unable to hear Fry's opera, Leela makes a deal with the Robot Devil,

promising her hand for a pair of robotic ears. When Fry refuses the Devil's newest demand to return his hands, the Devil calls in Leela's contract, revealing that she had promised him her hand in marriage. The choice is simple: Fry can give up the Devil's hands and save Leela—while losing the ability to play the holophoner and woo her—or let the Devil take her down to Robot Hell. Fry laments, "Destiny has cheated me by forcing me to decide upon the woman that I idolize or the hands of an automaton." Despite what he will lose by giving up the Devil's hands—fame, fortune, Leela's adoration—Fry surrenders the Devil's hands. The return of his flesh hands, however, also includes the return of the inability to play the holophoner properly, a fact made painfully clear after Hedonismbot calls for the resumption of the opera. Only Leela remains to hear how the opera ends, content in the all-human Fry before her. Leela's contentment, however, belies Groening's momentary exploration of the possibilities and implications of cyborg identity: while we may through technology transcend or escape the limitations of flesh, there is always some price to pay, some metaphorical devil to (prepare to) pay.

The episodes we have examined show that if we are to truly embrace our posthuman existence, we must not only take "pleasure in the confusion of boundaries" but also take "responsibility in their construction" (Haraway 150). Groening takes such pleasure in his creation of *Futurama*. Speaking of the possibilities of animation, he says, "There are no boundaries...If you can think of it and draw it, you can do it" (Mason 15). The only boundary is Groening's imagination. Likewise, as we progress in our posthuman world, boundaries will become increasingly flexible. With the maturation of nanotechnology and robotics, it may well be that if we merely think it, it can come to pass or into being. Seeing the play of boundaries in these episodes of *Futurama*, helps us to think of our boundaries of self as flexible, to see that we are already playing with these boundaries as we engage the technologies and machines around us.

If, as Brooks argues, we are becoming more like machines and machines are becoming more like us, it makes sense to explore the possibilities of robot subjectivity. In this exploration, we must pay particular attention to the roles of the body and materiality in the (re)configuration of said subjectivity. This is especially

important because, according to *Futurama* executive producer David X. Cohen, the writers could put robot bodies into more fantastic situations and positions than they could human bodies ("Space Pilot 3000 commentary"). This illustrates Haraway's claim that our "machines are disturbingly lively while we are ourselves are frighteningly inert" (152). Through its lively robots, *Futurama* explores the performative nature of subjectivity, particularly the idea of gender as performance. If robots are as malleable as Cohen's comment suggests, it is worth exploring the roles Bender performs and their corresponding subject positions in hopes of finding even more ways to cope with our current and future posthuman states.

CHAPTER THREE  
BEING BENDER: THE PERFORMATIVE NATURE  
OF SUBJECTIVITY

The claim that the nature of cyborgs, and all posthuman or postmodern subjects for that matter, is fluid is neither surprising nor new. This does not, however, preclude either an investigation into or a clarification of fluidity. According to Erin Calhoun Davis, the concept of fluidity is "variously construed as changing, unstable, inconsistent, and ambiguous" (101). With some qualification, the same adjectives can apply to posthuman subjectivity. Haphazard invocations of fluidity in human subjectivity are disingenuous, however.<sup>30</sup> Unqualified appeals to fluidity give the impression that fluidity and permeable boundaries mean that identification and its resulting subject positions are unbounded. Davis reminds us, however, that "[i]dentification occurs within a social regime of normative expectations and guidelines that shape everyone's possibilities for self-representation" (98). In other words, identity is very much bounded by culture.

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<sup>30</sup> For the purposes of this project, "identification" is considered synonymous with "subjectivity."

Indeed, much—if not all—of postmodern thought surrounding subjectivity posits that our choices for identification are, at best, limited to already pre-determined, normalized cultural constructs. Even if we defy these constructs, we are still upholding the norm, as it is, in fact, the defiance of the norm that defines the norm.<sup>31</sup>

Posthuman subjectivity, then, is not nebulous or ethereal. While technology may offer ways to transcend, overcome or blur boundaries, boundaries still exist. Also, as with human subjects, the posthuman body bears the marks of both culture and identification. As Haraway reminds us, "Bodies are maps of power and identity [and] cyborgs are no exception" to this (178). Indeed, one specific material body cannot possibly incorporate all of the possibilities of posthuman subjectivity; the inclusion of some aspects necessarily excludes other aspects, and the resulting identification manifests itself in the body.

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<sup>31</sup>Michel Foucault's work *Discipline and Punish* is the foundation for this argument. Through the bulk of *Discipline and Punish*, especially in the essay "The Carceral," Foucault argues that we are never outside of a normalizing system, that these systems produce specific types of bodies, and the lack of the "correct" body is grounds for discipline and punishment sufficient to produce the desired body. Foucault goes on to argue that, eventually, we internalize a system's norms and begin policing ourselves and others for the "proper" body and associated behaviors.



In her book *How We Became Posthuman*, N. Katherine Hayles seeks to (re)assert the primacy of embodiment in the configuration of the posthuman subject. She contends with roboticist Hans Moravec's vision of a future where we are able to download human consciousness into a machine, thereby escaping the limitations of the body.<sup>32</sup> The characters in William Gibson's *Neuromancer* and other cyberpunk science fiction works perpetuate/illustrate this propensity toward disembodiment/dematerialization. Hayles's dispute with Moravec hinges on the definition of information and embodiment. For Moravec's dream to come to pass, information must remain the same regardless of medium. Or, in other words, information must not have material consequences.

As Hayles argues, the role of the body/materiality and embodiment are often overlooked in both postmodern and posthuman theories of subjectivity. She insists that materiality is crucial to subjectivity. By calling the posthuman subject "a material-informational entity," Hayles asks us to consider the connection between the material

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<sup>32</sup> See Moravec's books *Mind Children: The Future of Robot and Human Intelligence* (1990) and *Robot: Mere Machine to Transcendent Mind* (2000) for a more detailed explanation of his vision of the possible future (uses) of robots.

(physical) and informational (interactive) aspects of subjectivity. She resists privileging one over the other, maintaining that both play important parts in embodiment. The connection between material and informational suggests that changing or shifting the informational aspect of the subject will necessarily affect the material aspect and vice versa. Though not as adamant as Hayles, Matt Groening's *Futurama* illustrates the importance and necessity of bodies with regard to subjectivity, which is most evident in his robot world. An examination of select Bender-centric episodes will illustrate both the importance and limitations of materiality and embodiment in the continuous configurations of subjectivity and the ways in which *Futurama* prepares us for citizenship in a world where both humans and machines are constantly changing.

First, I wish to clarify and qualify some of the terms I will be using, starting with *body* and *embodiment*. Hayles explains the necessity of materiality in the construction of subjectivity while at the same time trying to distinguish between these terms. She claims that the concept of the body is abstract and that the body is a "cultural construct" which influences, but does not outrightly determine, "embodiment" ("The Materiality of

Informatics" 148). Hayles writes, "Embodiment differs from the concept of the body in that the body is always normative relative to some set of [cultural] criteria" and that embodiment is "contextual, embedded within the specifics of time, place, physiology, and culture that together comprise enactment" (*How We Became* 196). Hayles both champions materiality and decries the posthuman tendency toward disembodiment as she seeks to "focus on the idea of relation and posit it as the dynamic flux from which both the body and embodiment emerge" ("Flesh and Metal" 298). With this focus, Hayles allows herself the necessary room both to explore and articulate more clearly the possibilities for and limitations of posthuman subjectivity. She does so while maintaining the importance of both materiality and embodiment. As cultural formations and beliefs shift, so do boundaries/norms regarding the body.

Embodiment enables us to interact with our environments, whether those environments are actual or virtual. Thus, as Hayles argues, embodiment and the body are inextricably linked. For example, a prosthetic leg is material. When attached to the runner's body, however, the prosthetic limb is now embodied and enables the runner to

more fully interact with the runner's environment. Through the prosthesis, the runner has overcome the limitations of his/her flesh, and may, in the use of the prosthesis, surpass what an otherwise equal able-bodied runner could do.<sup>33</sup> Changes to, or augmentations of, a body's materiality, regardless of original substrate, will consequently affect both the interaction of that body with the environment and the body's subject position.

Hayles uses *Galatea 2.2* by Richard Powers as further evidence of the necessity of the body.<sup>34</sup> One of the tensions in this novel is the inability of the "distributed software system" Helen to relate to the human Rick (*How We Became* 263). Hayles describes the computer program Helen as "present but [having] no presence in the world" because while Helen has a material base, she does not have a human body like Rick's (263). This makes it difficult for Helen to grasp certain aspects of language. Hayles argues that

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<sup>33</sup> South African Paralympian runner Oscar Pistorius, known as the "Blade Runner" for his prosthetic legs, is a real-life example of what is possible with prostheses. Though Pistorius has competed against able-bodied runners, he was initially banned from international competition in 2008, including the Beijing Olympics. His appeal to the Court of Arbitration for Sport was successful, however, and he was cleared to compete in Beijing if he made the team. Unfortunately, Pistorius did not qualify for South Africa's Olympic team. He did, however, earn three gold medals in the 2008 Paralympic Games. Pistorius is currently preparing for the 2012 London Games. For information on Pistorius, visit his website at: <<http://www.oscarnpistorius.co.za>>.

<sup>34</sup> See pages 261-272 of *How We Became Posthuman* for the entirety of Hayles's discussion of Powers's novel.

Helen's difficulty stems from the fact that Helen has learned language without a body. Hayles writes:

The problem that Helen confronts in learning human language is not that she is disembodied... but rather that her embodiment differs significantly from that of humans. There is nothing in her embodiment that corresponds to the bodily sensations encoded in human language.

*(How We Became 265)*

In other words, embodied experience is entangled with language; we often use our bodies as markers in our metaphors and assume other people will know what we mean because they have similar bodily experiences. Interactions with creatures who do not share our bodily form, however, may be more problematic, as is the case between Helen and Rick. Hayles reminds us that "[e]xperiences of embodiment, far from existing apart from culture, are always already imbricated in it" (*How We Became* 197). In other words, we experience our culture through our bodies and it is through our bodies that our culture recognizes (or determines) where we fit in our culture.

Ultimately, we must remember that identification is an embodied experience. Davis laments that, too often, "the

theoretical emphasis on multiplicity and fluidity...overlooks or insufficiently recognizes the embodied experiences" of identification, particularly gender identification (98). Davis's claim suggests that identity is performative in nature, that we act certain parts both in accordance with our self-perceptions and in response to social expectations. These perceptions and expectations can lead us to physically alter ourselves, ranging from the superficial change of hair color or outfit to the more profound/radical step of undergoing transformative procedures to literally change or augment our flesh. Each change to the body affects our ability to identify and be identified with specific groups. If we do not both look and act the part appropriately, others may question the credibility of our identity.

Before we can analyze what effects any change in Bender's materiality may have, we must first attend to what it means to be a robot in *Futurama*. This includes investigating both the usual material composition of robots and their general behavior. In Groening's world, most robots have metallic substrates and are relatively autonomous, though they are bound by their programming. A robot's programming can be changed, but it takes quite a

bit of effort to do so. Robots also require alcohol to function. If a robot does not drink enough, it will suffer symptoms similar to that of a drunk human.<sup>35</sup> Robots are everywhere in *Futurama*. There are, however, various levels of robots. We can easily recognize the humanoid forms of robots like Bender, but what we would consider machines in 2009—such as our refrigerator, disposal, television and microwave—are also robots in *Futurama*. We do not see them as robots, however, until their robotic natures are activated by Mom, the industrial tycoon who both manufactures and controls all robots.<sup>36</sup> Robots are also gendered in *Futurama*, suggesting that, like in much of science fiction, robots will mirror humans, serving both as commentary and forecaster.<sup>37</sup> Indeed, in *Futurama*, the main distinctions between humans and robots are material.

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<sup>35</sup> The episodes "The Birdbot of Ice-catraz" and "I, Roommate" illustrate the effects of Bender not drinking enough. The titles of these episodes riff *The Birdman of Alcatraz* and *I, Robot* respectively.

<sup>36</sup> In an episode called "Mother's Day" Mom incites all robots to rebellion through activating a special program contained in all robots. The insurrection is put down when Mom reunites with a past lover, Professor Farnsworth. The fact that Mom essentially rules the world is an interesting twist on the more traditional patriarchal dominance of industry.

<sup>37</sup> Such gendering can be seen in Honda's diminutive humanoid robot Asimo, who is marketed with a little boy's voice. Though Honda has made no clear statement on the matter, it is possible that Asimo could be constructed with differing age and gender profiles, potentially even customizable profiles. The implications of these choices are worthy of their own interrogation and would undoubtedly have an impact on both (post)human subjectivity but also identity formation as a whole. For

The episode "Fear of a Bot Planet" both explores the differences between humans and robots and serves to more fully establish Bender's character. In this episode, Planet Express has been contracted to make a delivery to Chapek 9, a planet colonized in the 27<sup>th</sup> century by "a murderous crew of radical robot separatists."<sup>38</sup> The separatists wanted to rid themselves of all human contact and go so far as to call for the death of all humans. Given this information, the office manager Hermes declares, "Bender will have to make the actual delivery." Indignant, Bender declares that he cannot go on the delivery because it's Robanukah, the robot equivalent of Hanukkah. Knowing that Bender only wants to get out of work, Leela reminds him and the rest of the crew that he has already claimed days off due to "Robomadan" and "Robanzaa." Hermes agrees, stating that while he "respects [Bender's] diversity to the extent the law requires," Bender "used up all of [his] days off when [he] had that bout with Roberculosis." Grumbling, Bender agrees to go on the delivery and the delivery crew head out to Chapek 9.

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more information on Asimo, visit the following site:  
<<http://world.honda.com/ASIMO/>>.

<sup>38</sup> The planet's name is a tribute to Karel Capek, a Czechoslovakian playwright who first coined the term robot-robota-which means "worker" in his 1921 play *Rossum's Universal Robots*. The name is deliberately misspelled to help viewers pronounce it.



Upon the crew's arrival at Chapek 9, we see more clearly what it means to "act" robot, at least according to Chapek 9's "normative expectations and guidelines" (Davis 98). We also see the first stirrings of Bender's latent animosity toward humans, fueled by a discussion he has with Fry:

Fry: So, let me get this straight. This planet is completely uninhabited?

Bender: No. It's inhabited by robots!

Fry: Oh. Kind of like how a warehouse is inhabited by boxes.

This exchange suggests that Fry and Bender have different ideas on what constitutes life.<sup>39</sup> Given Fry's material experiences—mostly flesh-bound—his concept of "life" is likely rooted in biology, specifically in the ability to give birth. Robots in *Futurama* can copulate—though the specifics of robot sex are unclear—but they cannot give birth. Thus, to Fry, robots are not alive, even if they

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<sup>39</sup> Unfortunately, the limited scope of this project does not allow for a thorough investigation of the question of what constitutes life and when life begins or emerges. What may be of particular interest to the reader, however is, the emerging field known as Alife, which studies and tries to achieve artificial life. For more information on Alife, see Brooks, pages 181-191. Brooks also gives more sources on page 196 of the same book. Additional information can be found at the following sites: Machines Like Us at <<http://www.machineslikeus.com>> as well as The International Society of Artificial Life at <<http://www.alife.org>>

are animated, and their occupation of planetary space would be more like boxes in a warehouse than, perhaps, humans occupying Earth. Bender objects to this worldview, though not in so many words. His invocation of robot holidays and, earlier in the episode, an argument with Professor Farnsworth and Fry about the inequality between humans and robots in sports—robots are not allowed to compete with humans—suggests that Bender sees robots as at least equal, if not superior, to humans. According to Bender's view, robots could inhabit a planet as fully as humans could, although robotic life would differ from human life on several levels, including but not limited to robots' material interaction with and use of the planet.

Like many other robots in *Futurama*, Bender considers himself as separate and distinct from humans. The quasi-racist anti-human position of the Chapek 9 inhabitants suggests that some robots feel like humans treat robots, at best, as second-class citizens. Knowing this, Leela is unable to land the ship on the planet for fear of her and Fry's life. As Bender prepares to make the delivery, Leela admonishes him: "Remember, you don't know humans, you don't work for humans, and, above all, you don't like humans." Though Bender bristles at Leela's reminder, her concern is

not unfounded. Although Bender has the right body to pass as a robot, he must also act appropriately on Chapek 9 or the entire crew could be in jeopardy. He must conceal his association with humans if he is to be considered a "true" robot on Chapek 9.

Unfortunately, Bender's association with humans comes to light and Leela and Fry must mount a rescue operation to save him. To do so, they will have to both look and act like robots, which may include "solving complex differential equations like robots." After cobbling together appropriate costumes, Leela and Fry approach the gates of the robot city. Once at the gates, Fry and Leela engage two robot guardians in the following exchange in order to prove their robotness:

Guardbot #1: Halt!

Guardbot #2: Be you robot or be you human?

Leela: Robot we be.

Fry: Yep! Just two robots out roboting it up.<sup>40</sup>

Guardbot #1: Administer the test.<sup>41</sup>

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<sup>40</sup> "Roboting" suggests that "robot" is a verb as well as a noun and is, thus, something that requires action as well as or instead of a specific materiality.

<sup>41</sup> This test is a riff from the Voight-Komp (VK) test in Ridley Scott's 1982 film *Blade Runner*. The VK test is administered to discern replicants from humans. Replicants are genetically engineered creatures who are almost identical to humans in every way, save for emotional

Guardbot #2: Which of the following would you most prefer? A: A puppy. B: A flower from your sweetie. Or C: A large, properly-formatted data file?

Guardbot #1: Choose!

Fry: Is the puppy mechanical in any way?

Guardbot #2: No! It is the bad kind of puppy.

Leela: Then we will go with that data file.

Guardbot #2: Correct.

Guardbot #1: The flower would also have been acceptable.<sup>42</sup>

Leela and Fry are admitted into the city and eventually find Bender, who has (over)compensated for his association with humans by becoming a leader of the anti-human movement on Chapek 9. He leads the daily human hunt and discovers Leela and Fry, who then must go before the robot judge—an old Macintosh computer—for the crime of being human. Found guilty, Leela and Fry are sentenced to “live as robots on Earth. They will perform tedious calculations and spot-weld automobiles until they become

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responses. The VK test is supposed to show a replicant’s lack of emotional response, particularly a lack of empathy. The central tension in *Blade Runner* revolves around identifying and eliminating rogue replicants.

<sup>42</sup> That the flower is acceptable suggests that robots can both have significant others and show some type of affinity toward those others.

obsolete and are given away to an inner-city middle school." We learn, however, that this sentence is spurious because a group of robot elders has already determined that all humans must die. They claim that humans "are useful as a scapegoat to distract the public from their real problem," which is currently a lug nut shortage. Bender rescues Leela and Fry from the robot elders and, as they flee to the ship, fulfills the delivery contract by dropping what turns out to be a package of lug nuts. The robots of Chapek 9 shout their thanks to the humans as the ship takes off while inside, Leela and Fry help Bender celebrate Robanukah in a show of their appreciation for his robotness.

A major marker of "robotness" in *Futurama* is a (seeming) lack of emotion.<sup>43</sup> Rodney Brooks states that robots "are [now] being built with emotional systems that model aspects of what goes on in the heads (and hearts) of humans" (157). "Model" may be the operative word here, as

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<sup>43</sup> The episode "Insane in the Mainframe" plays on the seeming emotional disparity between humans and robots. In this episode, Bender and Fry are sent to the HAL Institute for Criminally Insane Robots after being convicted for bank robbery; Fry is sent with Bender because the human insane asylum is full. While in the HAL Institute, Fry tries to convince the robot doctors he is human by pointing to both physical and emotional manifestations of humanness: pink, wrinkly skin and incessant complaining. In turn, the robot doctors try to cure Fry of his "delusions of humanity" and will not release him until he no longer exhibits emotions.

it affects both our perceptions of and interactions with "emotional" robots. If we believe that robots can develop or already have "real emotions, we will be starting down the road to empathizing with them" and we will slowly but surely come to grant them rights of existence, as we have with animals (Brooks 157). If, on the other hand, future robots only simulate emotions, then we will be less likely to attach ourselves to robots and their well-being.<sup>44</sup> We find in *Futurama* that robots are not necessarily emotionless. Bender is no exception. He exhibits a sense of humor, frustration, anger, jealousy, and desire, to name a few emotions. What he seems to lack, however, is a sense of empathy, an arguably deeper emotion than the aforementioned, more self-centered emotions.

The episode "I Second That Emotion" explores the consequences of Bender being forced to feel human emotions. The problems begin when Bender gets jealous of the attention showered on Nibbler, Leela's pet. In a particularly vehement fit of jealousy, Bender flushes Nibbler down the toilet, sending Leela into an emotional tailspin. She explains that she "wouldn't feel so bad if

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<sup>44</sup> For an example of how we can come to respond to simulated emotions, see Brooks, pages 157-159.

Bender just understood the pain he caused [her]." Amy agrees, "It's like he doesn't understand simple humanoid emotion." Human(oid) emotions are not simple, though. Summarizing the work of neuroscientist Antonio Damasio, Brooks explains that emotions are "primitive in the sense that we carry around the emotional systems that evolution installed in us" and that emotions "play intimate roles in all of the higher-level decisions that we tend to think of as rational and emotionless" (157).<sup>45</sup> While it would seem logical that Bender would want to rid himself of Nibbler's presence, he is actually acting on an emotion. In turn, Leela's seemingly logical request for Bender to understand what she is feeling is also based on emotion.

Professor Farnsworth declares that "through the miracle of science," Bender can come to feel exactly what Leela feels. Hermes, Fry, and Zoidberg help Professor Farnsworth install an empathy chip, which will allow—or, rather, force—Bender to feel other people's emotions.<sup>46</sup> An

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<sup>45</sup> I chose to use Brooks's summary instead of researching Damasio's work firsthand due to both time constraints and accessibility of the findings. Brooks does reference Damasio's work in his "Further Reading" section of Chapter 7, page 171.

<sup>46</sup> Bender's empathy chip is akin to the emotion chip Lieutenant Data received in the episode of *Star Trek: The Next Generation* entitled "Descent, Part II." Through the chips, both Bender and Data are able to feel and process human emotions, though the chips do not guarantee that either Bender or Data will sufficiently learn from their experiences.

interesting underlying assumption of the empathy chip in Groening's episode is that emotions can be both broadcasted and received. Indeed, once the chip is installed, Farnsworth only has to "tune it to Leela's emotional frequency" and Bender can begin experiencing empathy and "real" emotions. Throughout the rest of the episode, we see Bender deal with Leela's emotions, all of which center around Nibbler's absence. Interestingly, Bender can distinguish between what he feels and what Leela feels. For example, while Leela and Amy are out for the evening, Leela starts missing Nibbler and her sadness is transferred to Bender, who is at home sipping his beer and talking to Fry. Out of nowhere, Bender starts to cry, resulting in the following exchange:

Fry: What's your problem?

Bender: I miss Nibbler.

Fry: You do?

Bender: Hell, no! It's Leela's stupid feelings.

Why can't she just drink herself happy like everyone else does?

Eventually, Leela's emotions become too much for Bender to take and he flushes himself down the toilet in order to find Nibbler and bring him back to Leela. In



response, Leela, and Fry go to rescue Nibbler and Bender from the mutants who live in the sewer. There, Leela's fright and love for Nibbler incapacitate her and Bender against El Chupanibre, bane of the sewer. Fry tells Leela that "if [she] really cares about Nibbler, stop caring about him!" He goes on to tell her to think about herself. That way, Bender can step in and save them all. She complies and they successfully return to Planet Express with Nibbler in tow. We discover that though the empathy chip was running at triple capacity, Bender "barely felt anything" and, ultimately, did not learn from his experience.<sup>47</sup> While to this point we have not seen any drastic changes in Bender's materiality, we have both established his "normal" subjectivity and seen that subjectivity shift, albeit subtly.

The vignette "I, Meatbag" explores the ramifications of Bender's exchange of his metal body for a flesh body.<sup>48</sup> In a test of Professor Farnsworth's What If? machine, Bender requests to be human.<sup>49</sup> Farnsworth flips the switch on the What If? machine to reveal Bender strapped to a

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<sup>47</sup> Leela, on the other hand, states that, in so many words, she has learned from Bender how not to care so much.

<sup>48</sup> The title is a riff on/tribute to Isaac Asimov's *I, Robot*.

<sup>49</sup> The What If? machine is a plot device which allows the exploration of alternate realities and is used in this episode as well as the first "Anthology of Interest" episode.

table and connected to the professor's latest invention. Farnsworth explains that he has "discovered a way to make Bender human using a process [he calls] 'reverse' fossilization.'" Farnsworth goes on to explain that in "regular fossilization, flesh and bone turn into minerals. Realizing that, it was a simple matter to reverse the process." The existence of this technology reminds us that we are, indeed, in the future, but this moment of realization quickly passes as we see Bender transform from metal to flesh. The transformation is quick but telling. If it were not already apparent that Bender is male, Hermes's quick maneuver to "cover [Bender's] shame" with a pair of underwear alerts us that Bender's "antenna" has shifted from his head to his groin, marking his human gender as it had his robot gender.

Bender hops off the table and immediately starts reveling in his new materiality. He cannot wait to "see what kind of things this body can do" and proceeds to explore all types of bodily functions. Things such as eating, excreting, and having sex are all new to Bender because his flesh substrate affords him a different type of interaction with the environment than his metal substrate afforded. Indeed, his first cigar and beer as a human

excite Bender to no end. Leela admonishes him, "Bender, you drank and smoked when you were a robot." Bender's response, "But now it's bad for me. Woo!" shows that he understands, at least on some level, that his flesh body and metallic body are quite different. We would expect, then, that Bender would act differently as a human than as a robot, perhaps by taking better care of his body or at least understanding that his all of his actions now have physical repercussions. Unfortunately, this is not the case. Instead, Bender gorges himself and dies within a week of being human, leaving behind a grotesque mound of flesh. In this episode, at least, Bender's new biology led neither to a new psychology nor a new ethical standpoint (Lauritzen 28). He remained the same self-centered, egotistical male he had always been, regardless of substrate.

The episode "Bend Her" investigates Bender's most radical and controversial alteration of his materiality and its implications. After watching the Manbot bending competition at the 3004 Olympics and realizing that he could never measure up to the athletes, Bender laments, "I couldn't win a medal, either. Even at bending—the thing I was built to do. I'm so embarrassed." Though he, too, is a

Manbot, Bender is no match for the male bendingbots in the competition.

Indeed, we see that the bodies of both Manbot and Fembot athletes "reproduce the familiar and stereotypical characteristics of masculinity and femininity, often on an exaggerated level" (Wolmark 15). This is particularly apparent in biological representations of gender. Where Manbots are already distinguishable by their antennae, an undeniable phallic object, Manbot athletes' antennae are either thicker or longer or both. Fembots, in turn, are distinguishable by breasts and Fembot athletes' breasts are more defined and, in many cases, larger. The athletes also uphold the stereotypical differences in physical strength. The best Manbot bender can bend two unbendable girders into a pretzel where the best Fembot bender can only bend coat hangers. Not surprisingly, Bender decides to take advantage of the differences between Manbot and Fembot athletes and enter the Fembot bending competition: "Fembots? Methinks a clever Manbot suitably disguised as might win those events! But the charade would require subtlety, grace, nuance." The keywords here are "suitably disguised" and "charade." Bender understands that he must not only conceal his

markers of maleness, but he must also convincingly act female.

At first, Bender's transition into a Fembot is superficial. He merely covers his antenna with a headscarf, puts on a dress, and signs up at the registry as Coilette from Robonia, insisting that "Coilette's a chick's name!" In response, the official claims that "Robonia sounds like something somebody made up on the spot." Bender's threat, "Ever been beaten up by a guy dressed up as a chick?" reminds us that he is pretending to be female and that he can drop the charade at will. The judge acquiesces and allows Bender-as-Coilette to compete. By the end of the competition, Bender has amassed five gold medals, having far surpassed all other competitors. After the medal ceremony, all competitors are ordered to submit to an "engine-oil sex check" to ensure their femaleness. Bender's choice is clear. He can either surrender his medals and maintain his maleness, or he must take his charade a step further.

Bender chooses to intensify the charade and asks Professor Farnsworth for a sex change operation. Now instead of only acting female, Bender will make his body conform to his performance. A robot sex change involves two

major steps. First, the body itself must be literally pounded into the appropriate shape. Second, the existing bodily fluids must be replaced with the corresponding fluids of the desired gender, rendering gender fluid. The gender fluids—Femmzoil for Fembots and Testosteroil for Manbots—reflect that in Groening’s world, gender is still a matter of performance, of having or simulating the “correct” parts associated with the desired gender. Additionally, Femmzoil and Testosteroil reflect the different fluids associated with males and females, such as seminal fluids and vaginal fluids and milk. For Bender to completely and convincingly switch genders, exchanging his male fluids for female fluids both makes sense and is necessary. Farnsworth tries to talk Bender out of the procedure, however, claiming that “a robot sex change is a complex and dangerous procedure. [The effects of] replacing your testosteroil with Fembot lubricants... may be irreversible.” Farnsworth’s warning is not without merit, even if it is meant to be funny. Erin Calhoun Davis reminds us that “Given social expectations for the stable, biological nature of sex/gender and the corresponding precariousness of their gender identities, trans[gender] individuals negotiate the credibility of their gender

claims in their daily interactions" (98-99). If Bender wants to maintain his pose as Coilette, he must both change his body and acceptably act feminine.

We must take care, however, not to conflate gender with sex or either term with sexuality.<sup>50</sup> Traditionally, gender has been associated with and attributed solely to anatomy, specifically the presence or absence of a phallus. Judith Butler argues, however, that this is a fallible conception of gender because "gender is not always constituted coherently or consistently in different historical contexts and because gender intersects with racial, class, ethnic, sexual, and regional modalities of discursively constituted identities" (6). In other words, neither the presence nor absence of a phallus nor the prevailing definitions of "male" and "female" can account for gender identity because gender and its performance are mutable. Butler continues, "If gender is the cultural meanings that the sexed body assumes, then a gender cannot

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<sup>50</sup> Due to the limited scope of this project, I will be unable to explore the relationship between gender, sex, and sexuality as fully as I would like. These terms are related but are, at least in current theories of each, separate and separable from each other. Anne Fausto-Sterling's 1999 book *Sexing the Body: Gender Politics and the Construction of Sexuality* is a helpful starting place in this discussion. Generally speaking, Bender remains firmly ensconced in heteronormative hierarchies as either Bender or Coilette. Bender prefers Fembots; Coilette prefers Manbots.

be said to follow from a sex in any one way" and that "there is no reason to assume that genders ought also to remain as two" in what Butler would classify as a reductive binary (10). If gender is constructed because of or despite anatomy, then it "becomes a free-floating artifice, with the consequence that *man* and *masculine* might just as easily signify a female body as a male one, and *woman* and *feminine* a male body as easily as a female one" (Butler 10). Indeed, it is not a stretch to call a woman masculine or a man effeminate, though in our current gender climate, such attribution is not usually complimentary. In *Futurama*, Bender is marked as male both anatomically—his antenna is a distinct phallic object—and through his actions, particularly in his unapologetic misogyny.

Much to Amy and Leela's dismay, Bender's sex change operation is a success and as the episode progresses, we get a sense that Bender's transformation into Coilette is neither wholehearted nor complete. Indeed, we quickly realize both that Bender's sex change upholds patriarchy, particularly the belief that men are superior to women and that as superiors, men are both entitled and have the right to demean and belittle women. As a Manbot, Bender could not have won a medal, much less five. He admits it himself. As



a Manbot-posing-as-Fembot, however, he could exercise his power over the Fembots and reap the benefits of his superior subject position. In short, Bender becomes Coilette because it is convenient.

There is always a sense of temporariness to Bender's femaleness. Coilette is merely Bender in drag. In her article "Drag=Blackface," Kelly Kleiman defines drag as "men dressing as women in public, especially in performance" (671). Coilette is one of drag's "main type of women"—a "glamour girl" or a woman who "makes fun of women because of their sexuality" while, at the same time, she is "either predatory or helpless" (Kleiman 671).

Unsurprisingly, Coilette is predatory because Bender is predatory, which Davis explains is possible because "past gender experiences cannot [necessarily] be separated" from current gender experiences (105). Where Bender's predation manifests itself in his pursuit of Fembots, money, and booze, Coilette's predation manifests itself in her continual bilking of Manbot actor Calculon, who she met on a late night talk show. Calculon becomes infatuated with Coilette and showers her with gifts and attention, culminating in a marriage proposal.

Coilette's relationship with Calculon upsets her friends for different reasons. Most distressing to Fry is that Fry sees Coilette as Bender in drag; he does not see Coilette as her own woman. Thus, Fry is confused as to whether Bender-as-Coilette really loves Calculon. If so, then Fry projects homophobic fear onto a relationship between what he sees as two Manbots. If Fry were to recognize Coilette as a woman instead of as Bender in drag, however, it is possible that he would not object as vehemently to the impending marriage. Most distressing to Amy and Leela is that Bender's continued posturing as Coilette "makes [women] look bad in front of the other genders." Indeed, as a glamour girl, Coilette insists that women should flaunt their bodies, dress like tramps, and "glob on" the lipstick to attract men. Kleiman writes, "women are taught by dolled-up glamour girls and pantomime dames to be hyper-sexual, and shown that failure to do so renders [women] repulsive and superfluous" (Kleiman 676). Rather than identifying with women by becoming Coilette, Bender is actually perpetuating the abuse and degradation of women. Kleiman argues that drag "enables men to decide, and then to claim, what is 'feminine'; and it permits men to ascribe certain characteristics to women [through the

performance] and certain others to men" (674). Kleiman continues, "Any decree about what is feminine restricts [a] range of options" for women who do not have the option of not being a woman (675). Bender always has the option of removing the cloak of Coilette and returning to his usual subject position. Coilette's proclamation that "men are so much better at being women" solidifies Bender's transition as a transition not only of convenience, but one of calculated degradation.

Davis argues that "gender presentations and identities are negotiated with particular people in particular settings and are contingent on the form and function of particular interactions" (100). This suggests that we exaggerate or downplay aspects of our gender presentation depending on what the current moment calls for. We see this when Coilette is at Planet Express, we see more of her "past" as Bender. Her voice changes from a higher timbre back to Bender's deep tones; her movements become less feminine and her predatory nature is revealed. Bender, whether as himself or as Coilette, is always power hungry. If Bender can have more power as Bender, then he will be Bender. If Coilette is more powerful, then Bender will be Coilette. What we must realize, but Bender fails

to, is that to "impersonate gender is not to eradicate it, but to reinforce it, reify it, and more important, the power relations attached to it" (Kleiman 683). Indeed, Kleiman reminds us that "women who dress as men are dressing up...while men dressing as women are dressing down" in power structures (683 emphasis added).

In an uncharacteristic show of sympathy, Colette decides that she cannot break Calculon's heart and she asks Professor Farnsworth to change her back to Bender. Once again, Bender undergoes a brutal physical transformation and a new transfusion of gender fluids to assure the "proper" gendering of his personality. The transformation is complete when his antenna pops back into place as he insults women, causing Fry to proclaim: "Yay! My buddy's back and his respect for women is back to normal." Disappointed, Leela comments to Bender, "I kind of hoped this whole experience would have left you a little more open to your sensitive side." Bender shrugs, takes a long pull on a cigar and replies, "Yeah, you'd think so. But, what are you gonna do?" To Bender, Colette was a costume, a means to an end. Thus, he did not have to learn anything about being a woman. In response to this exchange, Kleiman would emphatically state that the "experience of women is

not a costume" because everything a woman does "is feminine by definition...while any decree about what is feminine restricts" a woman's options (675). Hence, Bender's experience in womanhood is not genuine but is, in fact, disingenuous. Indeed, Bender did not transition into Coilette to empathize with women. Rather, he transitioned into and out of Coilette to maximize his own gain. We must remember three things about Bender's experiences as Coilette. First, though Bender is a robot, he is able to both explore and alter his subject positions, even if his occupation of the subject position was suspect. Second, sliding into and out of subject positions, regardless of intent, may someday be as smooth as Bender's transitions are. Third, subjectivity depends on more than personal agency; it is dependent on and bound to contexts whose shifts we continually try to anticipate. *Futurama* is evidence of this anticipation.

Our limited examination of *Futurama* in this project shows us that whether or not we recognize it, we are already posthuman subjects. We cannot and must not underestimate the place of our embodiment in both the configuration and performance of subjectivity, even as we as posthuman subjects undergo "continuous construction and

reconstruction" (*How We Became 3*). As did its New York World's Fair predecessors, Groening's *Futurama* shows us a glimpse of our future and it is a future full of possibilities even if it is still plagued with issues we confront daily. Groening's goal is to help us find humor in these issues. He says, "There is a joy in breaking taboos, but for me, it is more interesting to look for humor in things that I lie awake worrying about: work, love and death. [Humor] makes the worry tolerable" although the worry is never truly alleviated (qtd. in Duncan). We can find the humor in these situations because Groening makes it a point to develop characters his audiences can relate to. *Futurama* co-creator David X. Cohen states, "One of the basic operating premises" of Groening's work "is that you can put the characters in any sort of crazy, bizarre [situation] you can dream up, but they have to react in a way which people sympathize with, even if we're talking about robots and lobsters. They still count as people" (*Science Fiction Weekly*). The ability to create sympathetic non-human characters attests to Groening's at least implicit recognition of our posthuman cultural moment. Indeed, Groening's *Futurama* helps us realize that if we still draw boundaries between humans and

machines/artificial creatures as we progress in our posthuman world, we must remember that the boundaries, too, will eventually disappear or be rearticulated to accommodate the next wave of innovations in both biotechnology and robotics.

Ultimately, *Futurama* is a comedy designed to make us laugh, even if it is nervous laughter, at the possibilities of the future. At the same time, *Futurama* is undergirded by both an almost uncanny understanding and exploration of current cultural conditions. This foundation allows *Futurama* to help us take pleasure in boundary confusion even as we take responsibility for their creation (Haraway 150, 154). As we are already cyborgs and, as Haraway says, cyborgs are "not reverent," we should do all we can to laugh at and enjoy boundary confusion to the extent that we can (151). If it is true that laughter is the best medicine for what ails us—and anxiety about the future is undoubtedly an ailment—then *Futurama* is a much needed dose for all posthuman subjects.

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