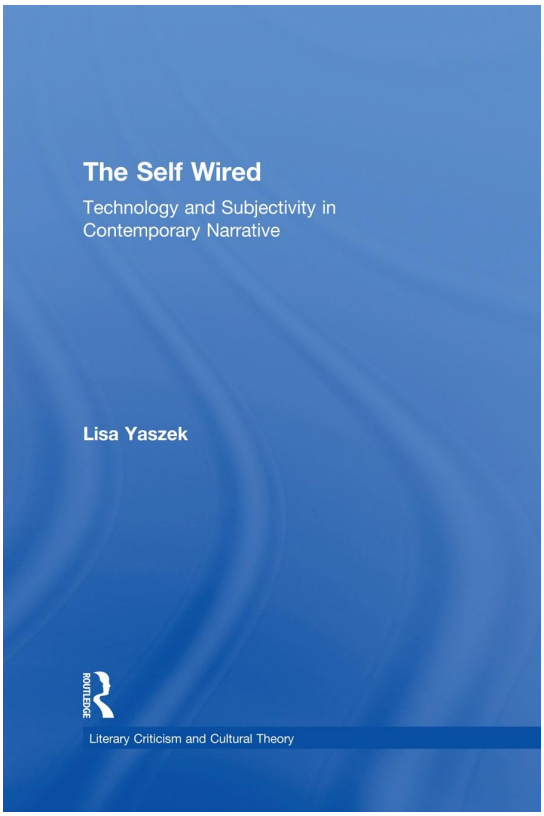
The Self Wired

Technology and Subjectivity in Contemporary Narrative

Lisa Yaszek



2002

Contents

Literary Criticism and Cultural Theory
Outstanding Dissertations
edited by William E. Cain
Wellesley College
A Routledge Series

A Coincidence of Wants
The Novel and Neoclassical Economics
Charles Lewis

Modern Primitives
Race and Language in Gertrude Stein, Ernest Hemingway, and Zora Neale Hurston
Susanna Pavloska

Plain and Ugly Janes
The Rise of the Ugly Woman in Contemporary American Fiction
Charlotte M. Wright

Dissenting Fictions
Identity and Resistance in the Contemporary American Novel
Cathy Moses

Performing La Mestiza
Textual References of Lesbians of Color and the Negotiation of Identities
Ellen M. Gil-Gomez

From Good Ma to Welfare Queen
A Genealogy of the Poor Woman in American Literature, Photography and Culture
Vivyan C. Adair

Artful Itineraries
European Art and American Careers in High Culture, 1865–1920
Paul Fisher

Postmodern Tales of Slavery in the Americas
From Alejo Carpenter to Charles Johnson
Timothy J. Cox

Embodying Beauty
Twentieth-Century American Women Writers' Aesthetics
Malin Pereira

Making Homes in the West/Indies
Constructions of Subjectivity in the Writings of Michelle Cliff and Jamaica Kincaid
Antonia Macdonald-Smythe

Postcolonial Masquerades
Culture and Politics in Literature, Film, Video, and Photography
Niki Sampat Patel

Dialectic of Self and Story
Reading and Storytelling in Contemporary American Fiction
Robert Durante

Allegories of Violence
Tracing the Writings of War in Late Twentieth-Century Fiction
Lidia Yuknavitch

Voice of the Oppressed in the Language of the Oppressor
A Discussion of Selected Postcolonial Literature from Ireland, Africa and America
Patsy J. Daniels

Eugenic Fantasies
Racial Ideology in the Literature and Popular Culture of the 1920's
Betsy L. Nies

The Life Writing of Otherness
Woolf, Baldwin, Kingston, and Winterson
Lauren Rusk

From Within the Frame
Storytelling in African-American Fiction
Bertram D. Ashe

The Self Wired
Technology and Subjectivity in Contemporary Narrative

Lisa Yaszek

Routledge
New York & London

Published in 2002 by
Routledge
29 West 35th Street
New York, NY 10001
www.Routledge-ny.com

Published in Great Britain by
Routledge
11 New Fetter Lane
London EC4P 4EE

Routledge is an imprint of the Taylor and Francis Group.

Library of Congress Cataloging-in-Publication Data

Yaszek, Lisa, 1969-

The self wired : technology and subjectivity in contemporary narrative / by Lisa Yaszek.

p. cm. — (Literary criticism and cultural theory) Includes bibliographical references and index.

ISBN 0-415-93964-X (acid-free paper)

1. Science fiction, American—History and criticism. 2. Literature and technology—United States—History—20th century. 3. Science fiction films—United States—History and criticism. 4. American fiction—20th century—History and criticism. 5. Biomedical engineering—United States. 6. Medical technology—United States. 7. Identity (Psychology) in literature. 8. Technology in motion pictures. 9. Subjectivity in literature. 10. Technologyinliterature.il. Narration (Rhetoric) 12. Cyborgs. I. Title. II. Series.

PS374.S35 Y37 2002

813'.0876609-dc21

2002002525

Acknowledgments

Apropos to a study about cyborg writing as a complex and diverse phenomenon, this book is indebted to the people who influenced my thinking in complex and diverse ways. In particular, I want to thank Thomas Schaub for his guidance throughout this project, as well as Bruce Bergett, Keith Cohen, and Jacques Lezra for their insight and enthusiam. Kudos also to Gene Ha, Gerry Jones, and Art Lyon, who reminded me time and time again that yes indeed, artists really do grapple with these ideas in their everyday work. Finally, I am deeply grateful to Rebecca Holden, Jami Moss, Kirsten Pullen, and Carrie Sandahi, without whom I could not have written this book —again, my thanks and love to you all.

Introduction: Riddles in the Wiring

Representing the Technologically-Mediated Subject

> The Industrial Revolution and its consequences have been a disaster for the human race ... permanently reducing human beings and many other living organisms to engineered products and mere cogs in the social machine... There is no way of reforming or modifying the system so as to prevent it from depriving people of dignity and autonomy... We therefore advocate a revolution against the industrial system.
>
> —Theodore Kaczynski, *The Unabomber Manifesto*

Recent decades have been marked by intense controversy about how to best understand and represent human subjectivity in a technology-intensive era. While philosophical and popular debates over the vitalist-mechanist question have flourished since the eighteenth-century scientific and industrial revolutions, American artists typically have resolved this question —or at least the dilemma of how to represent its fundamental terms —by locating the subject within an active, organic body clearly distinct from the passive, inorganic machine. However, contemporary technologies trouble this neat distinction: microbiology and genetics promise to penetrate and reorganize bodies from within, while computer-based virtual realities and global communication systems simulate and re-present them from without. These developments raise the stakes of the vitalist-mechanist question in two closely related wavs. First and most obviously, advanced technologies challenge conventional understandings of the human subject by transforming the body into a conduit between (rather than a protective barrier against) external forces and the internal psyche. Second, as the body becomes a kind of permeable interface, technological mediation seems to replace direct organic experience as the subject's primary source of information about itself and the world. Thus the increasingly intimate connections between our technologies and our selves seem to call for new modes of information processing or, in more conventional terms, new modes of representation.

Some have reacted to the shift from a "body versus machine" paradigm to a "body as machine" paradigm with distrust and near hysteria. This hysteria seemed to reach new heights in 1995 with the publication of Theodore Kaczynski's *Unabomber Manifesto,* which bitterly denounced "the Industrial Revolution and its consequences" for

transforming humans into "engineered products and mere cogs in the social machine."[1] Accompanied as it was by a certain lethal violence — the package bombs that killed two and injured five others involved in technological research and development —this denunciation received widespread media attention. In his *Manifesto,* Kaczynski equates the bombings with revolutionary activity but insists that such activity "is not to be [confused with] a POLITICAL revolution. Its object [is] to overthrow not governments but the economic and technological basis of the present society" (s. 4). For Kaczynski, then, technology becomes *the* central force informing—and deforming—contemporary human experience, one that appears to take on a fantastic life of its own apart from any other kind of social or political power.

Elsewhere in the *Manifesto,* Kaczynski argues that revolutionary violence is a necessary response to the deformation of representational systems themselves. Claiming that corporate control makes it "almost impossible" for individuals to voice dissenting opinions within the public sphere, he concludes that "if [I] had never done anything violent and had submitted the present writings to a publisher, they probably would not have been accepted" (s. 96). Thus Kaczynski links changes in the general relationship between humans and technology to changes in the specific relationship between the author and representation: as the technologization and commercialization of representation increases, the author's opportunity to challenge this process accordingly decreases. The only way to assert the individual voice, then, is to supplement words with (in Kaczynski's case, quite literally) explosive action, to make space for this voice within emergent economic and technological systems by blowing them wide apart.

Taken together, Kaczynski's writings and actions encapsulate some of the very-real complexities of the post-World War II era. Initially, Kaczynski's depiction of himself as a lone revolutionary voice crying out in the new high-tech wilderness might seem to simply reinforce his call for a return to an epistemological order affirming the conventional distinction between autonomous human subjects and their mechanical or engineered counterparts. At the same time, however, his actions suggest that he remained firmly embedded with the very technological networks from which he sought to distinguish himself at all times —indeed, this embeddedness both shaped and undermined his revolutionary/criminal project in significant ways. Kaczynski professed to despise the mass media, yet he chose to pursue his call to revolution through it. In doing so, he made himself legible to the systems of communication and control he wished to overthrow. Although federal investigators pursued Kaczynski for over seventeen y ears, prior to the publication *of The Unabomber Manifesto* they had little or no solid evidence against him; afterward, they had enough information to arrest him within a matter of months.[2] More than a matter of mere irony, the denouement to

[1] Theodore Kaczynski. *The Unabomber Manifesto,* 23 Sept. 1995, <http://well.sf.ca.us> (18 Aug. 1996), ss. 1–2,4; hereafter cited in text as *Unabomber.*

[2] Ferguson, Paul. "Tracking the Unabomber: More Luck Than Computer Analysis," 1997. <http://cnn.com/SPECIALS/1997/unabomb/investigation/puzzle/> (20 June 1998).

the Unabomber case indicated the extent to which contemporary subjects are always already inserted into dominant networks of power.

While the conclusion to the Unabomber case seems to underscore Kaczynski's own worst fears about technological mediation, for others the demise of the autonomous subject provides an opportunity to explore new modes of identity and agency modeled upon the new intimacies between humans and machines. In this book, I show how a growing number of writers and filmmakers depict technological mediation as a productive (rather than disabling) experience generating a range of relationships to ourselves and our world. More specifically, I argue that the revised understandings of subjectivity proposed by these artists are enabled by revised modes of representation: although contemporary artists (like their predecessors) continue to locate subjectivity within the body, depictions of this body change significantly. By using the figure of the part-organic, part-technological cyborg to explore the experience of technological mediation, these artists revise conventional understandings of human identity and agency and, in turn, contribute to the development of a new narrative genre: "cyborg writing."

Throughout this book, I combine the analytic techniques of literary and cultural theorists to better illustrate the contours of this new genre. In recent decades there has been a virtual explosion of scholarly interest in how Americans represent the phenomenon of technological mediation. Broadly speaking, this criticism can be divided into three strands. First, literary analyses such as David Porush's *The Soft Machine*[3] and Sharona Ben-Tov's *The Artificial Paradise*[4] examine how representations of advanced technologies function within well-established romantic and/ or humanist writing traditions. Such analyses provide a necessary and important historical context for understanding contemporary depictions of human-technology relations. In doing so, they combat the cultural amnesia of an era that often claims advanced technologies represent a clean break from the past. However, their emphasis on historical continuity limits the ability of these critics to discuss how the technological mediation of bodies and embodied experience might provide authors with the opportunity to imagine new forms of subjectivity.

A second strain of literary analysis —represented by works such as Joseph Tabbi's *Postmodern Sublime*[5] and Scott Bukatman's *Terminal Identity*[6] —*focuses* on the technologically-mediated or cyborg body as a narrative device through which authors explore the influence of advanced technologies on contemporary understandings of subjectivity. This focus allows such critics to acknowledge how material conditions affect representations of subjectivity. At the same time, they typically confine their

[3] David Porush. *The Soft Machine* (New York: Methuen, 1985).

[4] Sharona Ben-Tov. *The Artificial Paradise: Science Fiction and American Reality* (Ann Arbor: University of Michigan Press, 1995).

[5] Joseph Tibbi. *Postmodern Sublime: Technology and American Writing from Mailer to Cyberpunk* (Ithaca: Cornell University Press, 1995).

[6] Scott Bukatman. *Terminal Identity: The Virtual Subject in Postmodem Science Fiction* (Durham: Duke University Press, 1993).

discussions to one specific literary genre (such as "postmodern literature" or "science fiction"). Thus, their studies provide little or no sense of the relationship between different genres of writing.[7] While my own study draws upon certain aspects of these two stands of literary criticism —most notably, the historical emphasis of Porush and Ben-Tov and the focus on material relations advocated by Tabbi and Bukatman —it also complicates them by examining how historical and contemporary representations of technologies, bodies, and subjectivities circulate throughout diverse literary genres. In doing so, I erode the seemingly distinct boundaries between these genres and provide new contexts through which to read the narratives typically associated with them.

Cultural studies theorists offer a third approach to studying the phenomenon of technological mediation. Literary analyses often focus on understandings and representations of only one technology, such as "the computer." Thus they imply that all advanced technologies are essentially interchangeable and that they operate on the contemporary imagination in the same way. In contrast, anthologies including Judith Haberstam and Ira Livingston's *Posthuman Bodies*[8] and Chris Hables Gray's *The Cyborg Handbook*[9] show how different technologies influence our understanding of bodies and identities in different ways. By examining how technologies from diverse fields of industry such as aerospace research, toy development, and medicine transform conventional notions of subjectivity, the authors included in these anthologies address some of the silences of their literary counterparts. Unfortunately, their emphasis on "real life" cyborgs leaves little room for a sustained consideration of how these representations are imaginatively de- and reconstructed. By wedding cultural studies methodologies to their literary counterparts, I show how the trope of the cyborg emerges through the interplay of multiple texts: industrial and imaginative, canonical and popular, mainstream and minority.

The rest of this introduction shows how current debates over understandings and representations of technologically-mediated subjectivity emerged in congruence with the interdisciplinary science of cybernetics after World War II. First, I discuss the development of cybernetics itself as a legitimate field of scientific inquiry, as well as critical responses to the notions of human-machine equivalence and interdependency proposed by scientists working within this new field. Next, I examine how contemporary science historian Donna Haraway extends this critical tradition and articulates new theories

[7] For one study that does address how certain narrative tropes such as the cyborg circulate among seemingly diverse literary works, see Brian McHale's *Constructing Postmodernism* (New York: Routledge, 1992), especially Part Four, "At the Interface." Here, McHale argues that the increasingly similarity between the rhetorical strategies of canonical and non-canonical texts—especially between "highbrow" literature and "lowbrow" science fiction —is one of the defining characteristics of postmodernism as a whole.

[8] Judith Haberstam and Ira Livingston, eds. *Posthuman Bodies* (Bloomington: Indiana University Press, 1995).

[9] Chris Hables Gray, ed. *The Cyborg Handbook* (New York: Routledge, 1995).

of technologically-mediated subjectivity by carefully revising one of the primary narrative tropes to emerge from cybernetics —that of the part-organic, part-technological "cyborg." Finally, I provide an overview of how the authors and filmmakers discussed in this study both anticipate and complicate Haraway's theories by linking specific modes of identity and agency to engagement with specific manifestations of technology itself.

I. "The Searcher for Truth Cannot Pay Attention to His Own or Other People's Likes or Dislikes": Early Debates Over the Cybernetic Paradigm and Cyborg Subjectivity

Examining how cybernetics historically challenged conventional notions of what it means to be human provides a crucial context for understanding contemporary debates oxer this issue. An interdisciplinary science concerned with the study of information, cybernetics emerged from the diverse endeavors of Bell Laboratories and MIT researchers (most notably, Norbert Wiener, Alan Turing, John von Neumann, Claude Shannon, and Warren Weaver) in the 1930s and 1940s. Faced with new claims about the radical indeterminacy of the physical universe as advanced by quantum physics and articulated in Godel's theorem, these researchers hoped to solve the problem of uncertainty (and thus reinvigorate scientific positivism) by examining natural phenomenon in terms of communication and control rather than subatomic motion. The new field coalesced rapidly during World War II, when the Bell Laboratory and MIT scientists began to apply their theories to practical military problems such as message encryption and anti-aircraft missile targeting. This work led to the development of the first digital computers and, eventually, to the development of global communications systems as well as rapid advances in other fields of inquiry ranging from automation to medicine. The 1948 publication of Norbert Wiener's *Cybernetics: Or Control and Communication in the Animal and the Machine*[10] marked the birth of cybernetics as a formal scientific discipline, while the 1950 publication of *The Human Use of Human Beings: Cybernetics and Society*[11] made its basic principles accessible to the public at large.

As Wiener emphasized in both these works, the study of "control and communication in the animal and the machine" held the potential to do more than simply reinvigorate scientific positivism or provide technological solutions to problems of computation. Rather, in doing so, cybernetics also challenged conventional distinctions between animals (especially human animals) and machines. Specifically, Wiener argued that the

[10] Norbert Wiener. *Cybernetics: Or Control and Communication in the Animal and the Machine.* (New York: John Wiley, 1948).

[11] Norbert Wiener. *The Human Use of Human Beings: Cybernetics and Society.* (1950; reprint, New York: De Capo Press, 1954); hereafter cited in text as *Human Use.*

second law of thermodynamics— w hich posits that nature tends toward disorder or entropy — was countered by "enclaves of increasing organization" or "open systems" that transformed nature into meaningful information. If all such systems —be they organic, social, or technological —operated according to this same basic principle, then it was necessary to redefine "life" itself:

> Whenever we find a new phenomenon which partakes to some degree of the nature of those we have already termed "living phenomena," but does not conform to all the associated aspects which define the term "life," we are faced with the problem whether to enlarge the word "life" so as to include them, or to define it in a more restrictive way so as to exclude them. We have encountered this problem in the past in considering viruses... Now that certain analogies of behavior are being observed between the machine and the living organism, the problem as to whether the machine is alive or not is, for our purposes, semantic and we are at liberty to answer it one way or the other as best suits our convenience... I do not for a moment mean that the specific physical, chemical, and spiritual processes of life as we know it are the same as those of lifeimitating machines. I mean simply that both can exemplify locally anti-entropic processes ... which we should naturally term neither biological or mechanical. *(Human Use,* 31–32)

Thus Wiener suggested that even seemingly fundamental concepts such as "life" and "non-life" were not absolute, that they historically had been (and would continue to be) redefined with the accumulation of new knowledge. In turn, related concepts such as the seemingly inevitable distinction between humans and viruses or humans and machines also appeared to be historical and semantic constructs rather than universal truths. Confronted with new insights supplied by cybernetics, then, these older conceptual schema seemed to necessarily give way to new ones that positioned heretofore-discrete systems along a continuum of pattern recognition and message organization.

General analogies between biological and technological systems led to more specific ways of reconceptualizing the human mind and body as well. Assuming that information was always quantifiable and that all information-oriented entities could be described by formal logical-mathematical terms, cyberneticists set out to explain seemingly ephemeral phenomenon such as the mind within these terms. For instance, Wiener suggested that two of the most significant characteristics associated with the human mind —learning and memory—were essentially elaborate forms of feedback, processes in which organisms "modify their patterns of behavior on the basis of past experience so as to achieve anti-entropic ends" *(Human Use,* 48). Drawing on new findings in biology and neurochemistry, he argued that even the most elaborate forms of feedback could be explained and predicted upon determining an organism's neurochemical and physical structure. Thus organisms with neurochemical structures that were prevented from developing extensively due to relatively short life cycles or radical

physical metamorphoses (such as insects) exhibited little or no ability to remember or learn, while organisms with longer and more developmentally-stable life cycles (including most vertebrates, but especially primates) developed complex neural systems that allowed for greater degrees of learning and memory *(Human Use,* 52–53). By depicting the heretofore abstract, autonomous mind as the end product of specific material constraints and interactions, Wiener implicitly (and sometimes explicitly) underscored its ultimately describable nature.

Not only did cyberneticists suggest that the cognitive processes associated with the mind were quantifiable, but that they very well might be technologically replicable as well. In his groundbreaking 1950 essay "Computing Machinery and Intelligence," Alan Turing argued that scientists already used cybernetic principles to build digital computers that "learned" by mimicking less sophisticated machines and that eventually more advanced computers would be able to do the same by mimicking human behavior.[12] Indeed, as he rather enthusiastically predicted, "at the end of the century... one will be able to speak of machines thinking without expecting to be contradicted" (442). More specifically , Turing proposed that if "thinking" is largely a matter of generating and communicating messages, then the question of whether or not a machine can (or can eventually be created to) think could be answered by playing what he called "the imitation game." In this game (later known as the Turing Test), an interrogator in one room would carry on a written or tvped conversation with a human and a computer in another room. If the interrogator cannot determine which messages are from the human respondent and which are from the computer, then the latter had successfully mimicked the message-making patterns of the former and, even if it did so by a process which "is very different from what a man does [while thinking] ... we need not be troubled by [it]" (435). Ultimately, Turing's test challenged dominant understandings of the human mind as a unique entity in two important ways. First, much like other cyberneticists, Turing assumed that human cognition was both quantifiable and reproducible. Second, the Turing Test itself implicitly displaced consciousness (defined as the interplay of various cognitive processes) from its traditional location in the human body, recasting it as an effect arising from the interaction *between* bodies.[13]

---

[12] Alan M. Turing, "Computing Machinery and Intelligence." *Mind: A Quarterly Review* 59.236 (1950): 433–460; hereafter cited in text as "Computing Machinery."

[13] While the Turing Test seemed to determine consciousness (and thus the similarity between humans and machines) based on the ability of the computer to mimic relatively straightforward, rule-bound modes of cognition—such as those associated with casual conversation —cyberneticists also addressed the possibility that eventually computers would be able to simulate more complex modes of cognition as well. For further discussion, see section 6 of Turing's "Computing Machinery and Intelligence" and Warren Weaver and Claude E. Shannon's *The Mathematical Theory of Communication* (Urbana: University of Illinois Press, 1962) and Shannon's "A Chess-Playing Machine" in *World of Mathematics,* ed. James R. Newman. (New York: Simon and Schuster, 1956). While each of these authors examines different cognitive processes (original/aesthetic thought, linguistic translation, and gameplaying, respectively), all three assume that these processes, much like their simpler counterparts, are ultimately rule-bound and thus ultimately quantifiable and reproducible.

At the same time cybernetics positioned cognition as a kind of bodily effect, it proposed new interpretations of the body itself. While earlier writers typically defined the body in terms of its ability to produce or conserve energy, cyberneticists depicted it as a communications network that adapted to and acted upon its environment through "the accurate reproduction" of messages and signals *(Human Use,* 15). To better contextualize this new vision of the body, scientists positioned it within larger narratives of bodies and machines. For example, Wiener argued that dominant interpretations of the body tend to parallel the four dominant modes of mechanical knowledge marking Western history. In the first two phases —the "mythic, Golemic age" of preindustrial Europe and the "Age of Reason" —the body was figured as a malleable clay figure and as a clockwork mechanism, respectively. Subsequently, the Industrial Age of the nineteenth and early twentieth centuries portrayed the body as a "glorified heat engine," and, finally, the current age of communication and control depicted it as an electronic system *(Human Use,* 51). As he did elsewhere with "life," then, here Wiener indicated that "the body" was not an absolute concept, but one subject to change over time.

While Wiener's brief history of the body drew attention to how this body has long been imagined in relation to machines, it also suggested that the postwar era heralded a certain break in this history because it demanded a more radical reconceptualization of the body than did its predecessors. Earlier machines typically were designed for limited (usually industrial or agricultural) applications; thus while they might provide models for understanding the body in certain ways, at the last instant they failed to describe accurately (and thus remained distinct from) their more complex, "all purpose" human counterparts. In contrast, Wiener claimed, cybernetics theory allowed for the design of machines —ranging from missile guidance systems and computers to door openers and thermostats—that functioned in a much wider range of situations. These new machines provided a more compelling model for the human body because, much like this body, they performed equally well in *both* the industrial and the social worlds *(Human Use,* 55). Furthermore, by providing a common language through which to describe diverse kinds of machines, theories of communication and control also provided a highly effective way to describe the human body. Much like the new electronic machine, the human nervous system could be described as "effectively coupled to the external world, not merely by [its] energy flow ... but also by a flow of impressions, of incoming messages, and of the actions of outgoing messages" (54). By drawing attention to the formal correspondences between bodies and machines, then, cybernetics seemed to close the conventional gap between these two previously distinct categories. In doing so, it also suggested that the heretofore closed or intact biological body —like its technological counterpart—was essentially an aggregate of components available for de- and reassembly.

New understandings of the body were more than theoretical; indeed, bodies seemed to be quite literally reconstructed by the applied technological offshoots of cybernetics as well. As early as the 1950s, Soviet scientists drew upon insights into the similarities between biological and mechanical sense receptors to explore the possibility of au-

tomated prostheses for amputees. Concurrently, American researchers examined the possibility of using these insights to cure the neurological imbalance associated with Parkinson's disease and to develop visual and aural implants for the blind and deaf *(Human Use,* 164–67). The explicit goal of this research was to restore individuals to "normal" levels of human functioning. At the same time, however, this research implicitly redefined "normal human functioning" to encompass the fusion of biological and technological activity. Because these new technological prostheses were to be integrated into the organic body in intimate ways, they became quite literal signs of the new and newly intimate connections between humans and machines as a whole.

The potential fusion of human and machine —and its impact upon what it might mean to understand and represent the human body in a high-tech era — was illustrated most spectacularly by the work of scientists Manfred E. Clynes and Nathan S. Kline. Confronted with the problem of how to help astronauts survive space travel, Clynes and Kline proposed a rather elegant solution. Rather than searching for ways to construct and carry the natural human environment into space, they suggested that the products of cybernetic research and development could be used to adapt the human body itself to new environments. More specifically, they argued that a combination of neurochemical pharmaceuticals and automated delivery systems could "bring about the biological changes which might be necessary ... to allow [man] to live in space *qua natura."*[14] Clynes and Kline called the being that would emerge from this biological-technological interface "the cyborg," a kind of superhuman who would be free "to explore, to create, to think, and to feel" without becoming "a slave to the machine[s]" currently used to keep humans alive in hostile environments ("Cyborgs," 31). Indeed, Clynes and Kline went so far as to predict that the cyborg would do more than simply transcend its immediate environment. Instead, it would transcend the constraints of evolution as well because "starting as of now, it will be possible to [survive a range of different environments] *without alteration of heredity* by suitable biochemical, physiological, and electronic modifications of man's existing modus vivendi" ("Cyborgs," 29). Thus while Clynes and Kline developed the notion of the cyborg in response to the specific problem of space travel, this figure gestured toward more general dreams of human control over and transcendence of biology as a whole.

Of course, these new theories and depictions of what it might mean to be "human" did not go unchallenged. Scientists such as mechanical translation researcher Mortimer Taube called for a "criticism of science ... similar in its aims to the established arts of literary, musical, art, and religious criticism."[15][16] In his own such criticism, Taube claimed

[14] Manfred E. Clynes and Nathan S. Kline. "Cyborgs and Space," 1960. Reprint, in *The Cyborg Handbook,* ed. Chris Hables Gray (New York: Routledge, 1995), 31; hereafter cited in text as "Cyborgs."

[15] Mortimer Taube. *Computers and Common Sense: The Myth of Thinking Machines* (New York: Columbia University Press, 1960), v; hereafter cited in text as "Computers and Common Sense."

[16] This criticism was readily forthcoming from writers working in diverse fields. Much like Taube, scientist F.H. George argued that cybernetics could not continue to develop without substantial reassessment of the "rules" (both formal and informal) guiding communication and message organization.

that cybernetics research consistently has been flawed by an "inverted fundamentalism": a tendency to assume that because biological systems share some operational processes with their technological counterparts, the former could be modeled upon the latter in a relatively simple and straightforward manner ("Computers and Common Sense," 77). More specifically, Taube argued that cyberneticists tended to overestimate the similarities between such systems because they emphasized formal rules of information reception and organization at the expense of the (material, historical, and social) contexts in which such reception and organization occurs. In doing so, then, they gravely *underestimated* the impact of experience upon action—after all, as Taube pointed out, "the statements 'John knows football' and 'John can play football' are not equivalent" ("Computers and Common Sense," 48). While the cybernetic paradigm led to the development of technologies that clearly changed the contours of postwar life, then, it did little or nothing to prove a genuine equivalence between machines that operate according to formal rules and humans who act upon a combination of formal knowledge and informal, context-driven experience.

While Taube criticized the "inverted fundamentalism" of cybernetics from a largely theoretical standpoint, others pointed out that current cybernetic paradigms might very well have dangerous consequences in terms of their practical applications as well.[17] For instance, naval officer and nuclear researcher Hyman Rickover described an incident in which he was ordered to reduce the radiation shielding in nuclear submarine design so that (in the words of his superiors, who considered themselves well versed in theories of cybernetics and adaptation), "mankind might 'learn to live with radiation.'"[18] According to Rickover, such incidents occurred frequently in the military because research and development personnel —like their counterparts in the more abstract realm of scientific theory —tended to dismiss the importance of lived experience and to assume that "the searcher for truth cannot pay attention to his own or other people's likes or dislikes, or to...[their] needs, values, and principles" ("Humanistic Technology,"113–14). Much like Taube, then, Rickover called for greater attention

Concurrently, philosophers like Hubert Drey fus attacked the tendency within cybernetics research to make claims about the equivalence of human and artificial intelligence without taking into consideration (let alone formally documenting) the lines of inquiry and specific scientific experiments that indicated a very real *non-equivalence* between biological and technological systems. For further discussion of these issues, see George's *Automation, Cybernetics, and Society* (London: Leonard Hill Ltd., 1960) as well as Dreyfus' *Alchemy and Artificial Intelligence* (New York: The RAND Corporation, 1965) and *What Computer's Cant Do: The Limits of Artificial Intelligence* (New York: Harper Colphon, 1972).

[17] While Rickover is somewhat unusual in emphasizing the dangers of how cybernetic theories and technological applications are used within the realm of military operations, a number of other writers made similar (and certainly more widely acknowledged) points regarding the impact of new communications technologies upon the larger social sphere. See, for instance, Herbert Marcuse's *One Dimensional Man: Studies in the Ideology of Advanced Industrial Society'* (1964; reprint, Boston: Beacon, 1969) and C. Wright Mills' *The Power Elite* (1956; reprint, New York: Oxford University Press, 1965).

[18] Hyman G. Rickover. "A Humanistic Technology." In *The Social Impact of Cybernetics,* ed. Charles R. Dechert (Notre Dame: University of Notre Dame Press, 1966), 117; hereafter cited in text as "Humanistic Technology."

to material and social contexts and an increased consideration of how these contexts might inflect understandings of human-machine relations in general and of cyborg subjects in particular.

In addition to reassessing cybernetics as a discipline, critics also called for a reassessment of how to best represent the new human-machine relations suggested by this discipline. In an investigation of cybernetic metaphors, psychologist Ulric Neisser claimed that "the metaphor of man-as-machine" failed to adequately address the complex and sometimes contradictory ways that individuals experienced new scientific principles and technologies. Unlike earlier images such as the automobile (which were used to express everything from fears about environmental destruction to hopes about technologically-enhanced freedom and independence), new ones such as the robot and the computer tended to surface in the popular imagination in largely dystopic forms.[19] According to Neisser, these images could only convey limited reactions to a technology-intensive era precisely because they represented the wrong technologies; ones that were frequently talked about but only infrequently encountered in everyday life. Pointing to the increasing (if more prosaic) prevalence of television and other global communications systems, Neisser suggested that, until the time came when robots or computers were everyday phenomena, these technologies might well provide the foundation of more adequate metaphors of life in a technology-intensive era.

Media scholar Marshall McLuhan's work on the cultural impact of specific high-tech industries provided precisely such metaphors. In *The Mechanical Bride,* McLuhan used the titular figure to explore how industrial technologies transform the subject's relation to itself and its world.[20] Elsewhere, McLuhan drew upon the cybernetic paradigm to argue that new media such as television produced "new ratios or equilibriums among the [sense] organs and extensions of the body."[21] In doing so, they implicitly knit diverse and dispersed individuals together into a kind of "global village." More specifically for McLuhan, then, the new media transformed the individual body into an information-based, collective social body precisely because subjects "living in the electric age" would "wear all mankind on [their] skin" *(Understanding Media,* 44, 47). While images of the mechanical bride, the global village, and the collectivized, electric-skinned subject were clearly indebted to the notions of human-machine equivalence proposed by cyberneticists themselves, they departed from previously established cybernetic metaphors in two related ways. First, images such as the mechanical bride and the electric-skinned subject gesture toward the sensory — and perhaps even sensual —aspects of engagements with new technologies that seemed to be downplayed or erased by more austere

[19] Ulric Neisser. "Computers as Tools and as Metaphors." In *The Social Impact of Cybernetics,* ed. Charles R. Dechert (Notre Dame: University of Notre Dame Press, 1966), 85–87.

[20] Marshall McLuhan. *The Mechanical Bride: Folklore of Industrial Man* (New York, Vanguard Press, 1951).

[21] Marshall McLuhan. *Understanding Media* (New York: McGraw-Hill, 1964), 54; hereafter cited in text as *Understanding Media.* See also Marshall McLuhan and Quentin Fiore, *The Medium is the Massage: An Inventory of Effects* (New York: Bantam, 1967); hereafter cited in text as *Medium.*

phrases such as "artificial intelligence," "man-as-machine," or even "man-as-cyborg." Second, by carefully choosing images which evoke community and interdependence rather than isolation, McLuhan established a cluster of narrative tropes through which to examine the lived social dimensions of the potential new interfaces between humans and advanced technologies.

As this overview suggests, then, the development of cybernetics as a scientific discipline was —and continues to be —closely intertwined with larger cultural struggles over how to best assess the impact of cybernetic technologies upon human identity and agency. While cyberneticists themselves essentially recast subjectivity' as a material phenomenon by insisting on the tangible and quantifiable similarities between biological and technological systems, critics both drew upon and revised the cybernetic paradigm in their own depictions of subjectivity. Like their scientific counterparts, these critics located subjectivity within (or within the relationship among) material bodies. At the same time, however, they insisted that understandings and representations of the new, technologically-defined or technologically-mediated body must take into account the differences (as well as the similarities) between humans and machines by acknowledging the specific social and historical experiences that informed this body. Although such arguments provided a strong corrective to what seemed to be an overly simplified equivalence between humans and machines in scientific thinking, they failed to question the notion of a universalized "human experience" itself. This problem became central to later critics interested in assessing the impact of cybernetics in light of new theories about subjectivity generated by feminism and other forms of identity politics —a problem that is perhaps most clearly and compellingly articulated by science historian and socialist-feminist Donna Haraway.

II. "A Condensed Image of Both Imagination and Material Reality": Reassessing Cybernetics, Reinventing the Cyborg

Scientists and science critics alike continue to debate the cybernetic paradigm, especially as it bears upon representations of technologically-mediated subjectivity.[22] In

[22] For critical evaluations of technologically-mediated subjectivity other than those discussed here, see especially Jean Baudrillard's *Simulations,* trans. Paul Foss, Paul Patton, and Philip Beitchman (New York: Semiotextje], 1983) and Gilles Deleuze and Felix Guattari's *Anti-Oedipus: Capitalism and Schizophrenia* (Minneapolis: University of Minnesota Press, 1983). Like Haraway, Baudrillard draws upon popular tropes—in this case, those of the "automaton" and the "robot"—to explore how advanced technologies disrupt conventional understandings of subjectivity. Somewhat pessimistically, however, he argues that these technologies simulate and replicate embodied experience in ways that dissolve subjectivity—or, to extend Baudrillard's own visual metaphor, the robot essentially displaces humanity from the spheres of production and social interaction altogether. In contrast, Deleuze and Guattari use the images of "the body without organs" and the "desiring machine" to emphasize how the literal and

particular, science historian and socialist-feminist Donna Haraway provides one of the most compelling —and most often cited —recent contributions to this debate with her essay "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century."[23] As the title suggests, "A Cyborg Manifesto" grapples with the impact of advanced science and technology upon dominant feminist and socialist movements. According to Haraway, new sciences and technologies implicitly challenge feminism and socialism because they enable new economic and technological networks that destabilize the "naturally" united groups (such as "workers" and "women") upon which these political movements are predicated. As a response to this dilemma, she offers the "Manifesto" as an "ironic political myth" that "remains faithful to feminism, socialism, and materialism" while reworking their fundamental assumptions to account for new economic and technological developments ("Cyborg Manifesto," 148). At the same time, Haraway also participates in and extends the critical tradition surrounding the science of cybernetics by re-reading this tradition through the lens of feminism and socialism: indeed, it is precisely this tradition that provides the foundation for her new political myth and a new set of representational strategies.

Like the scientists and social critics preceding her, Haraway acknowledges that postwar scientific and technological developments have profound implications for conventional ways of knowing the world. In particular, she identifies three such developments that specifically trouble conventional distinctions between animals, humans, and machines. The first is related to the advent of biological and evolutionary theories that mobilize the cybernetic paradigm to implicitly "reduce the line between humans and animals to a faint trace reetched [only] in ideological struggle or professional disputes between life and social science" ("Cyborg Manifesto," 152). The second stems directly from work within cybernetics itself: the creation of "self-moving [and] self-designing" machines which "have made thoroughly ambiguous the difference between natural and artificial, mind and body ... and many other distinctions that used to apply to organisms and machines" ("Cyborg Manifesto," 152). Here, Haraway clearly echoes Norbert Wiener in *Cybernetics* and *The Tinman Use of Human Beings,* asking her readers to reconceptualize seeming absolutes such as "life" and "humanity" as culturally constructed and historically contingent.

Haraway's discussion of the third critical development—the advent of microelectronic technologies —bears a more complex relationship to that of her postwar coun-

discursive technologies of capitalism actively generate specific forms of identity and agency. While such figures are less readily accessible than those used by either Baudrillard or Haraway, they, too, indicate the extent to which notions of organic subjectivity are transformed by the practices and discourses of capitalism. Furthermore, we might note that, much like Haraway, Deleuze and Guattari use these images to explore how different forms of identity and agency are actively produced (rather than limited or dissolved) by literal and discursive technologies.

[23] Donna Haraway. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century." In *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991); hereafter cited in text as "Cyborg Manifesto."

terparts. Like writers ranging from Wiener to McLuhan, she suggests that recent scientific insights into the similarities between biological and mechanical systems might well extend to *social* systems as well. More specifically, she acknowledges that if the miniaturized and even invisible technologies stemming from these insights "have changed our experience of mechanism" collectively, then they necessarily invite consideration of how this new experience might change dominant social relations ("Cyborg Manifesto," 153). However, Haraway's own conclusions about technologically-mediated social relations diverge from those of her predecessors in significant ways. Situated as they were at the verge of a new, technology-intensive era, scholars such as Wiener and McLuhan tended toward relatively simple and straightforward speculations about the ways in which this era might unfold. For example, Wiener's work on World War II military applications led him to caution that "the hour is late, and the choice of good and evil knocks at our door" and to argue *against* uncritical, wide-scale social applications of the wry theories he himself helped establish *(Human Use,* 186). Meanwhile, as a consultant for the fledgling IBM corporation and a witness to the peacetime expansion of global communications networks, McLuhan, of course, more optimistically prophesied the advent of an electronic utopia —the global village. For postwar writers, then, the technological revolution seemed to have one of two (mutually exclusive) possible outcomes: either advanced technologies would become tools of economic or military oppression, or they would sene to enhance both individual and social liberation.[24]

Given that "A Cyborg Manifesto" is firmly situated with the kind of technologically-intensive era that postwar critics were only beginning to imagine, it is hardly surprising that Haraway's discussion of this era is both more detailed and more nuanced. On the one hand, throughout the "Manifesto" Haraway cites a number of studies concerning the diverse ways that new economic and technological networks merely exacerbate the inequities associated with their industrial-era predecessors. In a passage that seems to echo Wiener's own warning about the danger of failing to develop a more "human use of human beings" appropriate to these new networks, she concludes that: "A major social and political danger is the formation of a strongly bimodal social structure, with the masses of women and men of all ethnic groups, but especially people of color, confined to a homework economy, illiteracy of several varieties, and general redundancy and importance, controlled by high-tech repressive apparatuses ranging from entertainment to surveillance and disappearance" ("Cyborg Manifesto," 169).

[24] To suggest that Wiener was wholly skeptical and McLuhan wholly optimistic about the social impact of cybernetics is, of course, somewhat misleading. The second half of Wiener's *The Human Use of Human Beings* is devoted to showing how cybernetics theory and research could be—and already was—implemented for benevolent purposes in certain limited ways; the problem, for Wiener, was determining how best to implement cybernetics on a national or international scale. Meanwhile, McLuhan warned that "the television generation is a grim bunch" as well as a potentially utopie one, and that "dropping out" of mainstream society to find new patterns of existence could quickly become simply alienation *(Medium,* 126). Even when these writers reverse their tones, however, it is significant to note that the reversal itself is relatively simple and straightforward.

On the other hand, Haraway also nods toward McLuhan's hope for new forms of subjectivity and political engagement produced by these economic and technological realignments. Drawing on the work of U.S. third world feminists such as Chela Sandoval, Haraway notes that the growth of subaltern movements in which women (and sometimes men) of various races, ethnicities, and nationalities forge temporary alliances with one another based on "affinity, not identity" to achieve specific, limited political goals ("Cyborg Manifesto," 155). In turn, she argues, these movements might provide effective models of identity and agency for men and women interested in reorganizing economic and technological relations as well.

Haraway's more specific discussion of how we might represent technologically-mediated subjectivity also echoes and reinflects earlier thinking about this issue. Transferring Clynes and Kline's figure of the cyborg from its place within the realm of hostile or unnatural *physical* environments to the realm of hostile or unnatural *socioeconomic* environments, Haraway proposes that the part-organic, part-technological body of this figure makes it an ideal narrative trope though which to articulate the range of technologically-mediated subject positions available in a high-tech era. According to Haraway, the cyborg provides an invaluable way to understand subjectivity as materially and socially constructed while showing how that construction may vary. Much like the Clynes/Kline cyborg, Haraway's cyborg is assembled rather than born; as such, it is freed from "biology as destiny" and its ability to regenerate and recombine its own components indicates the possibility of generating new social identities and connections to others. At the same time, she insists that her cyborg's potential to engage in such activities be linked directly to its status as a product of late capitalism. In contrast its Clynes/Kline counterpart —which seems to overcome all earthly constraints with incredible ease —Haraway's cyborg is "a condensed image of both imagination and material reality" that emerges through its engagement with and negotiation of these same earthly constraints ("Cyborg Manifesto," 150).

Haraway goes on to suggest that the potential range of cyborg subjectivities can be represented by two extreme positions, each with its own distinct relationship to the advanced technologies of postindustrialism. In the first case, the cyborg can be understood as "the awful apocalyptic *telos* of the West's dominations," reflecting both the historical impulse to transform and control the phenomenological world through advanced technologies and the more contemporary desire to transform and escape the body itself via these same technologies ("Cyborg Manifesto," 150). According to Haraway, this figure is ultimately dystopic —"a man in space" —because the rhetoric of liberation it embodies is formulated and imposed upon this cyborg from without ("Cyborg Manifesto," 151). As such, the man in space often functions similarly to the tropes of the rampaging robots and automaton-like humans discussed by Ulric Neisser several decades previously. In both cases, such figures typically convey anxiety about and criticism of technologically-mediated subject positions that serve dominant economic or technological interests at the expense of individual or communal ones.

In contrast, Haraway's second cyborg suggests how imagination and material reality may intersect in a more positive and potentially progressive manner. Unlike its dystopic counterpart, the figure of the progressive cyborg acknowledges how bodies and identities are linked to and marked by both discursive and literal technologies. In turn, the multiplicity of these markings produce subject positions with the seemingly contradictory qualities of "partiality, irony, intimacy, and perversity'" ("Cyborg Manifesto," 151). To a certain extent, this figure resembles Marshall McLuhan's electric-skinned subject in that its technological markings enable it to connect to other, similarly marked subjects. At the same time, however, Haraway's cyborg resists the unities of its McLuhanesque counterpart. McLuhan's new subject is essentially technologically-enhanced rather than technologically-mediated, seamlessly joined to "all mankind" by virtue of its place within an electronic "total field awareness" *(Understanding Media,* 47). Ultimately, then, it embodies the contemporary Western dream of perfect communication and control. Conversely, Haraway's cyborg is enmeshed within a network of contradictory social and material forces, and its task is to call attention to these forces, to "struggle against perfect communication, against the one code that translates all meaning perfectly, the central dogma" of patriarchalism and capitalism ("Cyborg Manifesto," 176). As such, this cyborg necessarily questions even the most seemingly benevolent dreams of unity such as those of McLuhan himself.

Given that Haraway's cyborg represents the possibility of "jamming" perfect communication systems and opening spaces for new articulations of the self and the world, it is hardly surprising that she locates this figure within a new mode of communication she calls "cyborg w riting." Much like the hypothetical cyborg that acknowledges its markings in order to denaturalize them and make them signify differently, the real-life cyborg writer produces texts characterized by "retold stories ... that reverse and displace the hierarchical dualisms of naturalized identities... [by subverting] the central myths of origin of Western culture" ("Cyborg Manifesto," 175). Although this description of cyborg writing bears a striking resemblance to discussions of "postmodern writing" in general, Haraway insists on a certain divergence between the two.[25] According to Haraway; mainstream or canonical postmodern texts typically retell stories about the loss of original innocence and "the birth of the self, the tragedy of autonomy, [and] the fall into writing" ("Cyborg Manifesto," 177b As such, these stories seem to more specifically reflect first-world, white, masculine concerns. In contrast, cyborg writing "is not just literary deconstruction" of one narrative tradition, but a "liminal transformation" of what counts as narrative itself. The shift from deconstruction to transformation occurs in texts that evoke dominant Western myths (in either "pure" or deconstructed forms) only to replace or merge them with the subaltern storytelling traditions that "refuse to disappear on cue, no matter how many times a 'Western' commentator remarks on the

[25] See especially Brian McHale's *Constructing Postmodernism* (New York: Routledge, 1992) and Frederic Jameson's *Postmodernism, Or the Logic of Late Capitalism* (Durham: Duke University Press, 1991) for such discussions.

sad passing of another [such tradition] done in by 'Western' technology [or] writing" ("Cyborg Manifesto," 177). Thus cyborg writing may bear a close resemblance to and even mobilize many of the narrative strategies associated with its more general postmodern counterpart. However, in the last instant it marshals other representational strategies that undermine the tragic or ironically detached tendencies of postmodern writing itself, replacing them with narrative trajectories that tend toward a certain cautious hopefulness.

Although Haraway provides a compelling argument for this new genre of writing, her attempt to construct a kind of "cyborg canon" is surprisingly limited.[26] Given her political allegiances and her interest in speculative writing, it is hardly surprising that she includes feminist science fiction writers such as Sam Delany , Octavia Butler, and Vonda McIntyre in her discussions of cyborg authors. However, she fails to extend her new canon much beyond these writers. Elsewhere in the "Manifesto" Haraway clearly troubles the relevance of conventional political boundaries by showing how individuals ranging from third-world female assembly line workers to first-world male scientists can and do participate in progressive cyborg political action. Likewise, her survey of cyborg writing suggests a similar de- and re-construction of boundaries within the realm of narrative action. Nonetheless, by linking cyborg writing to a select group of authors who began publishing in a relatively specialized field in a relatively narrow time period (extending only from the late 1960s to the 1970s), Haraway seems to re-entrench conventional narrative boundaries in problematic ways.

This study provides the foundation for a more comprehensive cyborg canon by complicating Haraway's work in two interrelated ways. First, I consider how and when the ideas presented in the "Manifesto" can be combined with those of other theorists who more directly address the material conditions and specific technologies associated with cyborg subjectivities. Second, I examine how artists working in seemingly diverse traditions at different time periods use similar de- and re-constructive narrative strategies in their own imaginative assessments of these industries and the range of subject positions they might enable. In particular, I show how authors and filmmakers insert technologically-mediated or cyborg subjects into genres ranging from "the democratic novel" to "the feminist utopia" to "the sci-fi flick." In doing so, such artists illuminate both the limits of these genres (in terms of their ability to adequately depict the impact of postindustrialism on human identity and agency) and the ways these genres may be revised to account for new or alternative understandings of technologically-mediated subjectivity. I argue that it is only by recognizing how such strategies are deployed within specific cultural contexts and across multiple narrative fronts that we can begin to speak of cyborg writing in terms that grapple with its potential complexity and hybridity.

[26] While the word "canon"—with its connotations of limits and boundaries —might seem inappropriate, I have chosen to use it here because it provides a convenient shorthand for talking about groups of texts that share similar structural or thematic qualities.

III. Representing Cyborg Subjectivity in Contemporary Narrative: A Brief Overview

Throughout this book I assume that the "technological mediation" of subjectivity may be either abstract and indirect, as in the case of television, or quite literal, as in the case of surgery to provide patients with pacemakers or heart transplants. Thus, I assume that the depictions of cyborg identities and agencies produced by different kinds of mediation may be either metaphorical or literal. Accordingly, my first two chapters focus on representations of metaphorical cyborgs. Chapter One, "'A new mode of expression takes over': Articulating Cyborg Citizen Subjects in the Postwar Era," examines how the technologies of the post-World War II culture industries trouble traditional understandings of the American citizen subject. While culture industry advocates prophesied the coming of an "electronic democracy" in which technologies such as television would enlighten and liberate the American populace, novels such as Ralph Ellison's *Invisible Klan* (1952) and Thomas Pynchon's *The Crying of Lot* 49 (1967) suggest that the culture industries typically act in their own interests and transform citizen subjects into passive automatons. At the same time, both authors reject the possibility of retreating from the mass-produced world and reclaiming "pure" or unmediated identities. Instead, they represent individual engagement with new cultural technologies as a necessary first step in revising larger narratives of identity. T hus, they gesture toward the possibility of potentially progressive cyborg subjectivities that exist in relation to (rather than at odds with) the emerging postindustrial world.

Chapter Two, '"You've come a long way, baby': Imag(in)ing Gender and Race in Joanna Russ's *The Female Man* and Octavia Butler's *Kindred"* investigates how feminist writers extend the work of postwar authors by challenging contemporary depictions of specifically gendered subjects. While the 1970s advertising industry often linked representations of the newly-liberated woman to the technologies and commodities of a benevolent consumer culture, Russ and Butler insist on the need to remember historic constructions of women's identities outside those offered by Madison Avenue. By traveling to alternate times and places, characters from *The Female Man* (1975) and *Kindred* (1976) learn how to reclaim history so that it may be used in the present moment to construct cyborg subjectivities. Ultimately, then, both authors reject narratives of liberation via the advanced technologies of a patriarchal consumer culture, instead suggesting that the real technologies of liberation are inherent in the stories of bodies themselves.

The final two chapters consider images of literal cyborgs; subjects whose bodies have been technologically realigned in ways that parallel their more abstract relationships to the postindustrial world. Chapter Three, "'It's all about getting things done": Bodies Th/at Work in Recent Science Fiction," looks at representations of laboring bodies in William Gibson's *Neuromancer* trilogy (1984–88), Neil Stephenson's *Snow Crash* (1992), and Pat Cadigan's *Synners* (1991). While the information industry often claims

that advanced technologies will liberate us from monotonous and alienating physical labor, Gibson, Stephenson, and Cadigan suggest that contemporary high-tech labor practices more often transform workers into cyborgs defined solely by their market value. At the same time, these authors imagine the possibility of cyborg workers who attend to the intersections between bodies and technologies outside those of the market place. In doing so, these characters produce new narratives of work and identity that allow them to survive —and begin reweaving—the webs of capitalist relations.

Finally, Chapter Four, "Of Fossils and Androids: (Re)Producing Sexual Identity in Stephen Spielberg's *Jurassic Park* and Ridley Scott's *Blade Runner,"* investigates how advanced reproductive medical technologies disrupt the normative status of heterosexuality. Both *Jurassic Park* (1993) and *Blade Runner* (1991) depict cyborgs as monstrous scientific creations whose sexual ambiguity mirrors a similarly monstrous disruption in human sexuality. However, while Spielberg suggests that heterosexuality can be reestablished by attending to the "natural" dictates of the human body, Scott emphasizes the hybridity of his characters' bodies to parody and further denaturalize heterosexuality. Despite the apparent opposition between these films, both directors ultimately remain trapped in a certain representational impasse: by focusing on the viability of traditional sexual identities, neither can imagine the new ones that may be required by a high-tech era. Thus, I end this study on a cautionary note: while advanced technologies may demand that we examine the limits of conventional, organically-defined subjectivities, it is does not always seem desirable —and it certainly is never easy—to accept their cybernetic replacements.

Chapter 1: "A New Mode of Expression Takes Over"

Cybernetic Citizenship in the Postwar Novel

> "I imagined myself making a speech and caught in striking poses by flashing cameras, snapped at the end of some period of dazzling eloquence... I would hardly ever speak above a whisper and I would always be—yes, there was no other word, I would be *charming.* Like Ronald Coleman."
>
> —Ralph Ellison, *Invisible Man*

> "[Oedipa looked upon the city of San Narciso] and she thought of the time she'd opened a transistor radio to replace a battery and seen her first printed circuit... There were to both outward patterns a hieroglyphic sense of concealed meaning, of an intent to communicate... A revelation trembled just past the threshold of her understanding."
>
> —Thomas Pynchon, *The Crying of Lot 49*

With the rapid expansion of high-tech "culture industries" (such as radio, film, and TV) in the decades immediately following World War II, Americans became increasingly concerned about how these industries might to transform both social and individual bodies.[1] While advocates such as NBC television president Sylvester "Pat" Weaver optimistically prophesied the coming of an "electronic democracy" where advanced communications technologies would be used to better inform, educate, and thus liberate the American citizen subject,[2] this vision of benevolent technological progress failed to address the more complex and contradictory effects of these technologies. Consider,

[1] Obviously, the culture industries encompass more than just radio, film, and TV; other industries that depend on advanced communications technologies—such as newspapers, comics, and paperback book distributors—are also culture industries. Furthermore, as literary critic Philip Simmons notes in *Deep Surfaces: Mass Culture and History' in Postmodern American Fiction* (Athens: University of Georgia Press, 1997), we can extend the definition of mass culture to include "consumer culture generally (K-Mart, McDonald's, the contents of your medicine cabinet)... the culture of the products and services of Jail] corporations organized on a national or multinational basis" (5). In this chapter, however, I use the phrase "culture industries" primarily in reference to those industries that rely directly on advanced communication technologies, with occasional reference to other industries such as fashion and tourism.

[2] Gerard Jones. Interview by author, January 20,1998.

for instance, the above passages from Ralph Ellison and Thomas Pynchon. Here, the technologies of the culture industries both penetrate and exceed the individual subject: Ellison's invisible man imaginatively refashions his body in accordance with the images of American success provided by Hollywood, while Pynchon's Oedipa Maas equates her inability to decode America with her inability to decode American technologies such as the transistor radio. Rather than using culture industry products as tools to become self-aware citizens, then, these characters become enmeshed within systems of technologies that mediate and even obscure their understandings of themselves and their worlds. Thus, these passages suggest both a breakdown in conventional narratives of technological progress and the citizen subject and a need to generate new ones more appropriate to the changing conditions of a high-tech world. This chapter charts responses to the postwar culture industries and the crisis of identity they provoked by examining the images of technologically-mediated bodies and identities that circulated throughout this era, focusing specifically on those presented in Ellison's *Invisible Man* and Pynchon's *The Crying of Lot 49* (1967).[3] Ultimately, both authors refuse nostalgia for narratives of "pure" or unmediated identity and replace them with new ones about citizen subjects who engage with the technologies of the culture industries in personally meaningful ways. At the same time, however, they remain unable to imagine characters who —at least in the present of each novel —can use these new narratives to engage fully with the larger social and economic worlds around them.

Characters such as those depicted by Ellison and Pynchon mark a shift in conventional understandings of identity and the emergence of a new discourse concerning technologically-mediated, or "cyborg," subjectivities. Typically, humanist narratives of the citizen subject locate sociopolitical agency in the physical body and material experiences of the autonomous, organic self. However, such narratives cannot fully account for subjectivity' in an era where the culture industries seem to transform experience itself through replication, simulation, and re-presentation. Not surprisingly, the newly intimate connections between individuals and the culture industries produce a range of hopes and fears about the ultimate fate of the citizen subject. These hopes and fears often coalesce into one of two distinct narratives of cyborg identity. On the one hand, as theorists Chris Hables Gray and Steven Mentor argue, this new technological situation entails the very real possibility of citizen subjects becoming passive consumer cyborgs defined solely in accordance with the economic interests of the culture industries. On the other hand, they also point out that this dystopic vision oversimplifies the reality of contemporary life because it assumes that the culture industries erase all other narratives of identity and agency, that all subjects engage with and are affected by the culture industries in equal ways. Ultimately, Gray and Mentor suggest that the postindustrial era is most accurately thought of as a heterogeneous moment

[3] Ralph Ellison. *Invisible Alan* (1952; reprint, New York: Vintage, 1989); hereafter cited in text as *invisible Alan,* and Thomas Pynchon. *The Crying of Lot jg* (1967; reprint, London: Picador, 1979); hereafter cited in text as *Lot* 49.

where individuals inhabit a "new geopolitical territor) " marked by globally pervasive narratives of the consumer cyborg that coexist (often uneasily) with other narratives of subjectivity derived from local historical and material circumstances.[4] In turn, this situation produces a range of cyborg citizen subjects located at the interfaces between specific narratives. B) reconceptualizing identity as something that exists in relation to (rather than at odds with) a technologically-mediated world, we can imagine new forms of agency' more appropriate to a high-tech era based on the experience of negotiating and "confronting central intelligence through [its own] dispersed, diverse bodies of information and communication" (Gray and Mentor, 459–60), rather than simply assuming that agency has been reduced to mindless consumption of the cultural goods produced by this same central intelligence.

While Gray and Mentor are primarily interested in the possibilities of contemporary *posthumanist* subjectivities, in this chapter I argue that the characteristics they ascribe to their cyborg citizen subjects initially appear in postwar attempts to map the relationship between the newly globalized culture industries of that time period and conventional *humanist* narratives of identity and agency. In the first section I examine how the narratives of "patriotism as consumption" that emerge from the culture industries in the decade immediately following World War II provoke critical debate about the possibility of individual agency in a world where identity is de- and re-constructed from without. Here, I focus on the effort to locate a cybernetic humanist subject at the interface between historically based narratives of American identity and the subject's contemporary experience of a technologically-mediated world, with particular attention to Ralph Ellison's depiction of cybernetic American identity modeled on the historic ways black Americans have engaged with a predominantly white commodity culture. In the second section I argue that technological and economic developments in the culture industries of the late 1950s and 1960s transform the American present so thoroughly that historically based narratives of political identity and agency —no matter how thoroughly revised —no longer seem able to account for these changes. In response, social critics turn to the realm of science and the intellectual task of mapping the culture industries themselves to better understand the intersections between these industries and the subject.[5] Meanwhile, in his novel *The Crying of Lot* 49, Thomas Pynchon critically interrogates the limits of this activity, suggesting that it runs the risk of simply replacing traditional grand narratives of identity and agency with new ones that still fail to account for the local, everyday interactions between individuals and the larger technologically-mediated world.

---

[4] Ghris Hables Gray, and Steven Mentor. "The Cyborg Body Politic." In *The Cyborg Handbook,* ed. Chris Hables Gray (New York: Routledge, 1995), 459; hereafter cited in text.

[5] This distinction between the "first postwar decade" (1946–1947) and the "second postwar decade" (1958–1968) is an approximate one. Thus, my discussion of these two decades occasionally refers to texts that fit these time periods thematically but were published slightly before or after the specific dates in question.

IA. "To Make the Common Man an Uncommon Man": American Subjectivity and the Culture Industries, 1946–1957

Of course, debates surrounding the culture industries and the commercialization of identity are as old as America itself. Throughout the 19th and early 20th centuries, critics such as Alexis de Tocqueville worried that the mass reproduction and distribution of cultural goods would overwhelm the individual subject's own productive critical and intellectual abilities, while others such as Walt Whitman argued that these new technologies could provide the foundations for a more democratic production of—and engagement with —creative expression itself.[6] Despite the apparent opposition between these depictions of the culture industries, then, both implicitly posited an organic self distinct from the processes of technological reproduction as the site of authentic identity and agency. However, as Ian Angus points out, the postwar culture industries initiated a shift from the mechanical *reproduction* of preexisting cultural objects (e.g., the Mona Lisa) to technological *production* of such objects (e.g., Mickey Mouse). This shift seemed to engender a world "completely pervaded by 'copies' without 'originals'... A plurality of images that are not simply identical but refer to each other" exclusively.[7] Within this world, identity seemed to become a fully technological production, recognized and expressed in relation to "image-sets" that "postulate an original, an authentic experience, that is not within the image-set itself but is created by it"(Angus, 99–100). As simulation replaced reproduction in the commercial sphere, then, conventional understandings of the organic self no longer seemed to help make sense of either individual identity or the subject's relationship to the culture industries as a whole.[8]

The culture industries attempted to minimize anxiety about such transformations by invoking traditional narratives of democracy and benevolent technological progress. Movie moguls such as Jack Warner argued that Hollywood productions played an important part in creating and sustaining images of American patriotism during World War II, and that later productions were geared to continue this tradition in the face of

[6] See, respectively, Alexis de Toqueville's *Democracy in America* (1832; reprint, New York: Mentor, 1984), especially Part II, section 21, "In What Spirit the Americans Cultivate the Arts," and Walt Whitman's "Democratic Vistas" in *The Portable Walt Whitman,* ed. Mark Van Doren (1870; reprint, New York: Penguin, 1977).

[7] Ian H. Angus. "Circumscribing Postmodern Culture." In *Cultural Politics in Contemporary America,* eds. Ian H. Angus and Sut Jhally. (New York: Routledge, 1989), 99; hereafter cited in text.

[8] Of course, as Angus himself points out, the technological production of cultural goods began long before World War II (98). However, rapid advances in advanced communications technologies during the war, combined with decreased governmental regulation in the postwar period, resulted in an unprecedented expansion of the culture industries throughout the late 1940s and 1950s. In turn, "the industrial production of cultural objects" seemed to "permeate the whole of contemporary consciousness" in a way that was both quantitatively and qualitatively different (99).

the Cold War.[9] Meanwhile, the immensely popular newsman Edward R. Murrow made similar claims for radio, pointing out that, "it was customary during the war to say that democracy was on trial, as indeed it was... but the trial is not yet ended."[10] While these spokespersons mobilized the rhetoric of patriotism to explain the workings of the culture industries, others emphasized the potential for social progress inherent in the technologies of these same industries. For instance, Pat Weaver claimed that "the grand design of television ... is to create an aristocracy of the people, the proletariat of privilege, the Athenian masses —to make the axerage man the uncommon man" (in Folkerts and Teeter, 443). Taken together, these various defenses suggested that the culture industries themselves were merely tools to forward traditional humanist agendas including the dissemination of social values and the liberation of the individual subject.[11]

Critics were not convinced. Radical writer Dwight MacDonald suggested that the technological mediation of organic experience denied agency to the individual subject, transforming him or her into a mindless automaton helplessly "cogged to the social current" generated by the culture industries.[12] More specifically, MacDonald argued that the culture industries actually reworked the rhetoric of democracy to equate patriotism with consumption. In turn, identity became something constructed in relation to external commodity sets, while individual agency was diverted (and confined) to an obsession with personal style.[13][14] Sociologist Leo Lowenthal extended this line of

---

[9] Jean Folkerts, and Dwight L. Teeter, Jr., *Voices of a Nation: A History of Mass Media in the United States.* 2nd ed. (New York: Macmillan, 1994), 450–51; hereafter cited in text.

[10] Quoted in James L. Baughman. *The Republic of Mass Culture: Journalism, Filmmaking, and Broadcasting in America since* 1941 (Baltimore: Johns Hopkins University Press 1992), 34; hereafter cited in text.

[11] To a certain extent, my argument here oversimplifies the complex relationship between the U.S. government and the culture industries during the early Cold War years. As James Baughman points out, the radio and print media were "virtual partners" with the U.S. government throughout this time period, playing up every confrontation between the Soviet Union and the United States and uncritically reporting the statements of government officials as objective truth. For the most part, however, the entertainment media only bowed to government ideology under pressure from the Un-American Activities Committee of the House of Representatives (HUAC) (Baughman, 37). Nonetheless, as Jean Folkerts and Dwight L. Teeter, Jr. note, certain individuals within the entertainment industries such as Jack Warner did embrace this ideology rather willingly—out of what seemed to be a mixture of patriotism and economic self-preservation (450–51).

[12] Dwight MacDonald. "Inside *The Outsider."* 1956. Reprint, in *Against the American Grain* (New York: Random House, 1962), 215.

[13] Dwight MacDonald. "A Theory of Mass Culture." 1953. Reprint, in *Mass Culture: The Popular Arts in America,* eds. Bernard Rosenberg and David Manning White (New York: Free Press, 1957), 56–61; hereafter cited in text as "Theory of Mass Culture."

[14] As media historians Stuart and Elizabeth Ewen note in *Channels of Desire: Mass Images and the Shaping of American Consciousness* (New York: McGraw-Hill, 1982), MacDonald's claims about the externalization of identity seem to be born out by popular postwar film and advertising images that consistently and overtly depicted good, patriotic—and above all else, well-dressed—Americans in sharp contrast with their drably-clothed Communist counterparts. Likewise, in *Honey Tm Home!*

reasoning to conclude that the culture industries jeopardized the "inner fate of the individual" by supplanting spontaneous activity with "organized forms of leisure" such as movie going or family dinners scheduled around radio and TV programming.[15] For Lowenthal, the culture industries did more than simply mediate the subject's understanding of his or her own self by structuring identity through consumption; instead, they also invited the individual to define this self through its relation to larger consumer groups —thus, the "individual man" gave way to the "mass man."[16]

Given that radical critics drew upon traditional humanist notions of the subject as an organic agent distinct from his or her machines, it is hardly surprising that their predictions for the American future revolved around similar binary distinctions. In his more pessimistic moments, MacDonald imagined America as a technological dystopia where the culture industries functioned as a kind of "reciprocating engine" that "show[ed] no signs of running down" and that would devour all human energy to perpetuate its own activity ("Theory of Mass Culture" 71–72). Other critics emphasized the possibility of reasserting these "natural" distinctions, hypothesizing that technological dystopia could be averted through sheer (organic) willpower. For instance, anthropologist Hortense Powdermaker called for "exceptional individuals, with great strength of character and drive, with high talent, and with true morality, [to work] on their own as they try to dent the power situation" from within the culture industries themselves.[17] In essence, such responses attempted to reassert the conventional

Sitcoms: Selling the American Dream (New York: St. Martin's, 1992), television historian Gerard Jones notes a similar equation between Americanism and consumerism in early sitcoms like *The Goldbergs,* a show that revolved primarily around conflicts between old and new world values. Not only were these conflicts inevitably settled in favor of new world values, but they inevitably were settled around a prominently displayed pot of Sanka decaffeinated coffee—and Sanka just happened to be the show's corporate sponsor (43). Thus, rather than fulfilling its own rhetoric of democracy and functioning as a tool to enhance individual self-awareness, fledgling TV industry implicitly reorganized narratives of American identity to equate patriotism with consumerism.

[15] Leo Lowenthal. "Historical Perspectives of Popular Culture." 1950. Reprint, in *Mass Culture: The Popular Arts in America,* eds. Bernard Rosenberg and David Manning White (New York: Free Press, 1957), 47.

[16] For other radical postwar responses to the culture industries, see especially T.W. Adorno's "On Popular Music" *(Studies in Philosophy and Social Science* 9 [19411: 17–48) and "Television and the Patterns of Mass Culture" in *Mass Culture: The Popular Arts in America,* eds. Bernard Rosenberg and David Manning White (New York: Free Press, 1957) as well as Bernard Rosenberg's "Mass Culture in America" in *Mass Culture: The Popular Arts in America,* eds. Bernard Rosenberg and David Manning White (New York: Free Press, 1957). While Adorno, like MacDonald, examined the culture industries in terms of their function within the particularly repressive structure of capitalism, Rosenberg argued that the advanced technologies of the culture industries themselves were directly responsible for a "deadly" transformation of contemporary culture that occurred independently of economic, political, and social structures.

[17] Hortense Powdermaker. "Hollywood and the U.S.A." 1950. Reprint, in *Mass Culture: The Popular Arts in America,* eds. Bernard Rosenberg and David Manning White (New York: Free Press, 1957), 291. See also self-proclaimed radical Marya Mannes' essay collection, *But Will It Sell?* (Philadelphia: J.B. Lippencott, 1955). Like Powdermaker, Mannes calls for exceptional individuals to reform the culture

hierarchical distinction between humans and machines (or between individual agency and the machinery of social control) by resurrecting equally conventional narratives of heroic individualism and self-control.[18]

Much like their radical counterparts, liberal critics also acknowledged the power of the culture industries to mediate individual identity and agency. However, rather than assuming this mediation produced passive automatons and calling for a retreat to traditional humanist values, these critics began to imagine the possibility of what we might now call a progressive cyborg subjectivity by revising humanist narratives of identity and agency. Arguing that it was impossible to draw a "cordon sanitaire" between the organic and technological worlds, writers such as Gilbert Seldes suggested reconceiving the culture industries as "creative forces [that] condition people to be good by [culturally specific] standards of goodness."[19] For Seldes, then, the culture industries did not simply whittle away at or displace some kind of preexisting (and thus implicitly more authentic) subjectivity. Instead, by emphasizing the positive and "creative" characteristics of the culture industries, he reversed traditional understandings of the subject as an autonomous, transcendent being to suggest that all modes of identity—both "bad" and "good" —were always produced by specific interfaces between individuals and interrelated material and historical forces. In doing so, he opened up the possibility that these forces actually produce agency and that individuals might actively negotiate these forces in accordance with their own interests.[20]

Much like Seldes, communications scholar Marshall McLuhan refused the simple binary distinction between the autonomous, organic subject and the commercially produced automaton, instead locating a potential new cyborg subject in the "excluded

---

industries from within. Furthermore, she suggests that individual agency could be restored by retreating from commercial culture altogether and reorganizing the culture industries in more "human terms": transferring their control to noncommercial services heroically dedicated to disseminating "ideas and illuminations rather than the shadow solace of mass entertainment" (200).

[18] For a more general discussion of the conservative trends in radical/leftist discourse concerning politics and aesthetics, see Thomas Schaub's *American Fiction in the Cold War* (Madison: University of Wisconsin Press, 1991). In particular, the introductory chapter examines these trends as part of a larger cultural shift toward a supposedly less naive and "more realistic" "new liberalism."

[19] Gilbert Seldes. "The People and the Arts." 1951. Reprint, in Muss *Culture: The Popular Arts in America,* eds. Bernard Rosenberg and David Manning White (New York: Free Press, 1957), 87.

[20] For similar arguments, see Russell Lynes' "Highbrow, Lowbrow, Middlebrow" in *The Tastemakers* (New York: C.rosset &' Dunlap, 1954) and David Riesman's "Listening to Popular Music" in *Mass Culture: The Popular Arts in America,* eds. Bernard Rosenberg and David Manning White (New York: Free Press, 1957). While Lynes argued that the majority of Americans drew upon diverse historical and material experiences to organize their interactions with the culture industries in more complicated ways than most radicals (and most advertisers, for that matter) assumed, Riesman concluded that certain individuals mobilized their experiences with the culture industries to create identities and communities outside those officially sanctioned by the industries. Also like Seldes, both Lynes and Riesman acknowledged that such interaction was not necessarily progressive in and of itself, but insisted that it *could* provide the basis for potentially new forms of agency.

middle" between these two visions of identity.[21] McLuhan extended Seldes' argument to suggest that revised forms of political agency might derive precisely from the embodied experience of technological mediation, since the technologically produced "world of symbols, witticism, and behavior patterns... may or may not be a fatal solvent to the political traditions of America, but [they] do certainly compromise a common experience and a common language" ("American Advertising," 435). Even more specifically, he noted a certain similarity between the dynamic energy of the political founders of America and that of the contemporary culture industries, and argued that "while the two things aren't flowing in the same channels... that is precisely the thing that could be brought about by a frank educational programme based on the curriculum provided by the ad-men" ("American Advertising," 442). In essence, then, McLuhan proposed a kind of limited agency in which subjects could engage with and use the strategies of the culture industries to speak their own experiences of a technologically-mediated world and perhaps even to create a more comprehensive (and certainly more complex) narrative of contemporary American experience as a whole.[22]

Despite certain crucial differences between radical and liberal narratives of the culture industries, the predominantly white writers from both ideological camps tended to locate their hopes and fears for technologically-mediated identities in one source: the body of the *black* American subject.[23] For instance, Vance Packard claimed that the overall increased affluence of the postw ar black community, combined with a history of exclusion from mainstream American ideals, made African Americans particularly susceptible to the (falsely) democratic rhetoric of the culture industries. Thus, he concluded, African Americans were particularly susceptible to willing participation in the commodification of their own identities.[24] Meanwhile, liberal writer like Russell Lynes (who otherwise refused nostalgia for the mythical world of organic identity) proposed that black "lowbrow" or "folk" artists such as jazz musicians provided ideal models for what we might now call a progressive cyborg engagement with the culture industries because they somehow (in ways that Lynes himself mystifies) managed to

---

[21] Marshall McLuhan. "American Advertising." 1950. Reprint, in *Mass Culture: The Popidar Arts in America,* eds. Bernard Rosenberg and David Manning White (New York: Free Press, 1957), 435; hereafter cited in text as "American Advertising."

[22] When McLuhan wrote "American Advertising" in 1950, he perhaps had good reason to be optimistic about the possibility of using the strategies and even the technologies of the culture industries in inappropriate/d ways: for instance, the newly established television industry found that its attempts to consolidate its holdings were thwarted not so much by government regulation as by the fact that independent station operators created and promoted incredibly popular (and often critically acclaimed) local shows that often emphasized local histories and identities distinct from the totalizing narratives of patriotism and consumption circulated by the larger networks.

[23] And given that mass culture often was depicted as feminized or feminizing by these same critics, it is hardly surprising that they also pinned these hopes and fears on women as well—a problem I will take up later in this chapter.

[24] Vance Packard. *The Status Seekers: An Exploration of Class Behavior in America and the Hidden Barriers That Affect You, Your Community, Your Future* (New York: D. McKay, 1959), 309–10.

work within the confines of these industries but still speak the "genuine" experience of "beautiful blues, beautiful sunsets, beautiful women... [all] made in the expression of immediate pleasure or grief."[25] Somewhat ironically, then, Lynes' attempt to identify a specific form of cyborg agencyby emphasizing an idealized and largely visceral "black experience" ultimately excluded black Americans themselves from the kinds of technologically-mediated identities and agencies he elsewhere attributed to the majority of Americans. In order to better understand how African Americans perceived their own relationship to the culture industries and negotiated their identities as citizen subjects, in the next section I turn to Ralph Ellison's attempt to correct and extend the emerging discourse of progressive cyborg agency precisely by attending to the complex and sometimes contradictory nature of these negotiations.

IB. "The Stewards of Something Uncomfortable": Constructing a "New Humanism" in Ralph Ellison's Invisible Man

As the growing body of critical literature indicates, both pre- and postwar engagements between African Americans and the culture industries were far more diverse than scholars of the period typically acknowledged. For instance, Henry Louis Gates points out that early 20th century black intellectuals countered the stereotypes of mass produced "Sambo art" with their own depictions of a humanistic, fully self-realized "New Negro." Elsewhere, Houston Baker, Jr. argues that black "folk" artists such as blues musicians were not so much innocents wandering through the wilderness of the capitalist system as professional entertainers who carefully marketed specific images of themselves and their work in order to successfully negotiate this system.[26] Thus, not only did African Americans actively engage with the culture industries as critics and participants (rather than simply as consumers), but they did so by strategically reworking both humanist discourses and economic practices to make them speak histories and identities outside those officially sanctioned by the culture industries themselves. As Chela Sandoval suggests, such engagements constitute the kind of praxis long employed by colonized peoples in industrialized countries: limited and partial confrontations with power based on a variety of "transdiciplinary" tactics used to create "grounds for coalition, making possible community across distance, permitting the

[25] Russell Lynes. "Highbrow, Lowbrow, Middlebrow." In *The Tastemakers* (New York: Grosset & Dunlap, 1954), 318.

[26] For further discussion, see Gate's "The Trope of a New Negro and the Reconstruction of the Image of the Black" in *The New American Studies,* ed. Philip Fisher (Berkeley: University of California Press, 1991) as well as Baker's *Blues, Ideology, and Afro-American Literature* (Chicago: Chicago University Press, 1984) and "To Mov e without Moving: An Analysis of Creativity and Commerce in Ralph Ellison's Trueblood Episode" *(PMLA* 98 [1983]: 828–845).

generation of a new kind of citizenship."[27] For Sandoval, this "new citizenship" is not simply a stable synthesis of the opposing strategies described by Gates and Baker. Instead, she posits that the movement between identity consolidation and dispersion itself is situated within a field of specific historical and material forces that continually "realign [one another], creating different kinds of patterns, and permitting entry at different points." Thus, this new citizenship is better thought of as a "differential" or cyborg one, a semiautonomous form of identity and agency constructed both by and in reaction to the literal and discursive technologies of power (418).

While Sandoval theorizes a history of subaltern cyborg identity and agency as the basis for a more general technologically-mediated citizenship in the 1990s, African-American writer Ralph Ellison performed a similar kind of theorizing in his own historical moment. In essays written throughout the late 1940s and 1950s, Ellison argued that the culture industries thwarted the spirit of democracyby either constructing specifically white American identities against a comical dark Other or by erasing African Americans from representations of American history altogether. Thus, the culture industries, "as with every other technical advance since the oceanic sailing ship ... became a further instrument in the dehumanization of the Negro."[28] Elsewhere, however, he refused both the radical vision of the oppressed black American and the equally totalizing liberal myth of organic black identity, pointing out that "there is an American Negro idiom, a style and a way of life, but none of this is inseparable from the conditions of American society, nor from its general modes of culture —mass distribution ... the radio, television."[29] For Ellison, the key to a "new American humanism"[30] and a more fully democratic citizenship for blacks and whites alike hinged upon acknowledging two interrelated points. First, that all identities were informed by "a continuum" of cultural heritages and second, that while industrial technologies might very well modify or transform these heritages, they also presented "clear, certain possibilities" for representing the interfaces between various heritages ("Some Questions," 271, 265).[31] In essence, then, while Ellison called for a new mode of humanism, his hope

[27] Chela Sandoval. "New Sciences: Cyborg Feminism and the Methodology of the Oppressed." In *The Cyborg Handbook,* ed. Chris Hables Gray (New York: Routledge, 1995), 410; hereafter cited in text.

[28] Ralph Ellison. "The Shadow and the Act." 1949. Reprint, in *Shadow and Act* (New York: Quality Paperback Book Club, 1994), 274.

[29] Ralph Ellison. "Some Questions and Some Answers." 1958. Reprint, in *Shadow and Act* (New York: Quality Paperback Book Club, 1994), 270; hereafter cited in text as "Some Questions."

[30] Ralph Ellison. "Beating That Boy." 1945. Reprint, in *Shadow and Act* (New York: Quality Paperback Book Club, 1994), 97.

[31] While Ellison did not clarify what these "clear, certain possibilities" might be in this interview, elsewhere he outlined them more specifically. For instance, in his 1958 essay "Change the Joke and Slip the Yoke" (in *Shadow and Act,* New York: Quality Paperback Book Club, 1994), he rejected the notion of "pure identity" as hypocrisy, arguing that ever since white colonials masqueraded as Indians at the Boston Tea Park, American identity had been a matter of ironic masking, a joke that "always lies between appearance and reality, between the discontinuity of social tradition and the sense of the past that clings to the mind" (53). Thus, when culture industries such as advertising disseminated their own "masks" of authority and identify, they simply reiterated the form through which Americans

for a range of hybrid American subjects who might strategically use the techniques of simulation and representation offered by advanced communications technologies to re-present themselves and their histories suggests a movement toward *posthumanist,* cybernetic understandings of subjectivity instead.

Ellison further explores the conditions that might enable this new technological humanism and the emergence of cybernetic citizen subject in his 1952 novel *Invisible Man.* Set in a postwar America not too unlike our own, the novel revolves around an unnamed protagonist and his attempt to negotiate a world saturated by the technologies of simulation and representation, a world where politics and entertainment are inextricably intertwined and American identity itself is always technologically framed. The novel begins with a prologue in which Ellison's narrator withdraws from this world to think through the problem of democracy in contemporary /America —a problem that is, from the very first line, understood in terms of the relationship between individual experience and its cultural re-presentation: "I am an invisible man. No, I am not a spook like those who haunted Edgar Allan Poe; nor am I one of your Hollywood-movie ectoplasms... I am invisible, understand, simply because people refuse to see me" *(Invisible Man,* 3). By drawing upon the traditional distinction between the individui subject and his or her technological simulation, the invisible man attempts to assert a unique voice in the face of a mass-produced world. However, the fact that he can *only* assert this "natural" identity by consciously invoking its "unnatural" antithesis suggests the very real centrality of cultural simulation within American experience. After narrating the events that led to his "hibernation," Ellison's protagonist seems to reach a new understanding of himself and his relationship to a complex and sometimes confusing high-tech world, admitting that "I must shake off the old skin and come up for breath" and inviting his audience to do the same by concluding with the question "who knows but that, on the lower frequencies, I speak for you?" *(Invisible Man,* 580, 581) Here, then, the invisible man moves away from isolation and toward the creation of a new community, from the conventional humanist emphasis on the unique, discrete experience of the individual toward a posthumanist sense of new identities and new connections forged on the common ground —or mediated through the common frequencies— that constitute the contemporary American experience.[32]

---

have always created identify. For Ellison, the key to finding appropriate contemporary identities was not to reject these masks, but to de-and re-construct them so they spoke the complex histories and motives behind them. To a certain extent this argument parallels Marshall McLuhan's own hope to create a cybernetic American identity and agency by drawing on and diverting the "energies" of the culture industries. However, while McLuhan's definition of this "energy" tended toward a vague, organic universality, Ellison clearly situated his argument within specific historical and material contexts.

[32] While my own discussion of *Invisible Man* focuses specifically on Ellison's relationship to postwar debates ov er the culture industries and his use of cultural goods and technologies as metaphors for the problem of contemporary American—and especially African American —identity, numerous other critics have focused on various other strategies that Ellison uses to address this same problem. For instance, Steven Helming and Thomas Schaub argue Ellison draws upon experimental narrative techniques to redefine reality and provide a space for black cultural and political authority while Houston Baker

Ellison's narrator can only begin to imagine the possibility of progressive cyborg citizen subjects after (unsuccessfully) attempting to refashion himself in accordance with their more conventional counterparts. Indeed, throughout much of the novel the invisible man seems to be the apotheosis of the dystopic consumer cyborg imagined by Dwight MacDonald and Leo Lowenthal. While the invisible man is haunted by childhood memories of his grandfather's advice that the only way for black Americans to survive is to "overcome 'em with yeses, undermine 'em with grins, agree 'em to death and destruction" *(Invisible Man,* 16), his own belief in the possibility of transcending race through an innate merit made visible to the external world by the accumulation of the proper cultural goods leads him to dismiss this lesson in history and survival. However, to maintain this belief, the young protagonist must carefully repress and reinterpret his own lived experience. When the white leaders of his southern boyhood community promise to let him deliver his high school valedictorian speech if he first participates in the "battle royal" (an event in which young black men are stripped half naked, blindfolded, and forced to fight one another for the amusement of white spectators), the invisible man agrees to participate because "I wanted to deliver my speech more than anything else in the world ... I felt that only these men could judge truly my ability" *(Invisible Man,* 25). And indeed, when he gains this approval in the form of a calfskin briefcase, the invisible man's sense of "importance" seems to justify the means by which he earned it: "I even felt safe from grandfather, whose deathbed curse usually spoiled my triumphs. I stood beneath his photograph with my brief case in hand and smiled triumphantly into his stolid black peasant's face" *(Invisible Man,* 32–33). Thus, by reorganizing his experience of the battle royal (and his own role as an object of entertainment within it) around a single but tangible symbol of socioeconomic success, the invisible man manages to preserve the illusion of himself as an able, autonomous subject, even, quite literally, in the face of a contradictory history.

Not surprisingly, Ellison suggests that this narrative of commodity-oriented identity transforms his protagonist into a "walking zombie" or "mechanical man" severed from the real power relations structuring postwar America *(Invisible Man,* 94). During his college career, the invisible man imagines college president Dr. Bledsoe to be the ideal black American he himself wishes to become, a man who has subtly staked out a position of power and authority in a predominantly white world. Once again, however,

---

and John Callahan examine how Ellison performs this task by wedding traditional narrative strategies to alternative ones derived from African American folk culture and scientific theory, respectively. For further discussion, see Steven Helming, "T.S. Eliot and Ralph Ellison: Insiders, Outsiders, and Cultural Authority." *Southern Review* 25.4 (1989): 841–858; Thomas Schaub, "Ellison's Masks and the Novel of Reality." In *New Essays on Invisible Man,* ed. Robert G. O'Meally.(Cambridge: Cambridge University Press, 1988); Houston Baker, "To Move Without Moving: An Analysis of Creativity and Commerce in Ralph Ellison's Trueblood Episode." *PMLA* 98.5 (October 1983): 828–845; and John Callahan, "'Riffing' and Paradigm Building: The Anomaly of Tradition and Innovation in *Invisible Man* and *The Structure of Scientific Revolutions." Callaloo* 10.1 (winter 1987): 91–102.

he simply conflates this power and authority with its commercial trappings, nothing that Bledsoe "was the example of everything I hoped to be: Influential with wealthy men all over the country; consulted in matters concerning the race; a leader of his people; the possessor of not one, but *two* Cadillacs, a good salary and a soft, good-looking and creamy-complexioned wife" *(Invisible Man,* 101). In an attempt to emulate Bledsoe and begin accumulating his own status symbols, the invisible man jumps at the opportunity to escort the white millionaire-turned-philanthropist Norton around campus, hoping that "maybe he would give me a large tip, or a suit, or a scholarship next y ear." Unfortunately, the invisible man is so caught up in this dream of "identification with the rich man next to me" that he forgets his grandfather's warning about the "place" of black Americans in a white world *(Invisible Man,* 38, 39). In turn, he loses his place in the geography of the campus itself, accidentally making a wrong turn and taking Norton on a disastrous tour through the seamiest sections of the black community. Confronted with the "chaos" of poverty, incest, and madness that destroys his own belief in orderly social progress through benevolent white paternalism, Norton becomes seriously ill and an enraged Bledsoe expels the invisible man and sends him away to New York, hoping that a new environment might help him "get in the swing of things" *(Invisible Man,* 145). Thus, the invisible man's efforts to identify himself through the consumption of (white) material goods causes him to literally lose both himself and his sense of history.

The invisible man's first experiences in New York further illustrate how the equation between subjectivity and consumption transforms the individual into an object of technological production. At first Ellison's narrator simply interprets Bledsoe's punishment as a fresh opportunity to attain the power and recognition denied to him in the south, drawing upon the narratives of success provided by Hollywood to imagine himself as a black hero in the making whose future success, "caught... by flashing cameras, snapped at the end of some period of dazzling eloquence" will provide tangible proof of his merit *(Invisible Man,* 164). However, when others fail to recognize this merit and the invisible man finds that he must settle for menial work in a paint factory to survive, his growing awareness of the gap between the promise and the reality of American life for African Americans eventually leads him to a nervous breakdown and hospitalization. In the hospital, the invisible man quite literally becomes the object of a medical experiment to recondition him so that "the patient will live as he *has* to live, and *with absolute integrity" (Invisible Man,* 236, my emphasis). The phvsical reconstruction of the invisible man's brain through electroshock therapy is accompanied by an equally crucial cultural reconstruction designed to reinforce the "absolute integrity" and natural order of things. While the classical music that accompanies their work delineates the doctors' world of power and authority, the invisible man's place within another, very different world is made clear by the fact that he must contribute to this w ork by "remembering" a series of traditional black folktales —the cultural objects that reflect and constitute his "natural" world and identity. In this scene, then, the doctors manipulate the invisible man's body in painfid ways that reflect the more abstract

—but equally painful — ways that they manipulate cultural objects and identities into specifically raced hierarchies as well.

In contrast to the doctors who try to contain him within a naturally raced social hierarchy, members of the socialist Brotherhood seem to provide the invisible man with a way out of this hierarchy. At first, the Brotherhood's emphasis on social revolution through the "science of history" seems to offer Ellison's narrator a vision of America that accounts for the very real histories of oppression and exploitation erased by its capitalist counterpart *(Invisible Man,* 311). Furthermore, when the Brothers place him in charge of their Harlem office, the invisible man believes that he has finally been given the means to become a fully realized citizen subject: "Here was a way that didn't lead through the back door, a way not limited by black and white... a way to have a part in making the big decisions, of seeing through how the country, the world, really operated" *{Invisible Man,* 355).[33] At the same time, however, the Brotherhood *does* rather carefully reorganize history in its own interests. For instance, when the invisible man becomes too successful at recruiting new members through appeal to their specifically raced experiences of America (rather than following the Brotherhood's dictate to provide audiences only with a general picture of capitalist oppression), his mentor Jack advises him to "say what the people want to hear, but say it in a way that they'll do what we wish" *{Invisible Man,* 359). As Jack's advice rather cynically (if unwittingly) suggests, the Brotherhood's desire to actively shape history and identity to further an abstract—but supposedly greater—good bears a striking resemblance to the ways in which culture industry executives of Ellison's own time justified their activities. Thus, while Ellison draws upon radical arguments such as those presented by Dwight MacDonald to show how capitalist narratives linking identity and consumption inevitably transform the subject into a mindless consumer cyborg, he also suggests that these radical arguments may simply repeat the very power relations they criticize.

Given that the Brotherhood relies on tactics similar to those deployed throughout capitalist America to generate its narratives of history/ and identity/, it is hardly surprising that, as the mouthpiece for these narratives, the invisible man is once again transformed into a tool to be manipulated and exploited in the service of the Brotherhood's long-term goals. As in the hospital scene, Ellison links the invisible man's growing awareness of this manipulation to the painful manipulation of his body. When the

[33] Significantly, Ellison suggests that his narrator's loyalty to the Brotherhood is more than just loyalty to a new and more just vision of American history and identity. When the Brotherhood first recruits the invisible man—ostensibly on the basis of a powerful impromptu speech he has recently delivered —he initially resist the invitation because "I had a feeling that [they] were acting a part; that something about [them] wasn't exactly real" *(Invisible Man,* 331). However, when he sees a story about himself and the speech on the front page of a newspaper, his misgivings quickly are replaced by "a new sense of self-importance" *(Invisible Man,* 331). Thus, the Brotherhood provides the invisible man with precisely what he has wanted all along: the public image of successful selfliood both promised and denied to him by the capitalist system itself.

invisible man first begins to suspect that the Brothers are using him for his diversionary value as a black intellectual, he attempts to shore up his sense of self importance by shoring up his wardrobe. In the midst of a shopping spree, he stumbles across Tod Clifton, a black Brother who disappeared weeks earlier only to reappear before the invisible man as a buffoonish street merchant who sells dancing Sambo dolls to the white shoppers around him. After overcoming his initial disgust, the invisible man begins to suspect that Clifton's actions have a greater meaning: that the dolls very well might comment on the status of black Americans as mere puppets for the Brotherhood —a revelation that occurs almost simultaneously with the realization that his new shoes are pinching his feet *(Invisible Man,* 443). Here, then, Ellison suggests that the identity positions offered to black Americans by a predominantly white consumer culture are, quite literally, painfully constricted ones.[34]

After recognizing that neither capitalist nor socialist narratives of American identity adequately address his experience as an African American, the invisible man rejects the possibility of attaining the kinds of autonomous, organic subjectivity described by these narratives and attempts to exact revenge against the political systems that foster these ideals by becoming their opposite: "They wanted a machine? Very well, I'd become a supersensitive confirmer of their misconceptions... Oh, I'd serve them well and I'd make invisibility felt if not seen, and they'd learn that it could be as polluting as a decaying body, or a piece of bad meat in a stew" *(Invisible Man,* 509). Ellison's narrator learns to become this machine —to play the roles expected of him in order to secure a certain amount of covert freedom —when the spends an evening pretending to be the somewhat mysterious Rinehart, a man who rules the Harlem underworld by carefully manipulating the contradictory identities historically allotted to African Americans: lover and fighter, preacher and pimp, gangster and police informant. As his name implies, Rinehart is the terrible but perfect new American subject, a man for whom appearance (the "rind") supplants all other relationships (especially those of the "hart"/heart). As such, he appears to be the perfect model for "invisible" opposition and revenge. And yet, because the invisible man initially believes that becoming Rinehart will allow him to successfully oppose the Brotherhood, he fails to recognize the similarities between Rinehart and Brothers such as Jack —after all, the invisible man's attempt to become a machine is, in essence, an attempt to transcend the world

[34] Of course, we should note that the pain associated with these realizations is not simply the pain of destruction or disintegration. Instead, Ellison also suggests that it might be a kind of growing pain, one that signals his narrator's expanding sense of himself and his w orld. For instance, immediately after he notices that his shoes are pinching him, the invisible man also notes that, "moving through the crowds along 125th street, I was painfully aware of other men dressed like the boys, and of girls in dark exotic-colored stockings, their costumes surreal variations of downtown styles. They'd been there all along, but somehow I'd missed them" *(Invisible Man,* 443). Although this new awareness of people "outside the groove of history" and his new desire to connect with them does not immediately cause him to abandon his ties to the official but limited world of the Brotherhood, it is, as I argue later in this chapter, one of the many such incidents that eventually compels the invisible man toward his redefinitions of American identity and experience.

of representation and simulation precisely by manipulating its literal and discursive technologies to his own ends.

Since the invisible man's new understanding of himself as a vengeful machine merely moves him to a different position within the network of power relations without significantly changing these relations, it is hardly surprising that it also ends in a failure marked by bodily pain. However, because acting like Rinehart (or Jack) demands that he manipulate the social body rather than the individual one as he has done in the past, the pain attending his failure takes on the form of much more public disaster. Following Rinehart's cue, the invisible man carefully infiltrates and "tweaks" the Brotherhood publicity machine, allowing the Brothers to think that they have finally won Harlem over to their cause while carefully suppressing the reality of the growing tensions within the black community. However, rather than simply leading this community toward his own new awareness of the similarities between the Brothers and their capitalist counterparts, the tensions eventually explode into wide scale rioting that tears Harlem apart. While the riots do allow for a certain communal expression of anger against the current social order —after all, one man burns down the white-owned tenement slum in which he lives because "my kid died from the t-bees in that deathtrap" —for the most part the rioters merely loot local businesses in a desperate attempt to accumulate the very goods (and thus the good American life) prized by that same social order *(Invisible Man,* 547). Ultimately, then, the invisible man's attempt to assert himself as an authoritative citizen subject by becoming a kind of vengeful machine utterly negates the original vision of himself as a black leader. Rather than contributing to the creation of a truly democratic society through the creation of a communal political awareness, his actions and their rather spectacularly disastrous effects only serve to exacerbate the divisions within American society while reinforcing the capitalist equation between identity and consumption.

On the night of the riots, Ellison's narrator briefly considers the possibility of two other relationships to the chaos of contemporary America, both grounded in a rejection of that world and a retreat to the seemingly organic sphere of a traditional black community. The first of these two possibilities is embodied by Mary Rambo, a transplanted southerner who proudly notes that "I'm in New York, but New York ain't in me" and whose boarding house comes to represents an oasis of simplicity, stability, and tradition distinct from the deceptive and illusory realm of the public sphere *(Invisible Man,* 255). The second option is proposed by Ras the Exhorter/Destroyer, a self-proclaimed Ethiopian prince and militant black separatist who attempts to convince the invisible man that the only way to assert a genuine black subjectivity is from outside America through the creation of a black nation-state. While both of these narratives invoke a celebration of black history and subjectivity conspicuously absent elsewhere in the novel, Ellison suggests that it is impossible to maintain these idealized notions of unmediated identity in the face of an increasingly complex world. For instance, despite several attempts to retreat to Mary's house, the invisible man finds himself thrown so far off course by the Harlem rioters that he literally and figuratively loses all sense of

where her house —and the idealized organic world it represents —might be. Meanwhile, when the invisible man encounters Ras in his "foreign costume," hefting a spear like "the kind you see them African guys carrying in the moving pictures" and riding his horse "like Heigho, the goddam Silver," he recognizes that the separatist is "funny and dangerous and sad" *(Invisible Man,* 563, 564): dangerous because he dares to dream of preserving an authentic black identity through rebellion and revolution, but funny and sad because these same dreams are always already mediated by the narratives of capitalist culture through which he speaks them.

Finally, after exhausting every conventional narrative of identity and agency available to him, Ellison's narrator retreats to the New York sewage tunnels to ponder "the beautiful absurdity of... American *identify"(Invisible Man,* 559). By recognizing this "absurdity" —or, more specifically, the absurdity of assuming that the American experience can be fully explained by any single grand narrative—the invisible man moves toward a powerful redefinition of America and the American citizen subject.[35] On the one hand, he still acknowledges the very real possibility of the dystopic future predicted by social critics like Russ MacDonald, one where the citizen subject is obliterated by the "robot" of the larger social machine, "an iron man, whose iron legs [clang] doomfully as it move[s] *(Invisible Man,* 570). On the other, he remains hopeful that this future may be averted because:

> The world is just as concrete, ornery, vile, and sublimely wonderful as before, only now I better understand my relation to it and it to me. I've come a long way from those days when, full of illusion, I lived a public life and attempted to function under the assumption that the world was solid and all the relationships therein... Whence all this passion toward conformity, anyway?—diversity is the word. Let man keep his many parts and you'll have no tyrant states... America is woven of many strands; I would recognize them and let it so remain. It's "winner take nothing" that is the great truth of our country or of any country. Life is to be lived, not controlled; and humanity is won by continuing to play in the face of certain defeat. Our fate is to become one, and yet many— This is not prophecy, but description. *(Invisible Man,* 576–77)

[35] Interestingly, the transition between the invisible man's final rejection of conventional subjectivities and his move toward the possibility of absurd but powerful new ones is marked by the first and only description we receive of his own (seemingly absurd) physical appearance. Before this point, Ellison's narrator asserts his place within conventional narratives of identity through lavish descriptions of his clothing. However, when these narratives fail him, he finally admits to his larger social reality precisely by admitting to his personal physical reality: "I [am] no hero, but short and dark with only a certain eloquence and a bottomless capacity for being a fool to mark me from the rest" *(Invisible, Man,* 558–59). It is precisely the assessment of these material realities —an acknowledgement of the very real impossibility of conforming to idealized, heroic concepts of subjectivity combined with an equally powerful knowledge that *something* exists outside these idealized concepts (be it his eloquence or his foolishness) —that allows the invisible man to avoid despair and make the final transition to a new and more hopeful understanding of himself and his world.

By rejecting abstract and sweeping prophecies concerning the fate of America and replacing them with a vision based on the description of his own materia] experience, the invisible man (and, by extension, Ellison himself) begins to revise humanist political narratives and articulate a kind of cyborg politics in two important ways. First, much like postwar writers Gilbert Seldes and Marshall McLuhan, Ellison's narrator reconceptualizes the contemporary world as a cybernetic web of interdependent forces or "strands" (rather than as a singular and totalizing machine) to imagine the possibility of subjectivities that are mediated, but never wholly produced or controlled, by these various forces. Second, in anticipation of later cyborg theorists like Chela Sandoval, the invisible man also imagines the possibility of limited but still powerful cyborg agency in which subjects actively inhabit, map, and even contest their new geopolitical territories by confronting power on its own terrain and "continuing to play [even] in the face of certain defeat."

Ellison further underscores his character's metaphorical transformation from mechanical man to progressive cyborg subject through depictions of a literal transformation in the invisible man's relationship to advanced technologies. Much like McLuhan, Ellison suggests that the contemporary subject can avoid becoming ensnared in the paradigms of identity and consumption associated with the culture industries by engaging with them at a more fundamental level, strategically diverting their discursive and literal technologies in order to speak the experience of mediation itself. However, while McLuhan implicitly assumes that this activity will allow for a new but still somewhat universalized subject position in the "excluded middle" between grand narratives of political subjectivity and their equally sweeping economic counterparts, Ellison suggests that the exact nature of the "excluded middle" —and the forms of identity and agency available within it —changes depending on the specific historical and material forces informing the individual subject. For instance, during his hibernation in the sewage tunnels, the invisible man asserts his newfound sense of "vital aliveness" by quietly diverting electricity from Broadway to wire his hiding place with light and power his phonograph and play his Louis Armstrong records *(Invisible Man,* 6–8). While earlier juxtapositions between various cultural signifiers (such as the juxtaposition between classical music and black folktales he encounters in the hospital) underscored the ways in which black Americans typically are excluded from the realm of white authority, this new juxtaposition suggests the possibility of tapping into that realm to power a black voice. Furthermore, this new way of engaging with cultural technologies and products allows the invisible man to "see around corners" *(Invisible Man,* 13), to expand conventional understandings of subjectivity by making connections between different cultural signifiers outside (or underneath) the official public sphere. In doing so, he thus acknowledges his own connections to both these cultures and their attendant narratives of American history and identity.

Of course, Ellison does not simply suggest that his protagonist somehow magically becomes this progressive cyborg subject solely by withdrawing from the public world. Throughout his aboveground struggle to survive contemporary America, the invisi-

ble man encounters a range of alternative relationships between individuals and the dominant commercial culture that seem to offer hopeful alternatives to conventional modes of identity and agency. For instance, during a subway ride into Harlem, Ellison's narrator becomes fascinated with three zoot-suited boys who stand out from the businessmen and shoppers around them by virtue of the extravagant clothing which transforms their bodies so that they are "far too broad to be those of natural western men" *(Invisible Man,* 440). Recognizing them as representatives of a subculture rarely acknowledged in his own social circle, he wonders: "Who knew but that [these boys] were the saviors, the true leaders, the bearers of something precious? The stewards of something uncomfortable, burdensome... What if history was a gambler, instead of a laboratory experiment, and the boys his ace in the hole? ... For they were on the outside, in the dark ... running and dodging the forces of history instead of making a dominant stand" *(Invisible Man,* 441). Unlike the invisible man, w ho hopes to be seen or recognized by "history" by manipulating his appearance to conform to dominant images of American success, the zoot-suiters manipulate their own looks to *evade* this "natural" visual order and its larger socioeconomic counterpart. In doing so, they provide the invisible man with a glimpse of the "uncomfortable" knowledge that the products of American commodity culture can be used differently to create viable identities outside their officially sanctioned counterparts.

While the zoot suit boys use the cultural goods of mainstream America to silently refuse a place within American history, elsewhere in the novel the invisible man realizes that such goods may be used to speak more complex versions of that history. During the eviction of an old black couple in Harlem, the invisible man finds himself surrounded by "the clutter of household objects... a pair of crudely carved and polished bones, 'knocking bones' used to accompany music at country dances... a straightening comb, switches of false hair... a small Ethiopian flag, a faded tintype of Abraham Lincoln, and the smiling image of a Hollywood star torn from a magazine" *(Invisible Man,* 270). Significantly, the very "clutter" of these objects —a clutter that testifies to individual histories and identities informed by both official and unofficial, white and black, mass-produced and folk cultures —compels the invisible man himself to speak these histories and identities aloud. Indeed, in an attempt to mobilize the crowd into some sort of organized protest, he asks: "What are we going to do? ... I know [the old woman] is somebody's mother because I saw an old breast pump fall into the snow... I looked into a basket and I saw some bones, not neck bones, but rib bones, knocking bones... This old couple used to dance... Look at them, they look like my mama and my papa and my grandma and grandpa, and I look like yon and you look like me... They're our people, your people and mine, your parents and mine. What's happened to 'em?" *(Invisible Man,* 277–78) As the inyisible man begins to realize, identity is defined not only by the products of the white commercial world (the Hollywood star and the straightening comb), but also by cultural goods outside this world (the knocking bones and the Ethiopian flag). Thus, African American identity is neither wholly "black" nor "white," authentic or inauthentic. Instead it is mediated through the complex interplay of the

yarious social and historical forces represented by all these icons. Furthermore, it is precisely through these icons that the inyisible man recognizes his connections to both the couple and the African American community as a whole.

After obserying how others use cultural objects to create identities and histories distinct from those produced by the commercial world, the inyisible man himself begins to use such objects to his own ends.[36] When he prepares to giye his first official speech for the Brotherhood —a speech in w hich he is expected to recruit African Americans to the cause by emphasizing their place within the Brotherhood's (carefully deracinated) grand narratiye of history and revolution —the invisible man begins to suspect that that the entire rally is simply another variation on his experience at the factory hospital, an experiment designed to produce a sense of "natural" solidarity while implicitly reinforcing a certain hierarchical distinction between those with the power to create this solidarity and those who become the objects of indoctrination. Trapped between his contradictory identities as both a member of the Brotherhood and a recent object of their indoctrination, the invisible man finds himself quite literally trapped in the "hard, mechanical isolation" of spotlights that blind him and a microphone that refuses to work correctly. Rather than simply repressing his embarrassment at the contradictions inherent in his immediate predicament, Ellison's protagonist decides to call attention to and thus make a virtue out of it, joking to the audience: "lip to now they've kept me so far away from these shiny electric gadgets I haven't learned the technique ... and to tell you the truth, [the microphone] looks to me like it might bite! Just look at it, it looks like the steel skull of man! Do you think he died of dispossession?" *(Invisible Man,* 341) Once he acknowledges that he cannot fully master either himself or the technologies surrounding him, the invisible man wins the sympathy of his audience and regains control of the microphone itself. Significantly, this incident forces the invisible man to realize that trying to deliver his carefully rehearsed speech would be like "trying to speak in a foreign language." Accordingly, he shifts to the rhetorical strategies of his southern youth, elaborating and expanding upon the bond he already has created with his audience by elaborating and expanding upon the incident itself as a metaphor for black dispossession —a strategy that infuriates the Brotherhood but endears him to the Harlem community. In essence, then, the invisible man's battle with the microphone encapsulates the larger dilemma of establishing a viable identity and agency in contemporary America: much like other objects of reproduction and simulation, the microphone either can be used to transmit and even amplify monolithic stories of conventional hierarchical power relations, or it can be used differently

[36] For other discussions of how the invisible man grapples with the social and historical machinery of America through specific struggles with its literal machinery, see Brain K. Reed's "The Iron and the Flesh: History as Machine in Ellison's *Invisible Man" (College Language Association journal* 37.3 [March 1994): 261–273) and John Callahan's "Frequencies of Eloquence: The Performance and Composition of *Invisible Man"* in *New Essays on Invisible Man,* ed. Robert G. O'Meally.(Cambridge: Cambridge University Press, 1988).

to speak the experience of these relations and to forge connections between those who have been marked by them.

Although Ellison uses *Invisible Man* to depict certain technologically-mediated identities and communities outside those officially recognized by either traditional humanism or the postwar capitalist system, it is important to note that he also suggests that these identities and communities are only the first step toward what we might now call a fulfy-realized cyborg citizenship. Throughout the course of the novel, Ellison's protagonist learns to identify and reorganize his relationship to various cultural goods and, in doing so, to articulate an African American identity that is both produced by and in excess of these goods and the socioeconomic forces they represent. Furthermore, his final question at the end of the novel, "who knows but that, on the lower frequencies, I speak for you?" takes this lesson a step further to indicate the possibility that this new model of subjectivity might be more than a specifically African American one, that it might be the foundation upon which to reconstruct American identify and agency as a whole. And yet, the tentativeness of this question, combined with the fact that the invisible man remains in his hiding place even as he attempts to reach outward, indicates the very real difficulty of actually enacting this new citizenship. In hindsight, the invisible man's (and, by extension, Ellison's own) hesitation seems to be a well-founded one. As we move ahead 25 years to the end of the postwar period to consider Thomas Pynchon's treatment of these issues in *The Crying of Lot* 49, we will see that the construction of cyborg subjectivities and the attempt to enact them in an increasingly high-tech America are themselves increasingly important—but increasingly difficult —projects.

IIA. "In the Electric Age We Wear All Mankind as Our Skin": American Subjectivity and 1he Culture Industries, 1958–1968

Much like Ralph Ellison, Thomas Pynchon extends the postwar critical debates surrounding the culture industries to imagine a range of ways that Americans might interact with a technologically-mediated world. However, while Ellison depicts a "new" (and newly cybernetic) humanist subject who negotiates the realm of simulation and consumption by drawing upon subaltern histories of American identity , Pynchon explores the fragmentation and simulation of history itself. *The Crying of Lot* 49 revolves around suburban housewife Oedipa Maas and her quest to escape her own mass-produced "Tupperware" existence by sorting out the specific place of American history within what appears to be a centuries-old conflict between official communications systems and a mysterious counterforce called Trystero. And yet, while Oedipa encounters a variety of explanations for this conflict, each one re-presents history (and Oedipa's own place within it) in ways that seem designed to seduce her into com-

pliance rather than actually explain her experience of America. Ultimately, rather than relying on either official *or* subaltern histories as the foundation for new forms of technologically-mediated subjectivity, Pynchon suggests that it is the process of traversing and mapping constructions of history themselves that constitutes the first step toward a progressive cyborg engagement with the postindustrial world.

The difference between Ellison and Pynchon's depictions of American subjectivity and the culture industries parallel certain socioeconomic changes that occurred in the late 1950s and 1960s. In particular, the second postwar decade saw both continued technological expansion and increased economic consolidation on the part of the culture industries. Satellite technology brought television to even the most remote parts of the United States by 1958, and transatlantic telephone and television lines made live communication between the U.S. and Europe possible by the early 1960s. At the same time advanced communications technologies seemed to release the nation from its traditional geographic boundaries, they threatened to erase internal regional differences as well: because these technologies greatly increased broadcasting costs, independent TV and radio stations often were forced to abandon local programming in favor of the cheaper standardized programming of parent corporations. These parent corporations further solidified their economic power through new alliances w ith the United States military. For instance, CBS president Frank Stanton chaired various research organizations funded by the Air Force and the CIA, while RCA garnered well over $200 million worth of military contracts each year of the Vietnam War (Folkerts and Teeter, 470–72). Thus, the rise of the military industrial-entertainment complex appeared to challenge the conventional division of power within America itself.[37]

While the culture industries of this time period helped shape the future of the postindustrial world in significant ways, they continued to reinforce the equation between American identity and consumerism by colonizing and commodifying the American past. A new tourist industry centered around (more or less) historical sites such as Colonial Williamsburg, Detroit's Creenfield Village, and Disney's "Main Street America" flourished throughout the late 1950s and 1960s. Television broadcasters and filmmakers happily contributed to the effort to create an official, collective history through massive advertising campaigns and lavish docudramas tied into specific sites and the events they memorialized.[38] Not surprisingly, both the sites and the media specials depoliticized and re-presented the often-messy historical past to emphasize instead a long-standing benevolent connection between capitalism and patriotism (Kammen,

[37] Of course, as discussed earlier in this chapter, similar alliances between the culture industries and the government have occurred throughout American history, most notably during World War II. However, while past unions at least theoretically were made in the name of patriotism and the benefits that the culture industries accrued through them were largely "invisible" ones such as decreased government regulation, the alliances of this time period were far more powerful and overtly lucrative.

[38] Michael Kammen. *Mystic Chords of Memory': The Transformation of Tradition in Popular Culture* (New York: Vintage, 1993), 543; hereafter cited in text.

573).[39] Finally, even the news media —which prided itself on making contemporary history available to the public at large —seemed interested in representing only select narratives of history rather than recording it in its full complexity. For instance, reporters rarely covered contemporary black life or civil rights issues apart from the "crises" incurred by civil disobedience, while coverage of Vietnam simply tended to follow, rather than actively challenge or expand, pre-existing public opinions concerning the war (Folkerts and Teeter, 464, ff. 8; 465). Little wonder, then, that critics continued to condemn the culture industries in public (and that industry executives sometimes followed suit in private) as a kind of electronic wasteland.

In the face of this wasteland, social critics became increasingly skeptical about the viability of conventional narratives of the citizen subject. Not surprisingly, radical writers like C. Wright Mills and Herbert Marcuse continued to voice concern about the reconstruction of the American subject as a "one-dimensional" consumer c)borg. And yet, unlike many of their counterparts from a decade earlier, they specifically rejected the possibility of countering this reconstruction through traditional political representations, pointing out that that such representations had been neutralized "through their wholesale incorporation into the established order, through their reproduction and display on a massive scale."[40] Instead, they suggested the possibility of enacting other, "more rational" modes of identity and agency by carefully mapping and studying the history of the culture industries themselves *(One-Dimensional Man,* 219; see also *The Power Elite* 344–61).[41] In essence, then, these critics attempted to rejuve-

[39] Meanwhile, in the realm of "light" entertainment, TV companies began to replace critically-acclaimed live telecasts of the arts with more popular (and infinitely cheaper) Westerns and hard-boiled detective dramas that nostalgically revolved around images of a simpler, golden past (Baughman 86–88). Along with their theoretically more educational counterparts, then, such shows helped reinterpret history and the historic American subject in ways that both made sense of and justified the transformations of contemporary America.

[40] Herbert Marcuse. *One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society'* (1964; reprint, Boston: Beacon, 1969), 57; hereafter cited in text as *One-Dimensional Man.* See also C. Wright Mills, *The Power Elite* (1956; reprint, New York: Oxford University Press, 1965), 14; hereafter cited in text as *The Power Elite.*

[41] This kind of intellectual work—and the subject positions it implied—became increasingly poprdar throughout the 1950s and 1960s. For instance, in his forward to the 1960 anthology *Wass Communications* (Urbana: University of Illinois Press, 1960), Wilbur Schramm argued that an "important" and "healthful" transformation was occurring in mass media studies as scholars replaced generalized (political) claims about the culture industries with "accurate" and "penetrating" (or, "objective") research studies (n.p.). And indeed, Schramm's claim seemed to be born out by the sheer number of academic and popular texts designed to map even the most minute details of the culture industries. For instance, both Herbert Marcuse's *One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society* (1964; reprint, Boston: Beacon, 1969) and Wylie Sypher's *Literature and Technology: The Alien Vision* (New York: Random, 1968) examined the culture industries as part of a larger historic shift from creative scientific experimentation to technological rationalization. Meanwhile, others provided voluminous descriptions of day-to-day operations in contemporary cultural production sites such as the newsroom and the soundstage (see especially Schramm's aforementioned anthology, *Mass Communications).* Finally, the popularity of sociologist Vance Packard's best-sellers *The Hidden Persuaders* (New York: Pocket

nate American identity and agency as a whole by defining it in relation to a different narrative of humanist identity and agency: that of the scientist-scholar who engages with the technologically-mediated world, but who avoids entanglement by making that world the object of critical scrutiny.

Meanwhile, critics interested in the possibility of cyborg identities and agencies turned to the new interdisciplinary science of cybernetics for inspiration. In essence, cybernetics assumed that all communications systems —be they organic, technological, or some combination thereof—took on one of two distinct forms. Systems were either closed, entropie ones that endlessly recycled the same information until it degraded into meaninglessness, or they were open, dynamic ones in which the perpetual introduction of new information reorganized and revitalized the system as a whole.[42] Significantly, while leading cybernetics researcher Norbert Wiener argued that the culture industries were examples of the former —closed systems of degraded information that reduced the subject to a mere automaton —others drew upon notions of the open system to imagine the technologically-mediated subject as an active part of a greater dynamic system. For instance, in his groundbreaking study "The Two-Step Flow of Communication," Ehm Katz dismissed dominant conceptions of one-way communication flow from the culture industries to their recipients, instead arguing that the messages of the culture industries (and the narratives of identity and agency they invited their audiences to consume) were diffused among "networks of interconnected individuals" who both channeled these messages and simultaneously reorganized them to account for new information based on their experiences and relationships outside the culture industries.[43] Thus Katz used the language of cybernetics to extend the work of his predecessors Seldes and McLuhan, maintaining the humanist notion of a citizen subject who acts upon his or her embodied experience while expanding this notion to account for the experience of technological mediation itself.

Likewise, the ever optimistic Marshall McLuhan also wove cybernetic theories into his own later explorations of technologically-mediated identity. Acknowledging that the culture industries might very well appear to be a closed svstem due to their overt obsession with simulation and representation, McLuhan also claimed that the degraded or nostalgic *content* of cultural goods was ultimately less important that the *medium* of presentation. Thus, the medium was key to understanding both the culture industries and the contemporary citizen subject's position within them. Throughout the 1960s McLuhan argued that identity depended largely upon physiological senses, and that all technologies essentially served to extend these senses. Thus while his earlier

---

Books, 1958) and *The Status Seekers* (New York: D. McKay, 1959) indicated an equal desire on the part of the lay public to make sense of larger social transformations by uncovering and thus understanding (however vicariously) the motives of those who seemed to initiate and control these transformations.

[42] Norbert Wiener. *The Human Use of Human Beings: Cybernetics and Society* (1950; reprint, New York: De Capo Press, 1954), 12; hereafter cited in text as *Human Use.*

[43] Elihu Katz. "The Two-Step Flow of Communication." In *Mass Communications,* ed. Wilbur Schramm (Urbana: University of Illinois Press, 1960), 347.

work positioned the cybernetic American subject at the (discursive) interface between historical/political and contemporary/economic narratives of identity and agency, he now focused his attention on the forms of subjectivity that emerged from the interplay among individual patterns of sensory perception ("sense ratios"), culturally-favored patterns of sense ratios, and the ways both sets of patterns were reorganized by global communications technologies to create a dynamic "global village" and an equally dynamic global citizen subject.[44] To a certain extent this electronically-dispersed subject appeared distinct from the conventional humanist subject and its autonomous, private body. At the same time, however, McLuhan retained the equally conventional humanist equation between agency and self presence by suggesting that, if anything, the inhabitants of his global village were more fully integrated subjects than their traditional counterparts because they existed in an empathetic "total field awareness," wearing "all mankind as [their] skin" *(Understanding Media,* 47). Somewhat ironically then, while McLuhan attempted to locate a posthumanist cyborg identity within the physical body as it was transformed by its interactions with the culture industries, his insistence on the wholesale nature of this transformation (and his assumption tiratali individuals would understand this transformation in the same way) ultimately erased all other material differences between such bodies, uniting them under the aegis of a universal electronic skin.

Furthermore, both humanist and (potentially) posthumanist critics alike tended to depict changing human-technology relations through specifically gendered metaphors. For instance, Marcuse imagined the natural relationship between the scientific or intellectual subject and his technologized, objectified world as akin to a romantic heterosexual union in which the male subject asserts himself by describing the feminine object of his desire in loving and detailed terms in order to "break the circle of everyday experience and open (for a short moment) another reality" *(One-Dimensional Man,* 210). However, the contemporary era inverted this relationship by positioning the previously active subject as the passive object of technological manipulation and description. Continuing the gendered metaphor, Marcuse figured this new relationship as similar to that of a prostitute and her john: as a cold, sterile transaction in which the (feminine) technological world simulates and manipulates (masculine) desire solely in the interest of economic gain *(One-Dimensional Man,* 77–78). Meanwhile, McLuhan drew upon similarly gendered metaphors to depict the danger of clinging to conventional subjectivities in a high-tech world. Arguing that the attempt to do so could only result in a tragic disjunction between the individual and the larger world, he

[44] Marshall McLuhan. *Understanding Media* (New York: McGraw-Hill, 1964), 44; hereafter cited in text as *Understanding Media.* For McLuhan, then, the subjects formed at the interfaces of these sense ratios might well contain traces of the historical configurations (and thus modes of identity and agency) favored by earlier ages, but the dynamic new continuum between individual and social bodies ultimately-negated the possibility of these configurations reasserting themselves fully without endangering the psychic and physical health of the individual. For further discussion, see *Understanding Media,* Chapter 4, "The Gadget Lover: Narcissus as Narcosis."

imagined the average American as a kind of Narcissus passively ensnared by an image of himself that "numbjsj his perceptions until he [becomes] the servomechanism of his own extended or repeated image" *(Uirderstanding Media,* 41). For McLuhan, this image of the self was the product an older (visually-oriented) social order that had little or no relevance in the contemporary era. Therefore, the Narcissistic individual (like his mythic predecessor) was doomed to lose all subjectivity whatsoever because he could not escape this image and integrate himself with "Echo" —McLuhan's term for the newly expanded social and sensory order enabled by advanced technologies *(Understanding Media,* 41). Thus, while Marcuse ultimately argued for scientific and intellectual detachment from the high-tech world of America and McLuhan advocated a wholehearted immersion into that same world, both deployed rather conventionally gendered metaphors to figure the apparent disarray of the public realm as analogous to disarray in the private one of individual relations.

IIB. "This is Your America, You Live in It, You Let It Happen": The Technological Mediation of History and Identity in Thomas Pynchon's *The Crying of Lot 49*

Like the social critics of the late postwar period, fiction waiter Thomas Pynchon depicts the technological mediation of American history and identity in terms of gendered personal relations.[45] At the beginning *of The Crying of Lot* $_{49}$, Oedipa Maas appears to be (much like her counterpart in *invisible Man)* the stereotypically passive, puppet-like automaton whose identity is carefully delimited and "insulated" from change by the mechanical rhythms of American consumer culture —the muzak that accompanies her shopping, the 'Tupperware parties that provide her only connection to other suburban housewives, and the televised news that serves as her only conduit to the larger world around her.[46] Significantly, Oedipa's disconnection from the world

[45] My argument assumes that Pynchon uses gender in a largely metaphoric manner and that, as such, the literally female Oedipa represents all subjects —male and female alike—who Hud themselves "feminized" by the yyorld of technological production and simulation. For a reading that does examine Oedipa's dilemma as a specifically female one, see Tracey Sherard's "The Birth of the Female Subject in *The Crying of Lot q)" (Pynchon Notes* 32–33 [spring-fall 1993]: 60–74).

[46] For other examinations of mediated history and identity in *The Crying of Lot* 49, sec Pierre-Yves Petillon's "A Recognition of Her Errand into the Wilderness" in *New Essays on* The Crying of Lot 49, ed. Patrick O'Donnell (New York: Cambridge University Press, 1991); Lance Schachterle's "Pynchon and the Civil Wars of Technology" in *Literature and Technology,* eds. Mark L. Greenberg and Lance Schachterle (Cranbury, NJ: Associated University Presses, 1992); J. Kerry Grant's "Not Quite so Crazy After All These Years: Pynchon's Creative Engineer" *(Pynchon Notes* 28–29 [spring-fall 1991]: 43–53); Thomas Schaub's *Pynchon: The Voice of Ambiguity* (Urbana: University of Illinois Press, 1981); and Dean Ward's "Information and the Immanent Heat Death of Oedipa Maas" *(University of Hartford*

around her is immediately conflated with a certain disconnection from her own romantic history. Consider, for instance, the opening paragraph of the novel, where Oedipa learns that her former lover, the multimillionaire Pierce Inveriarty, has died and left her the task of sorting out his vast corporate estate:

Oedipa stood in the living room, stared at by the greenish dead eye of the TV tube, spoke the name of god, tried to feel as drunk as possible. But this did not work. She thought of a hotel room in Mazatlan whose door had just been slammed, it seemed forever, waking up two hundred birds down in the lobby; a sunrise over the library slope at Cornell University that nobody out on it had seen because the slope faces west; a dry, disconsolate tune from the fourth movement of the Bartok Concerto for Orchestra; a whitewashed bust of Jay Gould that Pierce kept over the bed on a shelf so narrow for it she'd always had the hovering fear it world someday topple on them. Was that how he'd died, she wondered, among dreams, crushed by the only icon in the house? That only made her laugh, out loud and helpless. *(Lot* 49, 5)

Trapped within the sterile but all-encompassing gaze of the godlike icon of her world —the TV —Oedipa finds herself unable to respond to Inveriarty's death in a manner appropriate to her role as a supposedly grieving lover. Indeed, even her memories of Inveriarty seem to be nothing more than stereotyped images (empty hotel rooms, fleeing birds, missed sunrises) from a partially forgotten broadcast drama, images so cliched and removed from the experiences they represent that they can only provoke "helpless" laughter.

To a certain extent, Inveriarty's death does "pierce" through Oedipa's insulation by making her aware that her suburban life is much like "a movie, just perceptibly out of focus, that the projectionist refused to fix" *(Lot* 49, 12). Furthermore, by granting her the position of legal executrix, Inveriarty seems to offer Oedipa a way to adjust this focus, to become a kind of "projectionist" w ith a different (and presumable more authoritative) relationship to the literal and discursive machineries shaping her world. However, the role of the projectionist fails to provide Oedipa with a sufficient way of organizing either Inveriarty's estate or the larger world around her. The inadequacy of this role first becomes apparent when Oedipa drives through the "ordered swirl of houses and streets" of Inveriarty 's former home, San Narciso. Comparing the city to the printed circuit card of a transistor radio, she notes that "there were to both outward patterns a hieroglyphic sense of concealed meaning, an intent to communicate... A revelation ... just past the threshold of her understanding" *(Lot 49,* 15). When Oedipa learns that Inveriarty's estate spreads far beyond the geographical limits of San Narciso —that the multimillionaire either owned or had a controlling interest in *everything* from munitions factories and academic endowments to cigarette companies and Turkish

Studies in Literature: A Journal of Interdisciplinary Criticism 20:3 [1988]: 24–37). While Petillon and Schachterle situate Pynchon's novel specifically within postwar literary and social debates concerning the relationship between advanced technologies and the cultural transmission of history and identity, Schaub, Grant and Ward focus on Pynchon's use of metaphors drawn from various areas of scientific inquiry—especially cybernetics,—to depict the dilemma of contemporary subjectivity.

baths —she finally concludes that the dead man's legacy is "the legacy [of] America" itself (Lot 49, 123). Unfortunately, the exact contours of this legacy remain frustratingly incomplete. Oedipa never receives an actual will or any other legal document outlining Inveriarty's estate; instead, she only catches glimpses of its vast dimensions through passing references, secondhand stories, and, perhaps most significantly, an endless flow of TV and radio advertisements (all of which, inevitably, simply point toward other, equally incomplete, representations of the estate). In turn her failure to assert any real control over the estate leads Oedipa to suspect that she is the victim of an elaborate practical joke on the part of Inveriarty *(Lot 49,* 118). Thus, even from beyond the grave the multimillionaire seems to manipulate Oedipa's desire for a coherent narrative of her self and her world in much the same ways that his commercials manipulate consumer desire. Indeed, Oedipa's position as the helpless and hapless victim of Inveriarty's joke parallels that of the American subject who finds him or herself similarly victimized —or "feminized" —by an emerging postindustrial order that promises authority and agency only to deliver an endless cycle of passive consumption and deferred desire instead.

In her quest to escape Inveriarty's joke, Oedipa attempts to connect with a variety of men who embody other relationships to American history and identity. The first two of these men are her husband, the used-car-salesman-turned-radio-DJ Mucho Maas, and her therapist, the Nazi-scientist-turned-Freudian-psychiatrist Dr. Hilarious. Both Mucho and Hilarious occupy positions of cultural power established within relatively recent history; thus, they seem to hold forth the possibility of making a clean break with the past. However, Pynchon ultimately suggests that individuals who occupy these cultural positions simply repeat history in ways that undermine their authority and agency altogether. For instance, Mucho leaves his first job as a used car salesman when his faith in the cars (and the freedom they symbolize) collapses under the weight of an "endless ritual of trade-ins" and he realizes that the boundless possibilities of industrial America have withered away into an "unvarying grey sickness" *(Lot 49,* 8). The pop music industry promises Mucho access to a new and more brightly colored world, but in reality it merely replaces one endless cycle of consumption with another and Mucho finds himself paralyzed by an America he can no longer believe in. Likewise, upon realizing that his work as a Nazi doctor was the end product of an Enlightenment science gone horribly awry, Hilarious attempts to escape his past and perform "a kind of penance" by becoming a Freudian analyst (Lot 49, 93). Unfortunately, his work as an analyst entails a series of LSD experiments that seem suspiciously similar to his Nazi experiments. Given their inability to establish authentically new relationships to contemporary America, then, it is hardly surprising that the two men cannot establish authentic relationships with Oedipa either: Mucho tells her that he is incapable of helping anyone, and Hilarious simply hangs up the phone when Oedipa asks his advice. Eventually, the contradictions inherent in their cultural positions cause the two men to lose all hold on their own (already tenuous) realities, and Hilarious goes insane while

Mucho "solves" his identity crisis by taking the therapist's LSD and dissolving himself into a hallucinatory mental landscape.

As her husband and therapist become increasingly disconnected from the bright and shiny surfaces of postindustrial America, Oedipa turns to the one character most fully at home within the play of these surfaces: her co-executor, the actor-turned-lawyer Metzger. Although the incredibly handsome lawyer claims that "looks don't means a thing any more... I live inside my looks, and I'm never sure" (Lot 49, 18), his subsequent refusal to distinguish between what appears to be and what is suggests that he is *quite* sure that appearances are *everything;* thus, he seems to represent one possible form of cyborg integration with a technologically-mediated world. Indeed, while Oedipa's own search for a meaningful historical narrative is thwarted by technological mediation, Metzger finds new kinds of meaning within this mediation. For instance, while watching the film *Cashiered* on TV—a World War II film he starred in as a child actor — the lawyer provides Oedipa with a running critique of the movie's military inaccuracies. When Oedipa protests that Metzger could hardly be an expert on the subject (after all, he was only a child living in Hollywood during the war), he simply brushes her protests aside with a single question: "Wasn't I there?" *{Lot* 49, 20) Thus Metzger's refusal to distinguish between history and its technological reproduction provides him with the ability to author history itself.

Although Metzger seems to offer Oedipa a new model of authority, the failure of their personal romance indicates that this model is as limited and limiting as the conventional ones it replaces. Much like Marshall McLuhan, Pvnchon frames this romance-gone-awry within the Echo and Narcissus myth: Oedipa's desire to find herself (or at least images of herself) in some conventional narrative parallels that of McLuhan's Narcissus, and Metzger's ability to negotiate the new electronic world connects him to the expanded sensory realm McLuhan associates with the figure of Echo.[47] However, while McLuhan uses the conventional tragic ending of the Greek myth —Echo and Narcissus' failure to consummate their union —to indicate the very real difficulty most subjects face when trying to integrate themselves with the new electronic world, Pynchon suggests that even when this consummation *does* occur, integration does not necessarily follow. Metzger and Oedipa begin their affair during a game of "Strip Botticelli," in which Oedipa must guess the various events that will occur throughout the film *Cashiered;* for each wrong guess, she removes a piece of clothing, and for each cor-

[47] The fact that Pynchon reverses the gendering of the traditional Greek myth by linking Oedipa to Narcissus and Metzger with Echo seems highly appropriate, given his concern with the potential feminization of all contemporary subjects. At the same time, we might well note that elsewhere Pynchon actually reverses this equation in fav or of a more traditional pairing. For instance, Oedipa is depicted as bearing a startling resemblance to the nymph on the sign of the "Echo Courts" motel where she meets Metzger *(Lot* 49, 16), while Metzger evinces a Narcissistic-like fascination with the image of himself projected upon the TV screen *(Lot 49,* 20). Ultimately, I would argue that the instability of these pairings underscores the other related problem concerning subjectivity that surfaces throughout the novel: the problem of constructing a stable referential framework through which to narrate one's identity.

rect one, Metzger does the same. The game becomes increasingly bizarre as the night becomes increasingly chaotic: the film reels are out of order, the hotel manager and his rock band wander in and out of the room alternately serenading the lovers and trying to join in on the fun, and Oedipa and Metzger themselves are nearly killed by a can of aerosol hairspray that Oedipa sends careening around the room in a moment of helpless laughter. Eventually the chaos overwhelms Oedipa, who passes out only to awake "at last to find herself getting laid; she'd come in on a sexual crescendo in progress, like a cut to a scene where the camera's already moving" (Lot 49, 27). Despite the fact that Oedipa achieves a certain sexual satisfaction from her encounter with Metzger, her sense that she has become a detached witness to the unfocused movie of her life yet again suggests that the lawyer does not provide her walh a new or authoritative way of engaging with America.[48] Rather than heralding the integration of the subject with her technologically-mediated world, then, this particular union between Narcissus and Echo reveals itself to be nothing more than a variation on Herbert Marcuse's sterile transaction between the prostitute and her john.

Upon realizing that Metzger's model of history and identity merely gives her "over to a new master" *{Lot* 49, 29), Oedipa turns to Mike Fallopian, the military engineer by day and anti-industrial anarchist by night w ho appears to be the living embodiment of C. Wright Mills and Herbert Marcuse's scientist scholar. As a member of the underground postal system W.A.S.T.E., (which, as Oedipa later learns, is probably the creation of Trystero, a shadowy historical force sworn to wreak havoc on official communications systems), Fallopian quite literally participates an alternative relationship to the advanced technologies of postindustrial America. At the same time, he offers Oedipa an alternative history of this America as well. Unlike Metzger, Fallopian does not trust technologically-produced images to accurately reflect the world. Instead, he insists that such images inevitably hide the real workings of power, telling Oedipa, for instance, that official depictions of the current Cold War are carefully disseminated by modern governments (Soviet and American alike) working with big business to distract citizens from the "creeping horror" of the increasingly rapacious, globally oriented military-industrial-entertainment complex in which they participate *(Lot* 49, 33). Also,

[48] Elsew here in the novel, Pynchon further indicates the similar inadequacies of both conventional and emergent American subjectivities by highlighting certain similarities in the ways that Mucho and Metzger conduct their personal relationships to Oedipa and other women. For instance, when Oedipa leaves Metzger to pursue Trystero on her own, she notes that, "as with Mucho ... [he] did not seem desperate at her going" *(Lot 49,* 68)—perhaps because, as with Mucho, the lawyer simply does not have room for Oedipa or Trystero within his world-view. Furthermore, while Mucho longs to escape his life's complications by running off with one of his teenaged fans but finds himself paralyzed because he "couldn't get statutory rape realiy out of the back of [hisblaw-abiding head" *(Lot 49,* 30), Metzger's disconnection from the material world and its conventions allows him to enact Mucho's own dream when he runs off with a band groupie to escape the complications of working with Oedipa *(Lot 49,* 102). If anything, then, Metzger's integration into the new America of fantasy and simulation merely repeats and exacerbates certain unsatisfactory tendencies already inherent within traditional narratives of identity.

unlike Mucho and Hilarious, who repress the relationship between past and present, the anarchist can and does provide Oedipa with this kind of relationship, locating the roots of contemporary politics in a long-forgotten Civil War alliance between Russia and the northern United States based on their mutual desire to replace traditional agrarian economies with industrial ones. Thus, Fallopian's work as a scientist-scholar seems to fulfill Oedipa's own dream of creating a viable order within the seeming disorder of a high-tech world.

However, Pynchon suggests that this order is actually quite similar to that of the postindustrial system it theoretically opposes and, as such, is always in danger of being anticipated and co-opted. Indeed, this possibility is inherent in Mike Fallopian's very name. Although his last name gestures toward the possibility of natural production of the part of the individual, in conjunction with his decidedly masculine first name, it suggests a very different relationship; while the cycle of biological reproduction typically involves a shared activity between two individuals, "Mike Fallopian" suggests a disarray in even this most fundamental relationship, a usurpation of the feminine subject's contribution to the reproductive process and thus a displacement of that subject altogether. In turn, this pattern of usurpation and displacement at the level of individual relations parallels the pattern that humanist critics like Mills and Marcuse themselves ascribe to the broader level of contemporary social relations, in which a world structured by technological reproduction and mediation usurps and displaces the "feminized" citizen subject's ability to act authoritatively in relation to that world. And indeed, despite his initial friendliness toward Oedipa, Fallopian seems destined to reenact the relationship implied by his full name. Upon learning that she is not already part of the W.A.S.T.E. system, the anarchist becomes increasingly reluctant to help her learn more about it, telling her that "you weren't supposed to see that" and rather quickly assuring her that "it's not as rebellious as it looks" *(Lot 49,* 35). Thus, his withdrawal excludes and displaces Oedipa in much the same way that she already has been displaced from Inveriarty's America. Furthermore, the authenticity of Fallopian's opposition to this America is severely troubled when Oedipa visits him again later in the novel: "She found Mike Fallopian, a couple weeks into raising a beard, wearing a button-down olive shirt, creased fatigue pants minus cuffs and belt loops, two-button fatigue jacket, no hat. He was surrounded by broads, drinking champagne cocktails, and bellowing low songs. When he spotted Oedipa, he gave her the wide grin and waved her over. 'You look,' she said, 'wow. Like you're all on the move. Training rebels up in the mountains'" *(Lot 49,* 115). In essence, then, Fallopian's earlier denial of his own rebelliousness proves to be correct. Rather than providing him with the means to generate genuinely alternative narratives of American history and identity, Fallopian's self-proclaimed position as a guerrilla warfare leader reveals itself it be little or no different than its stereotypical representation.[49]

[49] Fallopian's shifting attitude toward Oedipa and her desire for information about W.A.S.T.E. parallels his shifting sexual conduct toward her as well. At first, the anarchist's remarkable ability to

Elsewhere in the novel, Pynchon uses Oedipa's failure to establish meaningful personal relationships with other members of the W.A.S.T.E. system to further indicate the limitations of the subject positions valorized by Mills and Marcuse.[50] In her search for Trystero, Oedipa encounters a series of scholars and scientists, each of whom (like Fallopian) seem to offer her genuinely different ways of narrating or ordering the world, and thus genuinely different ways of negotiating contemporary America. For instance, Randolph Driblette, director of a Restoration-era revenge play called *The Courier's Tragedy* which provides Oedipa with her first reference to the historical Trystero, tells her that the reference "doesn't mean anything" because the play itself "was written [solely] to entertain people. Like horror movies" *(Lot 49,* 52). Instead of locating historical authority within its textual representation, he encourages Oedipa to think of those who author as the actual creators of history: "That's what I'm here for. To give the spirit flesh. The words, who cares? They're rote noises... The reality is in *this* head. Mine. I'm the projector at the planetarium, all the closed little universe visible on that stage is coming out of my mouth, eyes, sometimes other orifices as well" *(Lot 49,* 53–54). The image of the projectionist appeals to Oedipa's longing for authority, but her experience of the material world outside her head (and her desire for some form of connection to or explanation of that world) leads her to protest that it cannot be as simple as Driblette suggests —at which point the director cuts her off with the halfhearted offer of an affair, telling her that "You could fall in love with me... We could do that" *(Lot 49,* 54). Not surprisingly, Oedipa rejects the offer, and, with it, Driblette's understanding of reality as simply the product of the individual mind. Oedipa's decision seems to be a wise one —after all, Driblette kills himself on the closing night of the piay. Ultimately, Driblette cannot survive contemporary America because the relationship between narrative and identity is more complex than he is willing to admit; the director may give life to his play, but without the external reality of the text to validate *his* existence, Driblette himself quite literally dies.

---

produce seemingly genuine, alternative narratives of history parallels his equally remarkable ability to interact with Oedipa outside the confines of a sexual or gendered relationship. Later, of course, when he begins to withdraw from Oedipa in order to guard the secret of W.A.S.T.E., we might well begin to wonder if this romantic disinterest does not simply stem from the fact that he does not need or want her to participate in the modes of production he represents. Either way, it is significant to note that, after his transformation into a kind of walking cliché, he does begin to view Oedipa erotically *(Lot* 49, 115). Just as Fallopian himself is co-opted by the world of technological production, then, it seems that he implicitly wishes to co-opt Oedipa into an equally stereotypical relationship.

[50] Although my reading focuses primarily on the ways that failed sexual relations reveal failed relations to America as a whole, we should also note that Oedipa enters into other, equally thwarted, forms of gendered relations as well. For instance, when she turns to the somewhat scatterbrained stamp collector Ghengis Cohen for information about the history of W.A.S.T.E., she immediately begins to feel "motherly" *(Lot* 49, 65) toward him, and when she approaches the literary historian Emory Bortz for information about Trystero, the transforms herself into a daughterly, student-like figure, complete with sneakers, pinned back hair, and minimal makeup *(Lot* 49, 102). Unfortunately, both Cohen and Bortz fail to fulfill their familial roles when they fail to see Oedipa—or her search for history and identity—as little more than "part of [a] game" *(Lot* 49, 199).

Much like Driblette, the "really creative engineer" John Nefastis attempts to locate authority and agency in the individual who produces reality (Lot 49, 59). While Driblette believes he can control social and historical reality through intellectual activity, Nefastis claims that individuals can control physical reality through science and technology —or, more specifically, through technological devices such as his perpetual motion machine. According to Nefastis, the machine brings together two divergent fields of cybernetic inquiry by connecting "the [material] world of thermodynamics to the [abstract] world of information flow" through a human "sensitive" in order to increase the overall amount of order in the universe *(Lot* 49, 72–73). Thus, the sensitive's relationship to the machine seems to offer an ideal model for the individual subject's relationship to the machinery of the larger social sphere, a relationship that allows the subject to engage with the world in an authoritative way by knitting together abstract thought and physical activity. Inevitably, however, the machine (and the dream of complete control it represents) is an impossible one, and Oedipa (like everyone else before her) fails to make it actually work. When Oedipa begins to cry in frustration at yet another failure, Nefastis suddenly drops his scientific demeanor and attempts to comfort her by suggesting they "do it" on the couch while watching the TV news:."Maybe there'll be something about China tonight. I like to do it while they talk about Viet Nam, but China is best of all. You think about all those Chinese. Teeming. That profusion of life. It makes it sexier, right?" (Lot 49, 74). If this somewhat inept sexual advance sends Oedipa out the door screaming in disgust, it is, perhaps, because the speech reveals a certain paradox in Nefastis's own subject position. The engineer believes that he can use the technology of his perpetual motion machine to connect with and control the world around him, but his very desire for connection is always already controlled by another technology—television —and its re-presentations of life and human connection itself.

Finally, Oedipa's inability to connect with individual members of Trystero/ W.A.S.T.E. system repeats itself on a larger scale when the various communities supposedly linked together by this system also fail to connect with one another. After the incident with Nefastis, Oedipa spends the night drifting through San Francisco, where —despite the fact that she has stopped actively looking for them —signs of Trystero and W.A.S.T.E. continue to appear everywhere: in stores, on buses, in gay bars, in a poker game at the airport, and even in a children's game of hopscotch. Unfortunately, while these heretofore invisible communities seem to embody "all the promise, productivity, betrayal, and ulcers" of America *(Lot* 49, 85), it becomes increasingly clear that this America is hopelessly fragmented. Each community remains "unpenetrated," unaware of its relationship to any other community (let alone their common relationships to Trystero), and thus "Oedipa, to retaliate, stopped believing in them" *(Lot 49,* 82). At the end of the night, she finally admits that America might be nothing more than the land of the "drifters... searching ceaseless among the dial's ten million possibilities for that magical Other who would reveal herself out if the roar of relays, monotonous litanies of insult, filth, fantasy, love whose brute repetition must

someday call into being the trigger for the unnamable act, the recognition, the Word" *(Lot* 49, 124–25). Thus, she admits that the channels of communication provided by Trystero are little or no different than those structuring Inveriarty's America; both simply mediate and obscure the individual's relationship to history and identity, leaxing the subject trapped within a perpetual motion machine of endlessly deferred desire.[51]

At this point Oedipa also becomes a kind of drifter, isolated from both her social and personal worlds. Recognizing that she cannot maintain the position of the scientist-scholar who maps the legacy of Inveriarty/Trystero from without, Oedipa finds herself "breath[ing] in a vacuum" without connection to any stable reality, trapped between four "symmetrical" alternatives: either Trystero and W.A.S.T.E. really exist, or she is hallucinating them; either Inveriarty plotted to trick Oedipa into believing in Trystero as a fantastic, final practical joke, or she is "out of [her] skull" and spinning fantastically paranoid plots of her own *(Lot* 49, 117–18). Likewise, she notes a similar vacuum in her relationships to specific individuals. When she learns that Metzger has run off with another woman and that Driblette has committed suicide, she concludes that "they are stripping away, one by one, my men. My shrink, pursued by Israelis, has gone mad; my husband, on LSD, gropes like a child further and further into the rooms and endless rooms of the elaborate candy house of himself... My one extra-marital fella has eloped with a depraved fifteen-year-old; my best guide back to the Trystero has taken a Brody. Where am I?" *(Lot 49,* 105) As the final question in this speech suggests, then, Oedipa's failure to connect with individual men — and the modes of subjectivity they represent—in the private realm of gendered relations parallels the disorientation she experiences when she fails to connect with or make sense of her relationship to the public realm of America itself.

Along with this isolation, Oedipa's ability to act effectivelv—let alone authoritatively—becomes increasingly limited. In the beginning of her quest, Oedipa optimistically figures her quest for Trystero as a liberatory one in which she frees herself from the confining "tower" of contemporary American life by becoming her own "knight of deliverance" *(Lot* 49, 13). However, when Oedipa attends Inveriarty's estate sale

[51] To make matters worse, when Oedipa finally finds concrete proof of Try stero's historical existence, it only confirms her emerging suspicion that Trystero does not provide its subjects with alternative models of identity or agency. Despite its seemingly radical roots in the European renaissance, when Trystero functioned more or less overtly as a counterforce to the official Thum and Taxis postal system, Oedipa learns that Trystero "entered the penumbra of historical eclipse" at the dawn of the modern era when it attempted to stop the French Revolution and prevent the oxerthrow of Thum and Taxis itself by offering to join forces with its "fellow aristocrats" during this time of "temporary madness" *(Lot* 49, 119). When the alliance fails and it becomes clear that the revolutionary impulse is more than a temporary one, Trystero tails apart and its remaining members flee to America "where they are no doubt at present rendering their services to those who seek to extinguish the flame of Revolution" *(Lot* 49, 119). Thus, the history behind Trvstero appears to reinforce the claims of social critics such tr&AIills and Marcuse who argue that oppositional political subjectivities are always already co-opted by or complicit with the socioeconomic forces of postindustrial America.

at the end of the novel to seek out a direct representative of Trystero, it becomes apparent that her quest merely has circled back on itself and that she is doomed to repeat her own fairy tale in a rather horrifying fashion:

> She was not sure what she'd do when the [representative of Trystero] revealed himself She had only some vague idea about causing a scene violent enough to bring the cops into it... The men inside the auction room wore black mohair and had pale, cruel faces. They watched her come in, trying each to conceal his thoughts. [The auctioneer!, on his podium, hovered like a puppet master, his eyes bright, his smiled practised and relentless... Oedipa sat alone, towards the back of the room, looking at the napes of necks, trying to guess which one was her target, her enemy, perhaps her proof An assistant closed the heavy door on the lobby windows and the sun. She heard a lock snap shut... Oedipa settled back, to await the crying of lot 49. *(Lot* 49,126–27)

In essence, then, Oedipa is trapped in an increasingly downward spiral; not only does her quest merely force her to exchange one tower for another, but when the heretofore absent "knights of deliverance" finally arrive, they appear to do so with the actively malevolent intent of making sure that she stays in the tower for good this time around. At best, it seems that all she —or any other citizen subject caught within similar circumstances —can do is to "settle back" and let the forces shaping America unfold on their own, hoping that the puppet master does not pull the strings too hard.

By the end of *The Crying of Lot* 49, then, Oedipa appears to be the exact opposite of her literary predecessor, Ralph Ellison's invisible man. Although both fail to find adequate explanations for American history and identity in the narratives available within their respective moments, and both seem to be waiting on the verge of a new relationship to a new America, the relationships implied by their waiting are radicaliy different ones. After recognizing that conventional narratives fail to adequately explain his own experience, the invisible man waits to enact a "new (cybernetic) humanism" in which his connections to multiple cultural histories provide the template for negotiating the complex cultural machineries of an emerging postindustrial world. In contrast, Oedipa remains bound by the humanist dream of a comprehensive history and an authoritative subject position within that history. Thus, when the dream becomes its own nightmare, all she can do is wait to receive the dy stopic confirmation that all histories are the same and that authority is nothing more than the joke fueling the machineries of contemporary America.

Although Oedipa apparently cannot transform or regenerate herself like the invisible man, Pynchon suggests that her failure to do so might occur concurrently with the birth of a new subject and a more viable way of negotiating a technologically-intensive world. Along with the disintegration of her social world and her personal relationships, Oedipa also experiences a third level of disintegration — the disintegration of her physical

body. In a seemingly paradoxical move, Pynchon depicts this final disintegration as the precursor to a kind of fantastic birth: "Waves of nausea, lasting five or ten minutes, would strike her at random, cause her deep misery, then vanish as if the had never been. There were headaches, nightmares, menstrual pains. One day she drove into L.A., picked a doctor at random from the phone book, went to her, told her she thought she was pregnant. They arranged for tests. Oedipa ... didn't show up for her next appointment" (118). Significantly, Oedipa does not follow though with the appointment because she realizes that "your gynaecologist has no test for what she was pregnant with" *(Lot 4g,* 121).[52] If Oedipa-the-humanist literally carries within her the possibility of a new relationship to herself and her world, little wonder that she perceives this pregnancy as a tragically debilitating one —after all, as with any birth in the biological cycle of life and death, the delivery of this new subjectivity implies the eventual but inevitable death of the more conventional one Oedipa seeks.

While Oedipa clearly fears this transition to a new mode of subjectivity, elsewhere in his novel Pynchon depicts characters for which this transition is a hopeful (rather than a frightening) one. At the end of her night drifting through San Francisco, Oedipa comes across a convention of deaf-mutes who take her to a dance where:

> Each couple on the floor danced whatever was in the fellow's head: tango, two-step, bossa nova, slop. But how long, Oedipa thought, conld it go on before collisions became a serious hindrance? There would have to be collisions. The only alternative was some unthinkable order of music, many rhythms, all keys at once, a choreography in which each couple meshed easy, predestined. Something they all heard with an extra sense atrophied in herself. She followed in her partner's lead, limp in the young man's clasp, waiting for the collisions to begin. But none came... [It was] an anarchist miracle. Oedipa, with no name for it, was only demoralized. She curtsied and fled. *(Lot* 49, 90–91)

To a certain extent, the dancing deaf-mutes and their "unthinkable order" model a kind of ideal America in which individuals contribute to both the diversity and the harmony of the greater community by acting upon "whatever is in their heads." At the same time, however, they create this harmonious pattern *despite* the fact that, much like Oedipa, they seem to have lost the physical integrity of their bodies and thus the self-present subjectivity typically associated with the intact, organic body. Significantly, Oedipa can only perceive her own loss as a tragically paralyzing one, but the deaf-mutes transform theirs into a new and seemingly miraculous form of agency by drawing upon "an extra sense" that Oedipa herself cannot access. Thus, Pynchon's depiction of the deaf-mutes who successfully negotiate the dance floor by means of an alternative sensory relationship to one another parallels Marshall McLuhan's own depiction of a

[52] Elsewhere, another character assumes that Oedipa must already be a mother because "there's a certain harassed style ... you get to recognize. I thought only kids caused it" *(Lot* 49,104).

new cyborg subject who successfully negotiates the technologically-mediated world by accepting the loss of organic "integrity" and relying instead upon the new, expanded sensory modes that replace this integrity. If Oedipa is "demoralized" by this scene and can only comprehend it as a kind of otherworldly "miracle," it is precisely because her overwhelming desire for an identity and agency based on conventional self presence precludes her from acknowledging that limited or mediated forms of subjectivity might provide more appropriate and meaningful ways of surviving contemporary America.

Even more significantly, the structure of Pynchon's novel invites readers to enact the kinds of potentially progressive cyborg subjectivities that Oedipa herself denies. As McLuhan argues in *Understanding Media,* new cyborg subjectivities are produced not so much by the *messages* of contemporary cultural texts (which are largely "degraded" ones concerned with the issues of an already fading industrial world) as by engagement with the new electronic *mediums* through w hich these messages are presented. Pynchon's novel suggests a similar distinction. In terms of its actual plot, The *Crying of Lot 49* seems to present us with the "degraded" message that advanced technologies will tragically but inevitably eradicate both the conventional citizen subject and the conventional narrative orders through which that subject understands his or her world. At the same time, however, the novel invites readers to construct new narrative orders and new modes of subjectivity through certain engagements with the medium of its structural machinery, hi particular, we might note that the textual machinery of *The Crying of Lot 49* specifically mimics the flow of the electronic technology *par excellence:* television.[53] Oedipa's rather episodic journey through a series of loosely related events presented through a variety of different genres — the detective story, the romance, the history special, the light comedy—parallels the viewer's journey through an evening of TV watching. Furthermore, the reader/viewer's trek through the novel is more or less "guided" by a narrator who, like any good television announcer, periodically disrupts the action in progress to announce upcoming events. For instance, immediately after Oedipa meets Mike Fallopian and learns about W.A.S.T.E., the narrator announces that "so began, for Oedipa, the languid, sinister blooming of The Trystero" *(Lot qg,*

[53] For other readings *of The Crying of* Lot 49—and Pynchon's work in general—as a kind of textual machine, see David Porush's *The Soft Machine* (New York: Methuen, 1985); N. Katherine Hayles' "'A Metaphor of God Knew How Many Parts': The Engine That Drives *The Crying of Lot* 49" in *New Essays on* The Grying of Lot 49, ed. Patrick O'Donnell (New York: Cambridge University Press, 1991); Bernard Duyhuizens '"Hushing Sick Transmissions': The Disruption of Story in *The Crying of Lot 49"* in *New Essays on* The Crying of Lot 49, ed. Patrick O'Donnell. New York: Cambridge University Press, 1991); and Philip Simmons' *Deep Surfaces: Mass Culture and History' in Postmodem American Fiction* (Athens: University of Georgia Press, 1997). Porush and Hayles draw upon cybernetic theories to suggest that the Pynchon specifically constructs *The Crying of Lot 4g* as a twin engine to create unresolvable tensions within the story and thus to "free us from [technological] calculation by exposing its insufficiency" (Porush, 134). Meanwhile, Duyhuizen and Simmons examine how Pynchon incorporates the techniques of advanced communications technologies —especially film and video —into the larger structure of his novels to interrogate the discursive technologies by which narratives of history are produced.

36) —even though Trystero has never been mentioned before this point and does not resurface again until fifteen pages later. The shift from W.A.S.T.E. to Trystero makes little or no sense at first, but later, of course, the reader/viewer learns that W.A.S.T.E. is (probably) the creation of the larger Tasterò organization. Thus, much like his televised counterpart, the narrator ultimately attempts to enhance the overall flow of the novel by cobbling together various episodes through these "special announcements" and previews of upcoming events.

At the same time Pynchon draws upon McLuhan's distinction between medium and message, he also reveals the limits of McLuhan's cyborg subject and the danger of simply replacing one grand narrate of identity and agency with another, equally sweeping one. Like McLuhan, Pynchon invites his audience to distinguish itself from conventional perceptual patterns such as those embodied by Oedipa; rather than simply pursuing multiple —and ultimately contradictory —"clues" in a rather futile attempt to pin down the exact plot of the novel (does Trystero exist? is Oedipa insane? does it matter?), the audience must engage with the text in a more expansive, dynamic manner by attending to its larger structure. However, McLuhan's model assumes that engagement with these new textual structures necessarily leads to a more full engagement with the world as a whole, that the new subject is a fully self-realized global citizen who wears "all mankind as his skin." Thus, McLuhan ultimately elides technologically-mediated subjectivity with technologically-enhanced subjectivity and simply reinvents universal humanism. Unfortunately, as Pynchon suggests through characters such as the actor-turned-lawyer Metzger, this technologically-enhanced humanism is as problematic as its organically-grounded predecessor. Metzger takes on his new electronic skin with great ease, but defining himself solely in relation to the world of technological production ultimately undermines rather than expands his ability to act authoritatively: because he cannot cope with forces outside his reality (such as Oedipa's search for the history behind contemporary America), the lawyer is forced to define his world in increasingly limited terms until he retreats from Oedipa —and the novel itself— altogether. Likewise, if readers attempt to enact a similar relationship to the text, they also may find their ability to produce meaning limited by its largely selfreflexive structure. Thus, they remain trapped with this structure, endlessly mapping it in increasingly complicated detail without a specific endpoint or purpose.

Instead, then, Pynchon asks his readers to distinguish themselves from both Oedipa and Metzger, to occupy a subject position more like that suggested by later cyborg theorists Chris Hables Gray and Steven Mentor. In order to break out of the novel's cycle of endless deferment and perpetual motion, readers must construct a different relationship to it, mapping its paradigms and narrative strategies but then choosing selectively which ones to pursue, engage with, and (re)organize. Such engagements with the text and the readings they produce are necessarily limited ones that accept a certain amount of lost information —or, in cy bernetic parlance, a certain amount of "noise." Ultimately, it is precisely the limited nature of these engagements that opens them to other interpretations, transforming the "noise" of one reading into meaningful

information in the context of another. Thus, individual reader begins to forge connections with one another, generating a larger community of intellectually-engaged or critical readers. Indeed, as Patrick O'Donnell points out in his introduction to *New Essays on the Crying of Lot* 49, Pynchon's "slim novel" has been —and continues to be —one of the most commented-upon texts in contemporary fiction precisely because "the novel is put in the form of a question: it is, conceivably, a quest without end, an inquiry into and dramatization of our incessant desire for meaning, our will to generate signs and significance wherever we plant our feet."[54] Thus, the open-ended nature of *Lot* 49, combined with the various extra-textual demands of "wherever we plant our feet" (be this within the abstract space of certain theoretical models or the more practical grounds of publishing deadlines or academic degree requirements) creates a kind of cyborg community not unlike the ones Oedipa herself glimpses but fails to join. In doing so, this community of critical readers enacts a kind of "fantastic order" much like that of Pynchon's deaf-mute conventioneers, and engagement with the text-machine may even become a model for engagement with the larger machineries of postindustrial America itself.

III. "A NFAV Mode of Expression Takes Over" — but to What End?

Perhaps appropriately, then, this discussion of Pynchon's cybernetic reading community brings us back almost full circle to Ralph Ellison's own cyborg subject, the invisible man. Much like Ellison's protagonist, who constructs an alternative relationship to the cultural machinery of contemporary America by positioning himself in the "excluded middle" between personal experience and it technological representations, Pynchon's readers must tinker with the textual machinery of *Lot 49)* to make it account for their experiences and needs outside the novel itself. Also —and once again, much like the invisible man —this tinkering may lead readers toward a new model of technologically-mediated subjectivity and a "new mode of expression," but it remains unclear as to precisely *how* these models might be taken outside the readerly community and enacted within the broader context of America. Given that postwar authors such as Ellison and Pynchon articulate but do not resolve this dilemma, it is hardly surprising that it remains central to the work of later authors also interested in the relationship between advanced technologies and subjectivity. In particular, as we shall see in the next chapter of this book, feminist authors of the 1970s such as Joanna Russ and Octavia Butler grapple with issues remarkably similar to those raised by Ellison and Pynchon. However, rather than simply addressing the broad (and potentially unsolvable) dilemma of "technological mediation" and "American identity,"

[54] Patrick O'Donnell. "Introduction." In *New Essays on* The Crying of Lot 49, ed. Patrick O'Donnell. (New York: Cambridge University Press, 1991), 13.

these later authors explore the more particular problem of how one specific culture industry—advertising—mediates specifically gendered identities instead.

Chapter 2: "You've come a long way, baby"

Imag(in)ing Technology, Gender, and Race in Women's Science Fiction

> Who am I?
>
> I know who I am, but what's my brand name? Me with a new face, a puffy mask. Laid over the old one in strips of plastic, a blond Hallowe'en ghoul on top of the S.S. uniform... I did this once... and scared the idealistic children who lived downstairs. Their delicate skins red with offended horror...
>
> (Sorry, But watch out.)
>
> You'll meet me later.
>
> —Joanna Russ, *The Female Man*

> I had seen people beaten on television and the movies. I had seen the too-red blood substitute streaked across their backs and heard their well-rehearsed screams. But I hadn't lain nearby and smelled their sweat or heard them pleading and praying, shamed before their families and themselves. I was probably less prepared for the reality that the [slave] child crying not far from me... My face... was wet with tears.
>
> —Octavia Butler, *Kindred*

While postwar debates surrounding the cultural industries reflected a growing concern about how advanced technologies of simulation and replication often served to redefine political subjectivity in terms of economic interests, feminist and African-American critics of the 1970s extended these debates to consider how such technologies were deployed to produce subject positions consistent with patriarchal and Eurocentric interests. Such critics examined a wide array of cultural industries, but focused most intensely on the technologies of advertising, where the brevity of messages demanded highly stylized images to convey information quickly and the pervasive repetition of these images transformed sty le into stereoty pe. Operating on the assumption that media images played a crucial role in cultural perceptions of gendered and raced identities, such critics typically took one of two opposing positions: either advertising was inherently and irrevocably part of the machinery of social oppression or, if the consciousness of industry executives could be raised and media images changed, then

advertising itself could become an important tool in the struggle for liberty and justice for all. Significantly', advertisers seemed responsive to such arguments, and the 1970s saw an increasing number of media messages that replaced conventional images of women and African Americans with new ones that appeared to reflect more accurately their accomplishments and political gains.

At the same time, the very groups they claimed to represent often met these images of liberation with skepticism. As the above passages from authors Joanna Russ and Octavia Butler suggest, commercial imagery' seems carefully edited to serve economic goals over social ones; thus it often downplays or erases the "messy" aspects of history and subjectivity that that do not entertain viewers or encourage consumption. In *The Female Man,*[1] Russ's time-traveling, cybernetically-enhanced warrior Jael cannot explain either the gender wars of her near future or her own "ghoulish" anger to even the most enlightened women of our own era because there are no appropriate "brand names" or cultural tropes through which to express these things. Similarly, in *Kindred,*[2] Butler's protagonist Dana, a African-American woman from 1976 who travels back in time to the antebellum South, discoy ers that the representations of history generated by the media of her own time fail to prepare her for the brutality' and pain experienced by her ancestors. While authors such as Russ and Butler insist that commercial representation limits subjects' relations to themselves and their worlds, they do not simply advocate that women and African Americans reject advanced technologies in order to reclaim some form of authentic, unmediated subjectivity. Instead, they use the tropes of cyborg and otherwise hybrid bodies to reconnect technologically produced-images of gendered and raced subjects to specific historical contexts. Thus, rather than depicting technology as either a utopically liberating or a dystopically oppressive force, Russ and Butler use the historical intersections between technologies and bodies to imagine how we might reconstruct these intersections in the present day.

Like Ralph Ellison and Thomas Pynchon, Russ and Butler contribute to the emergent discourse of "cyborg" identity and agency by revealing the limits of conventional representational strategies and showing how more complex depictions of mediated subject positions might be more appropriate to a technologyintensive era. However, while Ellison and Pynchon ultimately elide the raced and gendered aspects of their characters' experiences with the dilemma of all Americans who are metaphorically (if not literal!y) marked by their engagements with a high-tech world, Russ and Butler suggest that we must pay attention to how gender and race impact (and are impacted by) the experience of technological mediation. As such, the cyborg characters found in Russ's 1975 *The Female Man* and Butler's 1979 *Kindred* model the dynamic interaction between bodies, technologies, and identities later theorized by Donna Haraway in "A Cyborg Manifesto." As Haraway puts it, these authors show that "it is not clear

[1] Joanna Russ. *The Female Man* (1975; reprint, Boston: Beacon, 1986); hereafter cited in text as *Female Man.*

[2] Octaxia Butler. *Kindred* (1979; reprint, Boston: Beacon, 1988); hereafter cited in text as *Kindred.*

who makes and who is made in the relation between human and machine"; thus, they "make very problematic the statuses of man or woman, human, artifact, member of a race, individual, entity, or body."[3] Indeed, she goes on to underscore the impact of such imaginative projects by noting the extent to which they have influenced theoretical articulations of the human-machine interface—including, of course, the "Cyborg Manifesto" itself.

In order to understand more clearly how Russ and Butler engage in the kind of project outlined by Haraway, it is important to situate them in within the specific theoretical discourses concerning commercial imagery, gender, and race generated by feminist and African-American scholars as well. These discourses suggest that advertising, television, and film often draw upon the rhetoric of feminist and African-American activism to re-present the struggle for social and political equality as a more specific struggle for equality within the realm of consumption. In doing so, they invite women and African Americans to imagine themselves as what we broadly might call "commodity activists," individuals who express identity and agency through the consumption of specific products. At the same time, these individuals inhabit a "contradictory cultural terrain"; thus, commercially produced representations of history and identity always coexist— however uneasily—with other representations generated by forces outside Madison Avenue.[4] Indeed, it is precisely this tension that offers the possibility of a different and potentially more progressive cyborg subject, one that negotiates among multiple representations to understand how gendered and raced relations are mediated in the present and, perhaps, to construct new social and economic relations in the future.

This move toward more complex depictions of the material and historical factors informing the relationship between advanced technologies, bodies, and identities parallels a concurrent shift in writing strategies. While Ellison and Pynchon write primarily within traditional "high" or "canonical" literary genres, Russ and Butler are more often associated with "low" or "popular" genre of science fiction (SF).[5] Russ and Butler

[3] Donna Haraway. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century." In *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), 177–78; hereafter cited in text.

[4] Robert Goldman, Deborah Heath, and Sharon L. Smith. "Commodity Feminism." *Critical Studies in Mass Communication* 8 (1991): 349; hereafter cited in text.

[5] This is not to say that the works of all four authors do not cross generic boundaries. Literary critics often note that Pynchon deploys a variety of pulp science-fiction tropes in his novels, and that many of his characters experience an estrangement from their technology-intensive worlds that anticipate the kinds of alienation depicted in later cyberpunk texts. For further discussion, see Brian McHale's *Constructing Postmodernism* (New York: Routledge, 1992) and Larry McCaffery's introduction to *Storming the Reality' Studio:* A *Casebook of Cyberpunk and Postmodern Fiction* (Durham: Duke University Press, 1991). Furthermore, while Ellison scholars such as Houston Baker typically focus on his use of African-American folktales and blues music within *Invisible Man,* I would argue that Ellison also invokes comparisons to science fiction through the title of the novel (which is, of course, also the title of H.G. Wells's cautionary tale about the effects of advanced technologies) and in his preface to the 1981 edition, where he comments that "a piece of science fiction was the last thing I aspired

were not alone in making the choice to explore seemingly serious issues in a seemingly disreputable genre; instead, the 1970s saw an increasing number of women and African-American writers either publishing directly in the field of SF or deploying SF motifs in their more conventional literary works.[6] As a narrative space for the allegorical exploration of contemporary social issues, science fiction provided these writers with a readymade vocabulary and an array of narrative tropes through which to consider the technological mediation of identity.

Perhaps even more significantly, as Pamela Sargent argues, the speculative aspect of SF allowed authors such as Russ and Butler to extrapolate from the present and imagine how the relationship between technologies and gendered and raced subjects might be organized differently in the future. Thus, while "other literature can show us women imprisoned by attitudes toward them, at odds with what is expected of them, or making the best of their situation in present or past societies... sf and fantasy literature can show us women in entirely new or strange surroundings. *It can explore what we might become if and when the present restrictions on our lives vanish, or show us new problems or restrictions that might arise"* (Sargent, lx). Although Sargent's evaluation of various literary genres focuses primarily on how these genres might be used to explore issues and concerns specific to women, her comments may also serve to explain why writers (male and female alike) interested in revising contemporary perceptions of human-technology-relations have increasingly turned to SF. Earlier authors such as Ellison and Pynchon depict cyborg characters who reorganize their individual relations to the technology-intensive worlds around them in ways that put them "at odds with

---

to write." However, as he goes on to admit, one of the most science fiction-like elements of *Invisible Man—his* narrator's disembodied voice — proved to be a valuable springboard for the expression of other, more "serious" concerns such as sociological theories of race and cultural visibility *(Invisible Man,* xv). Scholars have noted a similar generic hybridity in the novels of Russ and Butler. For instance, Russ often deploys both the visions of social reformation first suggested by nineteenth-century utopie writers and the linguistic experimentation of twentiethcentury postmodern authors in her novels, while Butler uses science fiction itself to reinvigorate the African-American tradition of slave narratives. For further discussion of generic hybridity in Russ, see Robin Silbergleid's "Women, Utopia, and Narrative: Toward a Postmodern Feminist Citizenship" *(Hypatia* 12.4 [fall 1997]: 156–77) and Dainien Broderick's *Reading by Starlight* (New York: Routledge, 1995); for an examination of these issues in Butler, see Robert Crossley's introduction to the 1988 edition of *Kindred* (Boston: Beacon, 1988); hereafter cited in text. See also Adam McKible's '"These Are the Facts of the Darky's History': Thinking History and Reading Names" *(African-American-Review* 28.2 [summer 1994]: 223–35).

[6] Pamela Sargent. "Introduction: Women and Science Fiction." In *Women of Wonder: Science Fiction Stories by Women about Women* (New York: Vintage Books, 1975), xiv; hereafter cited in text. Of course, the actual numbers of women and African Americans publishing in science fiction were still relatively small compared to the number of white men working in this field. Sargent estimates that only about 10 to 15 percent of all SF authors published in the 1960s and 1970s were female (xiv). Similarly, Robert CrossIey notes that "only a handful" of black authors entered SF during this time (xvi). Nonetheless, as both Sargent and Crossley argue, writers such as Ursula LeGuin, Samuel Delany—and of course, Joanna Russ and Octavia Butler—were widely read and highly influential in terms of provoking the science fiction community to rethink the implicitly gendered and raced assumptions that often structured the genre.

what is expected of them," but these characters remain perpetually on the verge of action, unable to translate their individual visions into broader social actions. In contrast, Russ and Butler use SF conventions to create "entirely new or strange" worlds where characters (and, by extension, authors themselves) actively pursue equally new and strange forms of cyborg relations.

This chapter traces the continued development of the cyborg as an increasingly important trope through which to map the intersection between advanced technologies, bodies and identities in imaginative narratives of the 1970s. In the first section of this chapter, I discuss how advertisers appropriated the rhetoric and icons of feminism to re-present women's liberation as a series of "styles" designed to transform individual bodies rather than larger social relations. I then examine Joanna Russ's *The Female Man* as an imaginative response to these representations, showing how she creates cyborg characters who affirm their connections to one another while reworking their connections to advanced technologies in ways that thoroughly disrupt dominant processes of "brand naming." In the second half, I argue that increased (and seemingly more egalitarian) representations of African Americans in 1970s advertising implicitly relegated political struggles for racial equality to a distant historical past while celebrating the present as a new era of racial equality through consumption. At the same time, however, Octavia Butler deploys a range of cyborg characters throughout *Kindred* to debunk this myth and provide a sustained consideration of the historical relationship between advertising, images of black bodies, and the formation of African-American subjectivities.

IA. "Strange Bedfellows": Advertising and Feminism in the 1970s

As media historians William Leiss, Stephen Kline, and Sut Jhally note, the rapid expansion of visually-oriented communications technologies in the latter half of the twentieth century has provoked advertisers to move away from written appeals based on product information and toward image-oriented depictions of products and their social meanings. (Concurrently, advances in marketing research, especially the development of sophisticated demographic sampling techniques, have encouraged increasing market segmentation and, ultimately, a redefinition of the relationship between products and people. For instance, while mid-century advertisers presented products as tools for individual transformation and personal satisfaction, they typical!y assumed that consumers all shared more or less the same vision of this transformation and satisfaction: that of the white, middle class, suburban American dream (228). However, when demographic surveys of the 1960s and 1970s revealed that Americans were more likely to define themselves in terms of local rather than national identities, marketing companies responded by developing "lifestyle" advertisements that depicted products

as "totems," or "representations of a clan or group ... recognized by its activities and its members shared enjoyment of the product."[7] Lifestyle campaigns allowed advertisers to convey messages about the social meaning of a given product quickly and effectively by mobilizing images of specific consumer groups viewers could recognize and "plug into" at an immediate, almost visceral level. Furthermore, they continued —and even intensified —the elision of consumption and identify established by mid-century advertising, suggesting that consumption (rather than material or historical circumstances) was the primary force binding such groups together.

These new campaigns emerged at the beginning of a decade marked by intense negotiations between the advertising industry and its feminist critics. As Marjorie Ferguson notes, liberal feminists were particularly interested in the relationship between advertising and cultural understandings of female subjectivify, an interest that stemmed from "shared ... beliefs about increased visibility as a key to greater access, equity, and power."[8] Informed by conventional humanist understandings of the subject as an autonomous individual free to pursue his or her diverse interests in the public sphere, such feminists often evinced an equally conventional anxiety about technologically-mediated and -generated subject positions, arguing that advertising limited cultural perceptions of women through "the tyranny of media messages limiting their lives to hearth and home" (Tuchman 1978, qtd. in Ferguson, 215). At the same time, they also argued that this state of affairs was not inevitable: if advertising practices changed, then advertising technologies could become useful tools to help women reclaim their "natural" social and political authority. According to the logic of this latter argument, images of strong, independent women distributed throughout the mass media would provide role models for wide variety of women who might otherwise not have access to such models; thus, they would help initiate a redefinition of gender and a redistribution of power that would "trickle down" into the real world and result in real gains for women across America (Ferguson, 216).

Given the liberal feminist anxiety about technologically-mediated (as opposed to technologically-enhanced) subjectivity, it is hardly surprising that research inspired by the women's movement reflected a similar anxiety.[9] A 1974 study conducted by the United Nations' Commission on the Status of Women concluded that: "Advertising is

[7] William Leiss, Stephen Kline, and Sut Jhally. *Social Communication in Advertising: Persons, Products, and Images of Well-Being* (New York: Methuen, 1986), 234; hereafter cited in text.

[8] Marjorie Ferguson. "Images of Power and the Feminist Fallacy." *Critical Studies in Mass Communication* 8 (1991): 215; hereafter cited in text.

[9] While "the women's movement" was, of course, more accurately a series of movements including feminists with a variety of different perspectives — liberal humanist, lesbian separatist, cultural materialist, etc. —in this chapter I follow critics Marjorie Ferguson and Robert Goldman, Deborah Heath, and Sharon Smith in using the term primarily to refer to those feminists most closely tied to the liberal humanist tradition. As these critics point out, this elision was common in public discourse throughout the 1970s, and remains useful today precisele because the feminists associated with liberal humanism typically made the greatest impact on public and industrial policy. (For citation information on Ferguson, see note 8 above; for Goldman, Heath, and Smith, see note 4 above).

the most insidious form of mass media in its portrayal of wives and mothers... women seem to be obsessed with cleanliness, placing above-normal emphasis on whiteness, brightness, and expressing a gamut of emotions at smelling the kitchen floor or family wash."[10] Thus, advertising represents women as unnatural (or at least "above-normal") automaton-like creatures whose actions and emotions are conditioned by the domestic products they purchase. Likewise, in 1975 the National Advertising Review Board (NARB) reported that household product ads depicted women as able to use products and verify their status as "good" mothers and wives *only* after they were "instructed by children, or by a man, or assisted by a supernatural male symbol... Apparently ... it takes a man to manufacture the product or to understand its virtues well enough to explain it" (qtd. in *Moving Target,* 239). As such studies indicate, then, the feminine identities produced by conventional advertising worked quite neatly (and sometimes quite obviously) to reinforce already existing capitalist and patriarchal power relations.

Elsewhere, the NARB report deployed more literal images of women transformed into passive automatons to emphasize the very real —and very unhealthy —effects that might attend the technological mediation of gendered identities: "Compared to a vibrant living person with a variefy of interests, talents, and normal human characteristics, the woman portrayed as a sex object is like a mannikin, with only the outer shell of a body, however beautiful... Some women feel that such single-dimension portrayals of women as sex objects hamper the development of friendships or love between men and women" (qtd. in *Moving Target,* 239). Here, the NARB report suggested that eliding feminine identify with that of the abnormal, soulless mannikin in the world of simulation and representation might have dangerous consequences in the world of everyday reality as well —transforming viewers, as Herbert Marcuse put it a generation earlier, into puppet-like "one-dimensional" men and women themselves.

Similar tropes and rhetoric circulated throughout more radical feminist studies as well. Using semiological analysis (a form of analysis steeped in the technology-intensive language of "codes" and "circuits of desire") in their own work on the technological mediation of gender, scholars including John Berger, Laura Mulvey, and Judith Williamson proposed that the very structure of advertising reinforced the specific understandings of gendered identify noted by popular feminist writers. Such critics argued that commercially-produced visual narratives typically were filmed and edited to create a specific economy of desire in which the viewer "visually dissected" the female body into "zones of consumption."[11] On the one hand, then, these narratives seemed to reinforce

[10] Rena Bartos. *The Moving Target: What F.very Marketer Should Know About Women* (New York: Free Press, 1982), 238; hereafter cited in text as *Moving Target.*

[11] See, especially, John Berger's *Ways of Seeing* (uggs; reprint, New York: Penguin, 1977); Laura Mulvey's "Visual Pleasure and Narrative Cinema" (1975; reprint, in *Visual and Other Pleasures.* Bloomington: Indiana University Press, 1989); and Judith Williamson's *Decoding Advertisements: Ideology and Meaning in Advertisements* (1978; reprint, New York: Kampmann & Co., 1984). While Berger examines a range of art forms throughout modern Western history and Mulvey focuses primarily on twentieth-century Western cinema, both of these critics —like Williamson in her more extensive study—

dominant understandings of the subject as an autonomous, organic being in full control of its own productive vision. On the other hand, they implicitly defined this subject as masculine; in contrast, feminine identity was relegated to an objectified body that was transformed into a complex but nonetheless controllable aggregate of machinelike parts available for de- and re-assembly.

The advertising industry itself was surprisingly responsive to feminist criticism. While some industry spokespersons insisted that media images simply reflect already-widespread cultural perceptions of gendered identify and, as such, had little or no effect on them,[12] many others acknowledged the impact of advertising 011 these perceptions. For instance, citing both the arguments about cultural visibility presented by liberal feminists such as Gloria Steinem and the findings of the UN and NARB reports (as well as the findings of her own exhaustive surveys), advertising executive Rena Bartos urged her colleagues to "raise the consciousness of everyone concerned in the marketing process about what is happening in people's lives today... We need to challenge the assumptions we make when we apply [marketing] tools" *(Moving Target,* 244). Indeed, Bartos predicted, advertisers who acknowledged the social function of media images and who adjusted these images to more accurately reflect "what is happening in people's lives today" would most likely see long-term economic benefits in the form of new female consumer bases. Thus, consciousness raising in the advertising industry "isn't [just] women's lib, it's marketing lib" *(Moving Target,* 245). By using marketing tools differently, then, advertisers could both contribute to the positive cultural visibility necessary for women to reclaim their natural status as full human beings and active political subjects and, simultaneously, enhance the natural workings of the marketplace as well?[13]

---

acknowledge that advertising is probably *the* most common kind of commercially-produced visual narrative that most people engage with on a daily basis.

[12] Indeed, noting the pervasiveness of this refrain throughout late twentieth-century advertising, Leiss, Kline, and Jhally wryly comment that "seldom does one find an industry so strenuously arguing the *ineffectiveness* of its product" (33).

[13] As this brief summary of Bartos suggests, her book would make for an interesting case study in and of itself. On the one hand, she clearly identifies with liberal feminist concerns, citing extensively from feminist writers throughout the first half of the book and concluding with an impassioned plea for advertisers in particular and American society in general to not simply dismiss the women's movement as a passing phase. On the other hand, in her position as a member of the advertising industry presenting a nominally objective report on the female consumer market, she consistently distances herself from feminist activism by positioning the women's movement as a primarily economic one (after all, changed economic status meant changed demographics and thus a need for changed advertising campaigns) and, as the book progresses, by eliding "women's lib" with "economic lib" altogether. Indeed, even the name of her study—*The Moving Target: What Every Advertiser Should Know about Women—suggests* a certain odd tension. In the preface she writes that the name was meant to acknowledge the widespread and dynamic changes in women's lives over the past decade; unfortunately the notion of women as "moving targets" seems to suggest that they are they objects of semi-scientific inquiry (or the prey of corporate hunters) rather than authoritative agents in their own right.

The notion that advertising could function as a tool for both social and economic progress seemed to be born out by early campaigns that replaced traditional images of femininity with new icons and rhetoric borrowed from feminist discourse itself. In 1969, the Leo Burnett agency received the coveted Clio award for its "you've come a long way, baby" Virginia Slims campaign, which depicted a series of confident and clearly independent young women "dressed for success" in a man's world while happily smoking their very own brand of cigarettes.[14] Several years later, Revlon launched a similar campaign for Charlie, which immediately became the best selling perfume in America. Commenting upon the success of the campaign, a journalist for *Marketing Communications* noted that "fragrance marketing and the women's movement may seem like strange bedfellows at first glance... But if Charlie was developed partially in response to the women's movement, she in turn helped to popularize the image of an independent woman" (qtd. in *Moving Target,* 165). Thus, the advertising industry-much like the cultural industries a generation earlier—drew upon a slightly updated narrative of benevolent social progress through technological and economic innovation to position itself as an agent of liberty and justice for all.

Although these "enlightened" campaigns seemed to fulfill the liberal feminist call for transformation within the advertising industry, contemporary feminist writers reflecting on these changes suggest that the new practices merely transformed cultural understandings of feminism itself. Luigi and Alessandra Manca note that images of "the new woman" generated by advertising in the 1970s (and still generated by advertising today) were (and still are) ultimately "utopian rather than political ... [appeals to] the individual consumer's pursuit of happiness rather than the broader needs of the collectivity or abstract ideas of justice... Gender issues are therefore often reduced to trivial matters such as the fact that now Virginia Slims women have the right to smoke, too."[15] Other critics argue that the new campaigns often did more than simply trivialize feminism; instead, they actively recontextualized feminist narratives of liberation to suggest that this liberation was the result of a benevolent consumer culture rather than the activities of women themselves. Robert Goldman, Deborah Heath, and Sharon Smith note that 1970s advertising drew upon liberal feminist demands for ownership over and control of the female body to suggest that women could exert this ownership and control by consuming products that allowed them to transform their individual bodies, and by extension, their selves. Thus, advertising "redefine[d] feminism through commodities, interpreting the everyday relations women encounter and negotiate into

[14] Paul Rutherford. *The New Icons?* (Toronto: University of Toronto Press, 1994), 42; hereafter cited in text.

[15] Luigi Manca, and Alessandra Manca. "Introduction." In *Gender and Utopia in Advertising: A Critical Reader,* eds. Luigi and Alessandra Manca. (Lisle, IL: Procopian, 1994), 1. For further discussion of how advertising has—and continues — to use decontextualized utopie images of gender relations to smooth over ideological contradictions between feminist and marketing goals, see Shelly Budgeon, "Fashion Magazine Advertising: Constructing Femininity in the Postfeminist Era." In *Gender and Utopia in Advertising: A Critical Reader,* eds. Luigi and Alessandra Manca (Lisle, IL: Procopian, 1994).

a series of 'attitudes' which they [could] then 'wear,'" and feminist identities became commodity forms or "stylish signs" that might "modify patriarch hegemony, but bow to capitalist hegemony" (Goldman, Heath, and Smith, 336). Somewhat ironically, then, media images of the new, self-realized woman implicitly reinforced the position of female viewers as consumer cyborgs (or, as the authors put it, as "commodity feminists") "grounded in a circuit of envy and desire" (Goldman, Heath, and Smith, 334). If the specific nature of this envy and desire changed —if women were now depicted as expressing themselves as active political and social agents rather than as passive domestic or sexual appendages to men —they nonetheless were invited to express these new subjectivities in much the same way as before: through the consumption of specific products.

At the same time, Goldman, Heath, and Smith argue that this new logic of consumption —a logic that continues to pervade advertising today—may ultimately hold the seeds of its own de(con)struction. Because commodity feminism positions the body at the interface between consumption and female identify, the body may also function as a crucial site through which to reorganize this interface. Drawing on the work of 1970s semiologists such as Judith Williamson, Goldman, Heath, and Smith locate the possibility of this reorganization in the body of the viewer herself: "The meaning of ads depends on the viewer's cooperation. Without a participating subject who enters the advertising space to complete the exchange of meanings, an ad cannot produce a sign that possesses value within the current system... It is on this contradictory cultural terrain made necessary by the conditions of continuous commodity consumption that the next chapters of the dialectic of female desire and pleasure will unfold" (349). Thus, viewers can disrupt the cycle of production and consumption by either removing themselves from the circuit of envy and desire altogether or—more importantly —by participating in it differently, "revaluing women's bodily pleasure [and] legitimating it on its own terms" in ways that necessarily challenge patriarchal and capitalist hegemony.

This vision of women's subjectivity departs from its liberal feminist counterpart in two significant ways. First, it provides a radical reconceptualization of how power operates. While liberal feminists argued that media images have a profound impact on cultural perceptions of gendered identify, and, as such, could function as tools to either hinder or help further the struggle for women to reclaim their rightful cultural visibility and agency, they implicitly assumed that that this power only operated in one direction, and that viewers (somewhat ironically) had little or no control over the meanings handed down to them by advertising. In contrast, Goldman, Heath, and Smith point out that viewers themselves may be active participants within the circulation of power, and that the nature of their participation may influence how this power operates and how the cultural signs it generates will actually signify.

This leads to different conceptions of subjectivity itself. According to the logic of liberal feminist discourse, women are either transformed into consumer cyborgs —passive automatons helplessly defined by the products of patriarchal and capitalist culture —or

they use the tools of this culture to help assert their natural rights as autonomous subjects. Later feminists such as Goldman, Heath, and Smith suggest a more complicated distinction between forms of technologically-mediated subjectivity. By acknowledging that advertising often deploys the rhetoric of feminism to its own ends, they show how women may be invited to identify themselves with a more sophisticated version of the consumer cyborg— that of commodity feminist. Significantly, however, Goldman, Heath, and Smith do not simply oppose this updated consumer cyborg with a similarly updated natural or organic subject. Instead, they argue that subjects always inhabit a "contradictory cultural terrain." This terrain is indelibly marked by "the conditions of continuous commodify consumption," but it is crossed by forces outside those of Madison Avenue as well (including, of course, feminism itself). While individuals are always mediated in some way or another, then, mediation itself emerges as a complex and sometimes contradictory process that provides individuals with the space to exert limited but still powerful forms of agency. Thus, contemporary subjects may best be understood as agents who acknowledge the inevitability of mediation, but who also engage with and begin to rewire the circuits of desire, envy and pleasure structuring it. As such, the interfaces between advertising technologies and women's subjectivities posited by these feminist critics are similar to the models of progressive cyborg agency suggested elsewhere by theorists like Donna Haraway and Chris Hables Gray and Steven Mentor.[16] Furthermore, as we shall see in the following examination of Joanna Russ's novel *The Female Man,* authors working in the field of imaginative fiction anticipated —and fleshed out—a similar range of technologically-mediated or cyborg subject positions for women as well.

IB. A Spy in the House of Love: Deconstructing Patriarchy, Reconstructing Gender in the Female Man

Like other feminists of the 1970s, women writing in the field of science fiction typically complicated conventional understandings of technology and subjectivify by showing how advanced technologies might liberate (or oppress) subjects in different ways and to varying degrees. These writers often reflected the liberal feminist conviction that technologies themselves were inherently neutral, and that their impact depended large!y on the socioeconomic context in which they were deployed. For instance, in *Woman on the Edge of Time* (1976), Marge Piercy provides a scathing depiction of how women may be manipulated by the legal and medical technologies of contempo-

[16] For further discussion, see Donna Haraway's "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century" (note 3, above). See also Chris Hables Gray and Steven Mentor's "The Cyborg Body Politic." In *The Cyborg Handbook,* ed. Chris Hables Gray (New York: Routledge), 1995-

rary America. At the same time, she also imagines a utopie future in which these same technologies allow men and women to explore both "masculine" and "feminine" qualities and thus to reach their full (non-gendered) human potential. Other authors aligned with radical and/or lesbian separatist forms of feminism suggested that advanced technologies were necessarily part and parcel of an oppressive patriarchal culture, and, as such, dismissed them as altogether useless for women. Accordingly, novels including Suzy McKee Charnas's *Motherlines* (1978) and Sally Gearhart's *The Wanderground* (1979) oppose dystopic futures where technocratic, patriarchal societies enslave and destroy women completely with utopie ones where women learn to construct more egalitarian subject relations by tapping into their "natural" affinities with one another and the organic world around them.

While Joanna Russ clearly participates in this feminist SF tradition, she also departs from it in important ways. For instance, early books such as the 1968 *Picnic on Paradise* draw upon the liberal feminist assumption that advanced technologies may benefit men and women equally; accordingly, these novels revolve around strong female protagonists who use advanced technologies in much the same ways as their male counterparts. Other works such as "When It Changed" (1972) seem more closely aligned with radical separatist feminism because they valorize all-female societies that either abandon advanced technologies altogether or create new ones to preserve the integrity of the landscape and women's connections to it. Elsewhere, however, Russ argues eloquently against conventional notions of inherently "natural" subjectivities: "I'm not so naive as to think that people can discard who they are... People will never be at home, spiritually, in *any* environment. The very things that make you wretched in your own society are also the things that are inextricably part of y ou."[17] Likewise, she dismisses overly simplified distinctions betw een human subjects and advanced technologies, contending that the high tech, image-oriented hyperreality of contemporary America "is perfectly real. It's our social controls, human ideas, our way of explaining and justifying situations to ourselves that are not true or not complete or fake or made up" (McCaffery, 184). Such arguments seem to be monstrously at odds with the assumptions guiding much other 1970s feminist SF writing. Thus, it is hardly surprising that Russ's best-selling and most critically acclaimed novel, *The Female Man,* uses a range of distinctly non-organic, "monstrous" cyborg characters to examine the range of ways that advanced technologies might mediate women's relationships to themselves and the world around them.

Russ begins this exploration with a rather dystopic image of cybernetic subjectivity in the epigraph to her novel, a passage from the writing of radical psy chologist R.D. Laing: "If Jack forgets something, he can induce Jill to forget it also... He can invalidate not only the significance, modality, and content [of her experiences], but

[17] Larry McCaffery. "An Interview with Joanna Russ." In Across *the Wounded Galaxies: Interviews With Contemporary American Science Fiction Authors* (Urbana: University of Chicago Press, 1990), 190; hereafter cited in text.

her very capacity to remember at all... In order for such transpersonal invalidation to work, however, it is advisable to overlay it with a thick patina of mystification" *(Female Man,* n.p.). This passage from Laing raises two of the key issues structuring *The Female Man:* first, how subjectivities are shaped (and naturalized) by elaborate techniques of induced forgetfulness and second, how these techniques typically are deployed to create distinct hierarchies of gendered subjects. The issues raised by Laing at the level of general abstraction are, of course, similar to those raised by feminists interested in the more specific ways that advanced technologies impact cultural understandings of identity and agency.. Indeed, Russ herself shows how the technologies of memory editing and identity production literally manifest themselves in the workings of advertising and other media image industries.

The novel proper focuses on four women—Jeannine, Joanna, Janet, and Jael, variants on the same genotype living in radically different probable universes — who are drawn together across space and time. By placing the four J's on different Earths at different stages of technological development, Russ shows how gendered identities may be mediated by image industries in a variety of ways. The most obvious (and most obviously dystopic) case is that of the "nice girl" Jeannine. Living in a 1969 where World War II never happened and socioeconomic relations have been stunted by a forty-year Great Depression, Jeannine whiles away her days as a part-time librarian, remodeling her apartment and herself in accordance with the latest fashion magazines between work shifts and patiently waiting for "the barrier between [herself] and real life [to] be removed by a man or marriage" *(Female Man,* 120). Jeannine's tendency to define "real life" in relation to patriarchal institutions is exacerbated by the extent to which she understands herself through commercially-produced narratives of romance and feminine glamour. Indeed, the two are inextricably intertwined in her dreams: "If I had the money, if I could get my hair done ... He comes into the library; he's a college professor; no, he's a playboy. 'Who's that girl?'... 'This is Jeannine.' She casts her eyes down, rich in feminine power. Had my nails done today. And these are good clothes, they have my taste, my own individuality, my beauty. 'There's something about her,' he says. 'Will you go out with *me?'"(Female Man,* 16) Here, Jeannine's dream reads like one of the "singledimension" advertisements so often criticized by 1970s feminists, a fantasy in which "feminine power" is conflated with the ability to transform oneself into a beautiful but soulless mannikin through the consumption of specific products and services —a transformation that is naturalized and "made real" by masculine approval.

Jeannine further enacts feminist fears by bringing this single-dimension mentality to bear on her everyday relations, carefully editing her life experiences into fragmented, commercial-like blips. For instance, in the midst of a seemingly disastrous boating date with a married man, Jeannine suddenly decides that the date is actually wonderful — after ah, "from the shore it must real!y look quite good, the canoe, the pretty girl, the puffy clouds, Jeannine's sun shade ... There couldn't be that much wrong with it" *(Female Man,* 120). Later, she determines to marry her on-and-off boyfriend Cal, rejoicing that "at one stroke she has amputated her past" by creating the occasion for a

"dramatic presentation" in which "Cal himself hardly figures at all" *{Female Man,* 131). Thus, Jeannine literally engages in the processes of selective reconstruction and representation typically associated with advertising, construing reality through idealized images of femininity and amputating herself from the material world altogether.

Russ indicates the debilitating nature of these transformative processes for women by linking Jeannine's psychological reconstruction to other, more explicitly tragic, stories of physiological reconstruction. For instance, Jeannine publicly claims that everything in her world is quite normal and that "I like being a girl" *(Female Man,* 86), but whenever she most approaches the ideal of normative femininity, she immediately begins to think to think of herself as a kind of beautiful monster: while making herself up to look like a famous model, she thinks of herself as "Jeannine the Water Nymph" *(Female Man,* 16); while redecorating her apartment, she wonders "how it would be to be a mermaid and decorate a merhouse with seaweed and slices of pearl" *(Female Man,* 107). The metaphor is both an apt and a complex one: like the conventional mermaid, Jeannine is a hybrid fantasy creature caught between two orders of being: not quite fully human, and yet not quite just an unthinking animal (or, as other passages suggest, a mindless editing machine). Furthermore, much like the little mermaid from the Grimm Brother's tale, she w illingly sacrifices part of herself (and quietly hides the pain of doing so) to become the ideal woman and win her prince.

Finally, and perhaps most disturbingly, Jeannine-the-mermaid complicates the relationship between gender, power, and desire inscribed in traditional sailors' tales. Rather than actually seducing men with her beauty, Jeannine herself is perpetually seduced by the siren song of patriarchal capitalism, awash in the sea of clothes and beauty products that clutter her apartment and in very real danger of destroying herself for the love of a man (or, at least, the "real life" and identity she believes a man will give her): "A drowning woman, she takes X's willing, merman hands; maybe it's wanting to get married, maybe she's just waited too long... Little did she know that he was a water-dweller and would drown her. Little did she know that there was, attached to his back, a drowning machine issued him in his teens along with his pipe and his tweeds and his ambition and his profession and his father's mannerisms" *(Female Man,* 125). In love with a (highly commercialized) ideal of love itself, Jeannine fails to recognize that the seemingly normal and benign trappings of her fantasy man are themselves part and parcel of the more deadly patriarchal technologies that generate this fantasy in the first place. In essence, then, Russ suggests that the image of the loving husband is itself a siren-like machinery that threatens to drown women like Jeannine who heed its call.

While Russ uses the figure of Jeannine to illustrate the painful and often dangerous limitations of the traditional, commercially-produced female automaton, she uses the character of Joanna to explore the equally painful and dangerous contradictions inherent in the new position of the "liberated" commodity feminist. Living in a 1969 remarkably similar to our own, Joanna appears to be the living embodiment of the Virginia Slims or Charlie woman —a bright, beautiful, well-dressed English professor

who succeeds both socially and professionally. Furthermore, she seems to have attained this position *without* sacrificing her feminist sensibilities. Unlike Jeannine, Joanna has a firm grasp on both the literal and discursive technologies structuring gendered identities in her world. For instance, Jeannine uncritically consumes the images of women she sees on television, while Joanna dismisses them because "I've been inside a television studio before: the gallery running around the sides of the barn, every inch of the roof covered with lights, [all carefully structured] so that the little woman-child with the wee voice can pout over an oven or a sink" (8). In turn, Joanna's ability to decode the mechanics of gender production in the realm of simulation allows her to decode them in everyday situations as well. During a quarrel between a man and a woman at a cocktail party, Joanna coolly predicts the outcome based on her understanding of socially acceptable masculine and feminine behavior — behavior that, as she notes, is always already (and in this case, quite literally) inscribed within the blue and pink "WHAT TO DO IN EVERY SITUATION" codebooks "that they give out in high school" *(Female Man,* 46). (The blue book assures the man that, inevitably, *"girl backs down — cries — manhood vindicated,"* while the pink one rather sternly warns the woman that *"mans bad temper is womans fault. It is also the womans responsibility to patch things up afterward" [Female Man,* 47].) Thus, much like feminist critics John Berger and Laura Mulvey, Joanna works to illuminate how "natural" gendered relations are carefully structured by specific, predetermined codes.

At the same time, however, Russ indicates that it is impossible simply to take on the positive aspects of commodity feminism and transcend the negative ones. Instead, she consistently depicts Joanna as enmeshed in the very codes she criticizes. After another scene in which Joanna mockingly reveals the rules of "The Happiness Game" (where women draw upon their codebooks to assure one another that they are absolutely delighted to be part-time "career girls" and full-time wives and mothers), she rather anxiously wonders if "somewhere, just to give me the lie, [there doesn't live] a beautiful (got to be beautiful), intellectual, gracious, cultivated, charming woman who ... does her own cooking, brings up her own children, holds down a demanding nine-to-five job at the top decision-making level in a man's field, and ... comes home at night, slips into a filmy negligee and a wig, and turns instanter [sic] into a *Playboy* dimwit, thus laughingly dispelling the [feminist] carnard that you cannot be eight people simultaneously with two different sets of values. *She has not lost her femininity" (Female Man,* 119). By collapsing Joanna's critique of The Happiness Game with the image of the idealized commodity feminist,[18] Russ indicates both the very real seductiveness of this image and the very real danger inherent in it: the figure of the "woman who has it all" ultimately distracts Joanna from her meditation on social inequality in much the same way that

[18] In this particular passage, Russ specifically seems to invoke the mid-1970s Enjolie perfume campaign, which depicted a woman changing out of her staid business suit and into a slinky red evening gown while assuring [presumably male] viewers that "I can bring home the bacon/fry it up in a pan/ and never never let you/forget you're a man."

commodity feminism implicitly distracts women in general by replacing the desire for social change with the desire for individual transformation.

Elsewhere, Russ uses Joanna to illustrate the tensions inherent in the dream of commodity feminism by more specifically showing how the conflation of commodity consumption and liberal feminism demands women to construct contradictory (and in both cases, ultimately debilitating) relationships to their own bodies. On the one hand, Joanna clearly feels compelled to fashion herself as the ideal of the desirable woman for social occasions, even though she laments that "my hair feels as if it's falling down, my makeup's too heavy, everything's out of place from the crotch of my panty -hose to the ridden-up bra to the ring whose stone drags it under my knuckles. And I don't even, wear false ey elashes" *{Female Man,* 33–34). On the other hand, while academia allows her to put aside the commercial markers of femininity, it also demands that she become a "female man" by denying all other aspects of life within the female body. Joanna describes her rise to respectability within academia as a painful metamorphosis: "I had [to become] neuter, not a woman at all but One Of The Boys... Of course, there's a certain disembodiment involved ... I back-slapped and laughed at blue jokes, especially the hostile kind... [Finally, they accepted me when J they decided that my tits were not of the best kind, or not real, or that they were someone else's (my twin sister's), so they split me from the neck up... I'm not a woman, I'm a man. I'm a man with a woman's face. I'm a woman with a man's mind" (133–34). Much like Jeannine, who carefully edits her material experience of the world to present herself as a "nice girl," Joanna finds that she must edit the material experience of her own body to garner public approval. Unlike Jeannine, however, she aspires to occupy a subject position that entails two very different—and ultimately irreconcilable —forms of self-editing.

Indeed, caught between the compulsion to fetishize her body and a mode of feminism that asks her to sacrifice this body altogether, Joanna eventually imagines herself as a monstrous, hybrid creature: "I'm a sick woman, a mad woman, a ball-breaker, a man-eater; I don't consume men gracefully with my fire-like red hair or my poisoned kiss; I crack their joints with these filthy ghoul's claws and standing on one foot like a de-clawed cat, rake at your feeble efforts to save yourselves with my taloned hinder feet: my matted hair, my filthy skin, my big flat plaques of green bloody teeth. I don't think my body would sell anything. I don't think I would be good to look at. O of all diseases self-hatred is the worst!" *(Female Man,* 135) Thus, while Jeannine's investment in commercially produced narratives of femininity transform her into a beautiful but doomed creature, Joanna's frantic attempt to occupy the idealized position of commodity feminist who has it all transforms her into a rather different, if equally damned, creature: a horrible, ghoulish harpy who is not "good to look at." Indeed, she becomes this horrible creature precisely because commodity feminism only provides her with one way to express her frustration and rage at *not* having it all—by turning these emotions back upon her body and her self.

While Russ uses Jeannine and Joanna to explore the two most common subject positions generated for women by advertising and other image-oriented industries, she uses the other two J's—Janet and Jael, time travelers from seemingly opposed futures —to imagine how different intersections between women and advanced technologies might produce more progressive forms of subjectivity. In the first case, while the technologies of Jeannine and Joanna's worlds threaten to destroy them altogether, those of Janet's world, Whileaway, enhance her ability to attain a seemingly utopie form of identity and agency. Whileaway is a probable Earth 10,000 years into the future of our own, where, in response to a distant past filled with plagues and wars that decimated the land and destroyed all the men, women have developed a new socioeconomic system based on "ecological housekeeping" *(Female Man,* 14). The system itself is run by two fundamental sociopolitical units: the "family" (extended tribes based on chosen affinities rather than blood ties) and "informal associations of the like-minded" who work together to determine what agrarian, cultural, and technological developments will benefit the greatest number of people *(Female Man,* 51). To a certain extent, then, Whileaway is highly analogous to what literary critic Leo Marx describes as the American humanist dream of utopia —a utopia in which subjects skillfully and conscientiously deploy technologies to transform the land only in ways that will produce "just enough" for human survival and enrichment.[19]

At the same time Russ invokes this dream of utopia, she also calls attention to its implicit gendering. As Marx notes, the American utopia typically is represented by images of union and harmony, especially "the machine in the garden."[20] The fruitful nature of this union is underscored by the association of technology with masculinity and nature with femininity; thus, such images naturalize specific modes of economic and technological production through their implicit reference to heterosexual union and reproduction. On Whileaway, however, both gardens and machines are marked specifically as the products of women's labor —a fact that is nearly incomprehensible to the one (and only) American male who visits Whileaway and immediately passes out upon encountering "a flying machine with no wings but a skirt of dust and air" tending a turnip field *(Female Man,* 5). As this brief but revealing passage suggests, then, the notion of a feminine technology —represented here by the skirted machine —presents such a fundamental challenge to the gendered distinctions structuring normative understandings of utopia that men from Joanna's world simply cannot process it.

The utopian subjects who inhabit Whileaway appear to be equally frightening and unfathomable. While the conventional utopie subject reflects the supposedly natural state of humanity, the women of Janet's world insist that "humanity is *unnatural'." (Fe-*

[19] Leo Marx. "American Literary Culture and the Fatalistic View of Technology." In *The Pilot and the Passenger: Essays on Literature, Technology, and Culture in the United States* (New York, Oxford University Press, 1988), 187.

[20] Leo Marx. "The Machine in the Garden." In *The Pilot and the Passenger: Essays on Literature,Technology, and Culture in the United States* (New York: Oxford University Press, 1988), 118.

male Man, 12, my italics) In part, Whileawayans are unnatural because their (markedly feminine) technologies allow them to reproduce, to modify genetic structures, and, of course, to travel through time. More significantly, they seem to be unnatural because they cheerfully reorganize the social world to suit themselves in a similar way. For instance, when Janet first arrives on Joanna's world, she represents Whileawayans as a race of mothers and peacekeepers —roles that make sense to the men and women of 1969 because they reflect the "natural" feminine propensity for nurturing. Later, she explains that the current structure of Whileawayan society fosters a certain fondness for fist-fighting and dueling as well —a revelation that shocks and appalls her audience because it contradicts "women's psychology," leading them to conclude that Janet herself is a "bitch" and a "ball-breaker" *{Female Man,* 43, 44). Significantly, then, while Janet and her countrywomen enjoy the traditional utopie freedom to pursue a diverse range of activities and interests, the fact that they are perceived as unnatural and monstrous for doing so reveals the extent to which Joanna's world (much like our own) implicitly associates this autonomy with masculinity.

Of course, it is precisely Janet's "unnatural" subject position that allows her to exert control over the technologies structuring Joanna's world. Although Janet never actually explains why she has traveled to this particular world, the objects she accumulates —newspapers, fashion magazines, pornography, books on marriage and mortality statistics —suggest that her primary goal is to learn about the production of gendered identities and relations under capitalism. Despite months of intense study, however, Janet never fully understands (and in some cases, quite actively refuses to follow) the codes structuring these relations. For instance, when a television interviewer suggests that Whileawayans must feel sexually incomplete without men, Janet dismisses both the reporters and the scientific experts he cites as "foolish," and then precedes to explain the erotic practices of Whileaway in great detail —an explanation that throws the studio into an uproar and is "cut off instantly by a commercial poetically describing the joys of sliced bread" *(Female Man,* 11). Joanna credits Janet's ability to create this uproar to her technological savvy, noting that prior to the interview, Janet had insisted that the studio use an uneditable recording system so her words could not be changed —a fact that makes Joanna "begin to like her more and more" *(Female Man,* 11) Thus, Janet quite literally changes male-dominated technological practices in ways that allow her to reorganize patriarchal discourse as well. By exerting authority over the processes of image editing and identity production, she is able to articulate —however briefly —a distinctly non-patriarchal vision of female subjectivity itself.

Janel also challenges the narratives of gender generated by these processes in the seduction of her teenaged research assistant, Laura Rose. The encounter begins in Laura Rose's living room and plays out against a background "television salad" of images that carefully situate appropriately-gendered romantic relations within the context of commodity capitalism: "Maureen trying unsuccessfully to slap John Wayne, a pretty girl with a drowned voice holding up a vaginal deodorant spray can, a house falling off the side of a mountain" *(Female Man,* 71). At first, the seduction appears to be

remarkably congruent with the sterilized —and highly stereotypical —narrative that emerges from this image salad: emulating Maureen O'Hara, Laura Rose tries to enact the role of the idealized good girl by passionately declaring her love for Janet only to slap her away when things go "too far." Meanwhile, Janet seems to play the part of John Wayne to the hilt, grabbing the sobbing Laura firmly and undressing her in a "businesslike" manner "on the assumption that nothing calms hysterics so fast" *(Female Man,* 71). At the same time, however, Russ refuses to let readers position the seduction as a butch/femme variation on the normative heterosexual romance by intercutting the scene with interior monologues that destabilize the subject positions associated with this form of romance. For instance, while Laura Rose seems to be a (naturally) shy and retiring good girl, she eventually indicates that her hesitancy with Janet stems from a combination of life-long conditioning to repress her "abnormal" lesbian desires and simple teenaged embarrassment about the "desperately inadequate" sexual techniques she has learned from her encounters with men *(Female Man,* 74). Likewise, Janet struggles with her own cultural taboos, worrying that *"everyone knows* that if you start them too young they'll be perverted forever and *everyone knows* that nothing in the world is worse than making love to someone a generation younger than yourself" *(Female Man,* 70). In a culture where December-May romances (such as the one between John Wayne and Maureen O'Hara) seem perfect!y natural, Janet's anxiety about cross-generation relationships prevents us from simply casting her as the typical masculine romantic hero.

Russ further destabilizes normative circuits of gender and desire in this passage by invoking and disrupting the visual narrative codes described by feminist critics such as Berger, Mulvey, and Williamson. The entire seduction is highly cinematic —interior monologues "dissolve" into one another as the scene of action shifts from Laura Rose's living room to Janet's bedroom —and the action itself is conveyed primarily through a montage of vivid images: Janet amidst her books, Laura slapping Janet, Janet against the worn pink satin of the bedspread, Laura standing naked and undecided in the midst of Janet's bedroom. The monologues and images are loosely linked together by Joanna, who, as witness to the seduction, functions as both narrator and, more importantly, as audience to this scene. However, while conventional visual narratives invite viewers to consolidate specific gendered identities by identifying with either the masculine subject whose gaze controls the scene or the feminine object of this gaze, Joanna finds that this particular tableaux does not provide her with any single, stable position. On the one hand, her own lesbian impulses drive her to identify with Janet, and at crucial points in her narration she quite literally elides herself with Janet by slipping from "she" to "I" to "we." At other points, her social conditioning drives her to identify more closely with Laura Rose, and indeed, she continues to plead "don't Janet... God wall punish" long after Laura's own protests have faded away *(Female Man,* 70–73). Eventually, Joanna admits, "I [finally] fled shrieking... I sat on the hall window frame and screamed" *(Female Man,* 74). Unable to narrate the seduction in a conventional manner and thus unable to articulate her own unconventional desires,

Joanna once again finds herself thrust into the position of the monstrous, shrieking harpy.

Finally, while Russ uses Janet and Whileaway to explore the possibility of a world that transcends both patriarchy and capitalism, she uses Jaei's future to imagine what might happen if these forces are taken to their logical ends. While advanced technologies have generated wealth and comfort for the majority of people on Jaei's world,[21] they have not produced just social relations; rather, the eradication of economic inequality simply highlights the very real—and very persistent—inequalities of sexual relations under a patriarchal system. In response, the w omen of Jaei's world have united to wage literal war against men, although, by Jaei's time, the war has settled into a "stalemate —if you'll forgive the pun" marked by elaborate and often highly corrupt exchanges of information and goods between "Manland" and "Womanland" *(Female Man,* 164). The stalemate is exacerbated by the fact that the nations need one another for basic survival: the Womanlanders need Manlander semen to reproduce, and the Manlanders need male children to populate their nation *(Female Man,* 167). In essence, then, the trade agreements between the two countries make explicit how the social contract of capitalist production relies on an unspoken sexual contract and a subsequent gendered division of labor—an arrangement that may lead, as it does here, to a mutual simmering hatred that both men and women are helpless to escape.[22] Tndeed, it is precisely Jaei's awareness of this debilitating situation —combined with her disgust for those who initiated it in the first place —that provokes her to bring the other J's together on the assumption that if she can recruit new soldiers, she might be able to rekindle the hot war, decimate the Manlanders, and break the cycle for good.

Russ's depiction of Jaei's world does more than make explicit the sexual relations necessary to a capitalist economy; more importantly, it shows how the technologies of this economy are deployed to create the specifically gendered subjects needed to maintain its everyday workings. This deployment is most obvious in Manland, where adults force the weakest of the male children to undergo extensive surgery and hormone therapy and become "femmes," trophy wives/slaves for the richest and most powerful Manlanders. Jaei's depiction of one such femme indicates the crucial role gendered — but especially feminine — identities play in the perpetuation of capitalist relations:

> [He was a femme] in a pink chiffon gown, with gloves up to his shoulder, a monument of irrelevancy on high heels, a pretty girl with too much of the riglit curves and a bobbing, springing, pink feather boa. Where oh where

[21] Of course, as Jael sarcastically elaborates, this only occurs after a "rather nice" world war that "wiped the have-not nations off the face of the earth and made their resoutfi.es available to us without the both of their populations;, [because it was germ warfare, all our machinery was left standing; we were getting wealthier and wealthier... So if you were not one of the fifty percent who died, you were having a pretty good time of it" *(Female Man,* 164).

[22] For a more in-depth discussion of the social contract, the sexual contract, and women's citizenship in *The Female Man,* see Robin Silbergleid's "Women, Utopia, and Narrative: Toward a Postmodern Feminist Citizenship." *Hypatia* 12.4 (fall 1997):

> is the shop that makes those long rhinestone earrings, objects of fetishism and nostalgia ... of no use to fully six-sevenths of the adult human race? Somewhere stones are put together by antiquarians, somewhere petroleum is transformed into fabric that can't burn without polluting the air, and won't rot, and won't erode... His green eyes shrewdly narrowed. This one has intelligence. Or is it only the weight of his false eyelashes? *(Female Man,* 171)

As Jael's description indicates, femmes ultimately express their technologically-produced sexuality through an aggregate of external signs —clothes, jewelry, makeup —that are themselves the products of a commodity culture.[23] At the same time, however—as her semi-rhetorical question concerning the location of the jewelry store suggests —this same culture carefully obscures the means by which it manufactures feminine goods and feminine identities. Indeed, by blurring the distinction between reality and illusion, it works to naturalize both the conspicuous consumption of these goods and the identities this consumption creates.

While the Womanlanders engage in technological productions of gendered identities similar to those of the Manlanders, they typically do so in ways that disrupt, rather than attempt to naturalize, the concept of "gender" itself. For example, Jael's household is run by her butler/chef/lover Davy, an "ice lad in a cloud of gold hair and nudity" whom just happens to be a genetically modified chimpanzee given limited intelligence by his computerized implants *(Female Man,* 185, 199). To a certain extent, Jael's relationship to Davy seems simply to reverse but reinforce the hierarchical gendered relations of the Manlanders: she calls him her "monster-pet," and, as the scene in which the other J's witness the two of them making love suggests, she clearly dominates "little Davy" and his "eerie malleability" *(Female Man,* 197–98). However, in contrast to the Manlanders, who naturalize both the femmes and their domination over them, Jael consistently' emphasizes the artificial nature of her "pet" and their relationship. On the one hand, Jael describes sex with Davy through highly poetic organic metaphors —comparing his genitals to "a rosebud" or "the blossom on a banana tree," and depicting their mutual orgasms as "convulsive fires." On the other hand, she frames these metaphors with rather dry descriptions of the technological processes that enable her to have sex with Davy in the first place, explaining that she must run her fingernails down his sides and up his arms to initiate his lovemaking program, and that she must press other triggers "between the thumb and forefinger" to control the speed with which he climaxes *(Female Man,* 196–97). Thus, while Russ deconstructs gendered identity and desire in the seduction scene with Janet and Laura Rose by foregrounding the visual codes that inform these constructions, in this one she performs

[23] Perhaps not surprisingly, while Joanna, Janet, and Jael react to the femmes with a mixture of pity and disgust, Jeannine (the one J most thoroughly interpellated into patriarchal and capitalist ideology) immediately adores them, a fact that pleases the femmes to no end and causes Jael to designate them all as "sisters in misfortune" *(Female Man,* 172).

a similar operation by suggesting that Jael essentially programs identity and desire by (quite literally) pushing Davy's buttons. Ultimately, then, we may read the entire episode as a metaphor for the ways in which women might begin to delight in the intimate connections between themselves and advanced technologies, to rewire "circuits of desire" in pleasurable and empowering ways.

Jael's intimate connections to the technologies of her world are reflected on the surface of her own body as well. To perform her duties as a spy and assassin for the Womanlanders, Jael willingly undergoes extensive technological modification to become a literal cyborg. Taken together, these alterations —including a jacked-up nerve system, steel eyes, fangs and fingernails, and a laugh that sounds like a "mechanical vulture on a gigantic garbage heap ... giving one forced shriek for the death of all organic life" —transform her into the living embodiment all of the anger and violence that her foremothers conici not express *(Female Man,* 159). Indeed, when Joanna (who is herself one of these foremothers) first meets the assassin, she simply calls her "The Woman Who Has No Brand Name" because she has no cultural tropes through which to understand what Jael represents *(Female Man,* 157). Furthermore, while the two women understand themselves as similar kind of unnatural beings—Jael notes that she like is a "Hallowe'en ghoul" and Joanna imagines that she is a harpy with "ghoulish claws" —they value their monstrosities quite differently. As the product of a world that insists on "naturally" discrete subject positions for men and women, Joanna can only understand her technological mediation and subsequent failure to occupy a natural subject position in self-negating terms. Jael, however, relishes her hybrid status because it gives her both the literal freedom to move back and forth between Womanland and Manland and the psychological freedom to evade conventional gendered categories of subjectivity.

Jael's recognition of how subjects are marked by both literal and discursive technologies also allows her to begin channeling her personal anger into larger social action. As she explains to the increasingly attentive J's:

> If you want to be an assassin, remember you must decline all challenges. Showing off is not your job.
>
> If you are insulted, smile meekly. Don't break your cover.
>
> Be afraid. This is information about the world.
>
> You are valuable. Trust yourself.
>
> Take the easiest way out whenever possible. Resist curiosity, pride, and the temptation to defy limits. You are not your own woman. You must be built to last...
>
> To put it simply: those are the times [you will be] most [yourself]. *(Female Man,* 191)

In contrast to the boundlessly optimistic Janet, who never fully understands the extent to which Jeannine and Joanna have been marked by their worlds (the most she can do is kick Jeannine for being a sap and advise Joanna to "throw [the codebooks of gender] away, love" *[Female Man,* 48]), Jael realizes that the women from 1969 cannot simply make a clean break with the past and present in hopes of creating a brand new future. Instead, she anticipates the arguments of later feminists such as Goldman, Heath, and Smith by acknowledging that the subject living under patriarchy always inhabits a contested cultural terrain — in other words, that "you are not your own woman." She also anticipates these critics by showing how this mediated subject may exert a limited but powerful agency by learning to use culturally-produced markers of femininity such as meekness and fear as tools with which to begin reorganizing the terrain of patriarchy from within.

Of course, Jael does not simply dismiss Janet's utopie worldview altogether. Instead, she complicates it by suggesting that utopia can occur *only* after women have done the hard work of replacing monolithic narratives of liberation and subjectivity with cyborg identities and agencies that acknowledge the complex connections between past, present, and future. Indeed, while Janet advises Jeannine and Joanna to "throw away" the codebooks, fashion magazines, and other technologies of forgetfulness that limit their perceptions of themselves and the world, Jael indicates that Janet herself is subject to similar forms of forgetfulness. When the Whileawayan refuses to help in the war against Manland, Jael quietly but furiously tells her:

Disapprove all you like. Pedant! Let me give you something to carry away with you, friend... Whileaway's "plague" [that killed all the men] is a big lie. Your ancestors lied about it. It is I who gave you your "plague," my dear, about which you can now pietize and moralize to your heart's content; I, I, I, I am the plague, Janet Evason. I and the war I fought built your world for you, I and those like me, we gave you a thousand years of peace and love and the Whileawayan flowers nourish themselves on the bones of the men we have slain. *{Female Man,* 211)

Unlike Janet, then, who elsewhere claims that "plague came to Whileaway ... starting so slowly that no one knew about it until it was too late" *{Female Man,* 12), Jael refuses to mystify or naturalize history by erasing the human agents who both live through and actively participate in it. Rather than allowing Janet and the other J's to believe that "plague [just somehow naturally] came," she forces them to confront the unspeakable, messy truth that the women specifically and deliberately engineered (or will engineer) the plague virus. Thus, they also are forced to confront the equally unspeakable and messy truth that the Whileawayan utopia itself is founded upon the very principles of violent gender division it claims to transcend.

While Janet may most closely resemble the ideal heroine of other 1970s feminist narratives, then, by the end of the novel Russ suggests that it is the cyborg Jael who embodies the form of identify and agency most appropriate to life in the contemporary high-tech world. Not only do both of the 1969 J's ultimately agree to help Jael with the war against Manland, but each becomes an assassin in her own right. Jeannine's

transformation begins when Jael acknowledges her long-submerged intelligence and anger by asking if she has ever killed anyone: as Joanna notes, "something had gotten into Jeannine's clear, suffering gaze, something had muddied her timidity ... [making her] quietly stubborn" *{Female Man,* 165). Afterward, Jeannine watches Jael go about her work as an assassin quite "calmly," eventually inviting the Womanland soldiers to come to her world and "take the whole place over" *{Female Man,* 211). Moreover, upon returning to her own world, Jeannine herself begins to prepare for war in her own way: "Jeannine goes window-shopping... [She] is out on the town saving goodbye, goodbye, goodbye to all that. Goodbye to mannequins in store windows who pretend to be sympathetic but who are really nasty conspiracies ... goodbye to The Girls, goodbye to Normality, goodbye to Getting Married ... goodbye to feebleness, goodbye to adoration, goodbye Politics, hello politics. She's scared but that's all right. The streets are full of women and this awes her; where have they all come from?" *(Female Man,* 209) Like the guerilla warriors later envisioned by feminist scholars Goldman, Heath, and Smith, Jeannine begins to stake out a more progressive form of cyborg subjectivity for herself by refusing to participate in the circuits of envy and desire generated by the system of patriarchal capitalism. At the same time, she remains firmly entrenched within the contested terrain of this system. Indeed, it is precisely by rejecting "Politics" (and all of the other capitalized, normative gender codes associated with it) that she can actually begin to see the other inhabitants of this terrain and to affirm the connections between them that constitute the (lower case) politics of everyday life.

Likewise, although Joanna suspects that Janet "is in secret our savior from utter despair" she admits that the utopian dream has little relevance to her immediate situation and concludes: "I like Jael the best of us all" *(Female Man,* 213).[24] Accordingly, she determines to become more like her cyborg counterpart by reevaluating her own hybrid status as a female man, merging supposedly contradictory gender codes into her own being. In a revealing move, she compares the process to electrocution: "Take in your bare right hand one naked, severed end of a high-tension wire. Take the other in your left hand. Stand in a puddle. (Don't worry about letting go, you can't.)... If those wires are your own wires — hang on... You are making yourself a conduit for holy terror and the ecstasy of Hell... Only in that way can the wires heal themselves" *(Female Man,* 139). While Jeannine takes the first step toward a more progressive cyborg identity by rejecting the circuits of envy and desire constructing normative understandings of gender, Joanna takes the next step by actively immersing herself within these circuits and rewiring them in ways that allow her to acknowledge her connections to both masculine and feminine subjectivities.

[24] In this respect, Joanna differs from Jeannine, who does not "believe in" Janet whatsoever *(Female Man,* 212). More appropriately, it may be that Jeannine *cannot* afford to believe in either the Whileawayan or the utopie dream she represents—after all, she has already "whiled away" much of her life in another (if ven different because commercially-produced) utopie dream.

In doing so, Joanna begins to exert a more progressive form of agency as w ell. After her Frankensteinian rebirth, she finds that she can now embrace the "paradoxes" that previously tore her apart:

> For years I have been saying *Let me in, Love me, Approve me, Define Me, Regulate me, Validate me, Support me.* Now I say *Move over.* If we are all Mankind, it follows to my interested and righteous and rightnow [sic] very bright and beady little eyes that... you will write about me as a Man from now on and speak of me as a Man and employ me as a Man and recognize child-rearing as a Man's business; you will think of me as a Man and treat me as a Man until it enters your muddled ... bull-moose head that *I am a man.* (And you are a woman.) That's the whole secret... If you don't, by God and all the saints, *I'll break your neck. (Female Man,* 140)

In her previous incarnation as a commodity feminist, Joanna-the-female-man could only understand the contradictions and tensions inherent in her position as a grotesque personal failing; thus, she directed her frustration and rage at social inequity back upon herself. However, once she understands "the whole secret" of what it might mean to be a female man outside the constraints of commodity feminism, Joanna finds that she can productively channel her anger outward. Rather than trying to change her own body, then, she tries to express — and begin rectifying—the inequities of the social body by transforming its two most fundamental component: definitions of "man" and "woman" themselves.

Finally, given that Joanna's world most closely resembles our own, it is not surprising that the novel ends in Joanna's voice with a description of the most important cyborg action she has taken to date: the creation *of The Female Man* itself.[25] By writing the book, Joanna unleashes a virus akin to the one Jael eventually will release on her own world: while Jael designs a literal virus to eradicate patriarchal and capitalist relations by invading and destroying the genetic codes of the individual male body, Joanna's book is designed to perform a similar operation by invading and destabilizing the discursive codes of the social body:

> Go, little book, trot through Texas-and Vermont and Alaska and Maryland and Washington and Florida and Canada and England and France; bob a curtsey at the shrines of Friedan, Millet, Greer, Firestone, and all the rest... Recite yourself to all who will listen, stay hopeful and wise. Wash your face and take your place without fuss in the Library of Congress, for all books

[25] While Joanna-the-character seem to embody certain aspects of Joanna-Russ-the-writer throughout the novel —both are blond-haired and blue-eyed, both are feminists working in the male-dominated field of academia, and both ultimately identify themselves as lesbians —the boundary between fiction and reality erodes most thoroughly in this final passage, where Joanna's first-person narrative voice and Russ's previously third-person omniscient one blend together almost seamlesslv.

> end up there eventually, both little and big... Do not get glum when you are no longer understood, little book. Do not curse your fate. Do not reach up from readers' laps and punch the readers' noses.
>
> Rejoice, little book!
>
> For on that day, we will be free. *(Female Man,* 213–14)

Joanna's final words to her book clearly reiterate Jael's advice to become an assassin by declining challenges and smiling meekly. More importantly, this final passage begins to perform the covert activity of the cyborg assassin by remarking upon the connections between women outside those of official patriarchal narratives. Bx bidding her book to "bob a curtsey at the shrines of Friedan, Millet, Greer, Firestone, and all the rest," Joanna refuses to let readers simply pigeonhole her nov el as an excursion into the realm of fantasy; instead, it calls attention to itself as part of a larger feminist project that extends across the boundaries between "trivial" fiction and "serious" non-fiction.

The passage also troubles conventional understandings of feminism as a contemporary social movement (and thus perhaps only temporary blip on the radar screen of history) by positioning *The Female Man* within a long-standing tradition of women's critical fiction. In particular, Joanna's encouragement to "go, little book ... stay hopeful and wise" echoes the sentiment of proto-feminist (and proto-science fiction author) Mary Shelly, who prefaced the 1831 edition of *Frankenstein* by bidding her own "hideous progeny go forth and prosper."[26] The comparison seems apt: after all, much like her predecessor's work, Joanna's novel engages with the problem of technologically-mediated identity in complex ways. In particular, while both authors explore the very real dangers of technologically-mediated subjectivities, they also align themselves with "unnatural" or monstrous identities and agencies in more hopeful ways —Shelley implicitly through the affectionate designation of *Frankenstein* as her "hideous progeny," and Russ more explicitly through her "ghoulish" cyborg characters. Ultimately, then Joanna expands onr understanding what it might mean to be a cyborg assassin by acting upon another bit of Jael's advice: to remember that "you are valuable." Rather than simply destroying the codes of patriarchal culture, *The Female Man* works to penetrate and reorganize them so that we may remember —and revalue —women's activities and social contributions across space and time.

IIA. "I'd Like to Boy the World a Coke": Commercial Representations of Race in the 1970s

Much like Russ, African-American author Octavia Butler uses the science fiction trope of time travel to examine the range of subject positions available to minorities in a

[26] Mary Wollstonecraft Shelley. *Frankenstein, Or, The Modern Prometheus.* (1818, 1831; reprint, Chicago: University of Chicago Press, 1982), 229.

technology-intensive era. However, while Russ looks primarily to the future to imagine new and politically progressive relations between subjects and advanced technologies, in *Kindred* Butler suggests that we must look to the past and understand the history behind these relations as well. *Kindred* revolves around the adventures of Dana and Kevin, an interracial couple from 1976 who find themselves repeatedly drawn through space and time to the antebellum plantation where Dana's ancestors were enslaved. While the couple eventually realize that the commercially-produced images of African-American history and identity permeating contemporary America have little or nothing to do with the lived relations of 1819, Butler refuses to simply let her characters —or her readers—reject their connections to either history or the present moment. Instead, *Kindred* provides a direct and sustained interrogation of image production and its history —indeed, her characters only survive their experience of the antebellum south by learning this history. In doing so, she shows both how systems of commercial imagery may be used to maintain a racist and capitalist status quo and how subjects may engage with them to construct new relations that destabilize this status quo.

Published in 1979, *Kindred* can be situated squarely within the increasingly heated debates about commercial representations of African Americans marking the late 1960s and 1970s. With the notable exception of fictitious (and highly stereotyped) figures such as Aunt Jemima and Uncle Ben, African Americans were largely absent from mainstream commercial advertising until this time period. Industry spokespersons offered several explanations for this absence. While many corporations simply refused to use black models or target black audiences for fear of inciting white consumer backlash, advertising agencies often justified their failure to acknowledge African Americans in a more complex way.[27] Adapting conventional liberal notions of a universal humanity joined together by universally-shared emotional and intellectual qualities to their own purposes, advertising spokespersons argued that commercials were designed to appeal to consumers based on these supposedly universal qualities (rather than on "mere" physical ones such as skin color). According to this logic, race simply was not an issue for advertisers; the) simply chose actors who could best convey certain emotional and/or intellectual states —and the fact that these actors tended to be white was quite incidental (Dates, 472).

While many African-American leaders agreed that advertising could—and should—be a tool to uphold liberal humanist principles of equality, they typically argued that this tool needed to be used differently. Much like their liberal feminists counterparts, civil rights advocates posited a strong correlation between cultural visibility and cultural perceptions of racial identity.[28] For instance, New York Mayor Robert Wagner's 1962 Committee on Job Advancement charged that "the portrait of America painted in

[27] Janette L. Dates. "Advertising." In *Split Image: African Americans in the Mass Media,* ed. Janette L. Dates and William Barlow. (Washington, D.C.: Howard University Press, 1993), 466; hereafter cited in text.

[28] Of course, African-American activists espoused a variety of political movements throughout this period, not all of which were necessarily compatible with liberal humanist politics. However, in this

our advertisements ... is a distorted one [due to] the systematic exclusion from advertising layout of Negroes."[29] Meanwhile, NAACP and National Urban League leaders suggested that the technologies of commercial representation could be used to "support fundamental American principles" and to "sell [more products as well as] the idea of affirmative action" by hiring blacks as both advertisers and as advertising models (qtd. in Kern-Foxworth, 118). Indeed, even more so than feminists, then, these leaders positioned advertising as key to the enhancement of social and political authority. Wedding liberal humanist political rhetoric to its economic counterpart, they argued that the increased visibility of African Americans in commercial mediums would inevitably raise black self-esteem, heighten general public awareness concerning the racial diversity of America, and, ultimately, pave the way toward greater economic prosperity and social equality for all.[30]

Wide-scale economic pressures and industrial changes in the 1970s helped make corporations and advertisers more responsive to the charges (and suggestions) of civil rights advocates. When black leaders such as Jesse Jackson threatened to organize nationwide boycotts against companies that refused to acknowledge African Americans in their advertising—and studies revealed that significant portions of the black consumer population would wholeheartedly endorse these boycotts —major corporations including AT&T, Coca-Cola, and Pepsi hired new advertising agencies friendly to civil rights agendas, and the number of ads featuring black spokesmodels for their products increased slowly but significantly (Kern-Foxworth, 126). Otlier corporations (and advertising agencies) began to follow suit for more immediately practical reasons. The success of network television sitcoms such as *The Jeffersons* and *Good Times* and dramatic series such as *Roots* (which continues to be ranked as one of the five most popular shows in TV history) indicated that Americans in general—and African Americans in particular —were extremely responsive to respectful and relatively nuanced depictions of black life and history. Finally, the advent of cable television in the late 1970s promised to split the national viewing audience (and thus national consumer base) in dramatic ways. Assuming that more affluent viewers would flock to the new pay channels and thus that the future network audiences would be comprised primarily of less affluent blacks (and other minorities), advertisers finally concluded

---

section I focus primarily on those who were affiliated with such politics because, much like their liberal feminist counterparts, they typically received the most public attention.

[29] Quoted in Marilyn Kern-Foxworth. *Aunt Jemima, Uncle Ben, and Rastus: Blacks in Advertising, Yesterday, Today, and Tomorrow* (Westport, CT: Greenwood Press, 1994), 116; hereafter cited in text.

[30] Although the terms "black" and "African-American" are derived from different time periods, and that the former topically refers to racial identity and the latter to cultural or ethnic identity, throughout this chapter I follow scholars such as Marilyn Kern-Foxworth, Herman Gray, and bell hooks in using these terms interchangeably for the sake of writing, clarity.

(to paraphrase an industry spokesperson regarding feminism) that "black lib" might very well equal "economic lib."[31]

Whatever the motivations, commercial representations of African Americans produced in this period were largely constructed within the same format, dubbed "integrationist" or "pluralist" advertising. According to media scholar Herman Gray, integrationist imagery not only includes, but quite often celebrates, racial diversity and equality while erasing the social, political, and historical struggles leading to the production of such images in the first place. If racial tension is at all present in this imagery, it is carefully figured as an individual (rather than systemic) problem to be resolved at the level of personal (rather than social) relations.[32] Consider, for instance, two of the most famous integrationist ads from the 1970s: Coca-Cola's *Buy the World a Coke* (1971) and *Mean Joe Green* (1979). *Buy the World a Coke* featured a group of beautiful, racially-diverse adolescents frolicking together in a pastoral setting, telling viewers (in the slightly revamped words of a popular folk song) that they would "like to buy the world a Coke/to keep it company." Despite initial concerns about the ad, Coca-Cola received thousands of fan letters from consumers who praised it as a "beautiful" and "really moving" "anthem to amity" (qtd. in Rutherford, 48). In apparent contrast, *Mean Joe Green* (which won both a Cho and a Cannes Gold award) focused on just two characters—Joe Green, a large (and very black) football player with a "tough guy" reputation and the small white boy who played the part of his adoring fan. Initially Green scorns the attention of the young fan, but when the boy offers him a Coke to ease his obvious post-game irritability, the athlete is suddenly transformed into a sweet, gently paternalistic figure (Rutherford, 49). Thus, while *Mean Joe Green* seemed to acknowledge continued racial tension in America, it did so only in a limited way, locating this tension solely at the interpersonal level and eliding it with more general (and more socially-acceptable) emotional and generational conflicts. Furthermore, like the earlier Coke ad, this later one ultimately pointed toward a utopie future founded upon racial harmony —and implicitly suggested that this future could be achieved through the peaceful and democratic activity of consumption rather than the more difficult and tension-filled one of political activism.

While such commercials seemed to equate racial equality with product consumption, others suggested that the corporation itself was the real agent of this equality. For instance, throughout the 1970s AT&T consistently positioned itself as one of the key players in the civil rights movement. In one campaign, the corporation emphasized its commitment to equal opportunity employment by featuring several generations of African-American w orkers. In others, it celebrated its commitment to black arts traditions by featuring various African-American actors and entertainers (Dates, "Advertis-

[31] Janette L. Dates. "Commercial Television." In *Split Image: African Americans in the Mass Media.* Ed. Janette L. Dates and William Barlow. (Washington, D.C.: Howard University Press, 1993), 295, 322.

[32] Gray, Herman. *Watching Race: Television and the Struggle for "Blackness"* (Minneapolis: University of Minnesota Press, 1995), 87–89; hereafter cited in text.

ing," 469). In doing so, the phone company positioned itself as the benevolent patron of black political and cultural movements. Ads for McDonald's operated in similar ways. For instance, in one ad, a young black woman picks up her son from a community day-care center and helps him climb on a city bus; obviously exhausted from a long day at work; the woman takes her seat and promptly falls asleep. Tlw singer/narrator tells her (and the audience) that "time is flying, children grow up fast, take a little break today: at McDonald's." Eventually the bus stops, the woman wakes up, and our two protagonists exit the bus to be joyfully reunited with the husband/father waiting for them outside McDonald's (Kern-Foxworth, 163). In essence, then, the ad suggests that McDonald's is more than just a place to get a quick, cheap hamburger. Instead, it emerges as the savior of the African-American family, a corporation that show it cares by quite literally providing this family with the space from which to retreat from the difficulties of black working-class life.

Despite the widespread critical and public acclaim for such ads, African Americans remained concerned about the ways in which integrationist advertising limited cultural perceptions of black subjectivity. While surveys conducted throughout the 1970s suggested that older African Americans —especially those who had been or were still involved with civil rights movements —responded favorably to integrated advertisements, they also revealed that this approval was contingent whether or not the ads in question depicted blacks in relatively positive and plausible ways (Kern-Foxworth, 155). Furthermore, a growing number of younger African Americans argued that integrationist ads were neither positive nor plausible because they simply transformed blacks into "holographic projections" or "imitations of the white bourgeoisie."[33] This argument seemed to be born out by the experience of African Americans working within the advertising industry as well. In an interview from 1977, heavily bearded black model Ron Garner noted that "right now, the problem I'm facing with my beard is that too often it is equated with militancy. I've lost a lot of work because of it" (qtd. in Kern-Foxworth, 158). Thus not only did integrated advertising work to re-present African-American subjects in terms of dominant (white) social and economic values, but it carefully minimized or excluded the presence of subjects who might signal dissent or antagonism toward those values —be it however minimal a way.

In her own assessment of commercialized subject positions over a decade later, African-American scholar bell hooks labeled the advertising strategies noted by Garner and others as a new form of "white supremacy." Like Herman Grav, hooks suggests that the new advertising practices of the last several decades might seem (and their practitioners might honestly intend) to rectify the previously invisibility of blacks in commercial imagery, but that they only do so by inviting the African-American subject to consume the values and beliefs of white, middle-class America. In doing so, they mediate this subject's relationship to African-American history and transform him

[33] Robert Atwan, Donald McQuade, and John W. Wright. *Edsels, Luckies, and Frigidaires: Advertising the American Way* (New York: Dell, 1979), 87.

or her into a kind of "black replicant."[34] As the name suggests, the black replicant—much like its counterpart, the consumer feminist—is invited to express itself through consumption of—and identification with —specific products and images (rather than through connections to others in similar social, political, or economic situations). The process through which this occurs can be dizzyingly elaborate. For instance, liooks links the recent popularity of light-skinned, blond-haired (or wigged) models to that of Tina Turner in the 1970s. Turner herself began to w ear wild, lioness-like wigs at the suggestion of then-husband Ike Turner, who found them reminiscent of the wigs worn by white actresses in 1930s B-films to signify the role of the "jungle queen."[35] For hooks, the replicant-like consumer who identifies with and takes on this look is doing more than simply buying into an idealized image of white beauty, then. Instead, she is buying into a whole history of images generated by whites to signify black primitiveness, images that maintain conventional hierarchical distinctions between white and black subjects.

At the same time, however, African-American media critics also recognize that contemporary subjectivities are always at least partially mediated by the sphere of commercial image production. Accordingly —much like their feminist counterparts — they typically suggest that acknowledging but working to transform the precise nature of this mediation constitutes an important form of political action in and of itself. Hooks calls this mode of action "decolonization," or "the effort to critically intervene and transform the world of image making authority... For those of us who dare to desire differently, who seek to look away from the conventional ways of seeing blackness and ourselves, the issue of race is not just about critiquing the *status quo.* It is about transforming the image, creating alternatives, asking ourselves questions about what types of images subvert, pose critical alternatives, and transform our world views and move us away from dualistic thinking about good and bad" (hooks, 1992, 4). As hooks goes on to note, the decolonized replicant occupies a position similar to that of Donna Haraway's more generally formulated progressive cyborg subject: both subjects acknowledge that they are psychologically mediated or otherwise marked by commercial systems of representation, but both also work to break up the hegemony of these systems by infusing them with multiple and sometimes contradictory images of the histories and identities in question (hooks, 1992, 44).

Elsewhere, media scholar Herman Gray examines how African Americans may generate representations of these "decolonized cyborg" subject positions — and enact them for themselves —in mainstream commercial media. While Gray acknowledges that black (and sometimes white) producers, directors, writers, and other artists often are limited by the industrial and generic constraints of commercial mediums, he argues that such artists can disrupt "the gaze of an idealized white middle-class audience"

[34] bell hooks. "White Supremacy." *Zeta* I (1988): 24.

[35] bell hooks. *Black Looks: Race and Representation* (Boston: South End Press, 1992), 72; hereafter cited in text.

(and, I would add, its black replicant counterpart) by acknowledging and engaging with these constraints —with conventional themes, plot structures, design elements, and, of course, the history of images associated with them (Gray, 89). In doing so, they generate representations that "mark, displace, and disarticulate hegemonic and normative cultural assumptions and representations about America's racial order. At their best, such representations fully engage all aspects of African-American life and, in the process, move cultural struggles within television and media beyond limited and narrow questions of positive/negative images, role models, and simple reversals to the politics of representation" (Gray, 92). In essence, then, Gray outlines a model of cyborg activity that comments upon —and works to decolonize —both the African-American relationship to systems of commercial representation and those systems themselves.

Although hooks and Gray attribute this model of activity primarily to filmmakers and television producers of the 1980s and 1990s, scholars and authors of the 1970s attempted to decolonize the relationship between African-American subjectivity and advertising in similar ways. Media historians Janette L. Dates and William Barlow note a virtual explosion in scholarly research concerning the relationship between African Americans and the commercial media in the 1970s, much of which focused on the historical foundations of this relationship.[36] These studies troubled predominant understandings of image production in two important ways. First, they showed how early American advertising helped consolidate white institutional power structures by providing a public forum for slave owners to communicate w ith one another across vast distances. In doing so, they implicitly challenged contemporary claims that advertising was inherently race-neutral (Kern-Foxworth, 3). Second, (and more explicitly) they showed how early advertising complicated contemporary images of black liberation and enlightenment via consumption. Pointing out that slave and runaway advertisements typically emphasized the unique personalities and professional skills of the subjects in question to pique the interest of white readers, scholars such as Gerald Mullin concluded that "to see slaves as a 'society of helpless dependents' is to make a [drastically oversimplified] judgment"—about African-American history in particular and American History in general (qtd. in Kern-Foxworth, 24). Taken together, these two observations about early American slave advertisements worked to position advertising in general as a kind of contested terrain, one that could both conceal and reveal subjects' relationships to themselves and their worlds depending upon the configuration of historical and material forces acting in any given moment.

Similar projects informed the work of many African-American —especially African-American women — authors from this period. Alice Walker, Toni Cade Bambara, and Toni Morrison all addressed the commodification of black bodies, histories, and identities in their literary waiting. Indeed, critics often cite Morrison as providing some of

[36] Janette L. Dates and William Barlow. "Introduction." In *Split Image: African Americans in the Mass Media,* ed. Janette L. Dates and William Barlow (Washington, D.C.: Howard University Press, 1993): 16.

the most articulate and compelling investigations of race and its commercial representation; as Susan Willis points out, tragic characters such as Pecola from *The Bluest Eye* and Hagar from *Song of Solomon* are "sublime manifestations" of the contradiction between narratives of equality through consumption and the "reality that translation into the dominant white model [of subjectivity] is impossible for marginalized people."[37] As such comments suggest, these fiction waiters tended to be less optimistic about the subversive or progressive potential of commercial representation than their academic counterparts. Nonetheless, their works made important (and certainly more widely read) contributions to the burgeoning debates over race and representation by showing how commercial imagery such as advertising informs dominant cultural understandings of blackness. Of course, participation in these debates was not limited to either scholarly or "high" literary writing. In the next section, I examine how some African-American authors used "low" genres such as science fiction and fantasy to carry our similar efforts, focusing specifically on how Octavia Butler contributes to the project of decolonization in her 1979 novel *Kindred.*

IIB. "A Grim Fantasy": Historicizing Commercial Imagery and African-American Subjectivity in Kindred

While significant numbers of feminist writers from the 1970s saw science fiction as an ideal narrative form through which to convey their concerns about the commodification and technological mediation of subjectivity to relatively large audiences, fewer African Americans chose this path. Commenting upon the scarcity of black SF readers and writers, Charles Saunders notes that, thematically speaking, the genre has revolved around the hopes and fears of white America; thus even black readers "who share the common demographic characteristics of white science fiction readers (i.e., young, educated, middle-class) tend to be more interested in political and sociological works along with the fiction of black writers like James Baldwin and Toni Morrison. To them, science fiction and fantasy may well seem irrelevant to their main concerns."[38] Nonetheless, those African Americans who were writing SF during the 1970s found that the conventions of the genre provided them with powerful ways to express those same "political and sociological" concerns. For instance, both Saunders and Jewelle Gomez successfully used traditional fantasy and SF tropes such as supernaturally- or technologically-enhanced longevity to create characters who narrate African and African-American history across the boundaries of time and space. Meanwhile, Samuel Delany received (and continues to receive) critical praise for using conventional motifs

[37] Susan Willis. A *Primer for Daily Life* (New York: Routledge, 1991), 114.

[38] Charles R. Saunders. "Why Blacks Don't Read Science Fiction." In *Brave New Universe: Testing the Values of Science in Society,* ed. Tom Henighan (Ottawa: Tecumseh Press, 1980), 167.

such as "the encounter with the alien other" to interrogate how we construct and confront raced and gendered others in everyday, terrestrial life.[39] Much like their feminist counterparts, then, these authors drew upon the general vocabulary and tropes of SF to explore specific social and political issues.

Octavia Butler claims to have turned to SF for similar reasons. Noting that "science fiction has long treated [alien] people who might or might not exist," she argues that the genre provides an ideal narrative space in which to consider the seemingly fantastic possibility that there might very well be black people who exist outside the official white world (qtd. in Crossley, xvi). However, even while Butler sometimes allies herself with writers like Saunders and Delany, she also departs from them in significant ways. Works such as *Patternmaster* (1975) and the *Xenogenesis* trilogy (1987–1989) depict dystopic high-tech futures in which race and gender are mediated quite literally by advanced technologies; thus critics often align these works with those of white feminist SF authors.[40] Conversely, novels like *Kindred* and *Wild Seed* (1980) are set at least partially in the colonial and early American past; because these novels clearly engage with and rewrite historic understandings and representations of race relations, critics often downplay their science fictional aspects and ally them with the work of "serious" African-American authors including Gayl Jones and Toni Morrison.[41] In terms of *Kindred,* Butler herself attempts to steer between these categories by simply calling the novel "a grim fantasy" (qtd. in Crossley, xii). The seeming paradox of this designation is highly appropriate —after all, *Kindred's* intensely serious or "grim" critique of historic representation depends upon its protagonists' seemingly fantastic ability to travel through time and space. Thus Butler's novel may understood best as a kind of hybrid text situated at the intersection between popular and canonical or speculative and historical literary genres —a position that provides her with an ideal space in which to explore the possibilities and constraints inherent within hybrid or mediated subjectivities themselves.

Butler explores these possibilities and constraints through the specific relationship between her two protagonists, the African-American Dana and the Caucasian Kevin. Dana and Kevin first meet at a temp agency, where, as Dana puts it, they recognize one another as "soul mates" bound together by their common intellectual interests and

---

[39] Robert Crosslev. "Introduction." In *Kindred* (Boston: Beacon, 1988), xvi; hereafter cited in text.

[40] See, for instance, Beverly Friend, "Time Travel as a Feminist Didactic in Works by Phyllis Eisenstein, Marlvs Millhiser, and Octavia Butler." *Extrapolation* 23.1 (1982): 50–55; and Lucie Armitt, "Space, Time, and Female Genealogies: A Kristevan Reading of Feminist Science Fiction." In *Image and Power: Women in Fiction in the Twentieth Century,* ed. Sarah Sceats and Gail Cunningham (London: Longman, 1996).

[41] See, for instance, Elizabeth Ann Beaulieu, *Black Women Writers and the American Neo-Slave Narrative: Femininity Unfettered* (Westport, CN: Greenwood Press, 1999); Sandra Y. Govan, "Homage to Tradition: Octax ia Butler Renovates the Historical Novek"MELUS 13.1–2 (spring-summer 1986): 79–96; Adam McKible, "'These Are the Facts of the Darky's History': Thinking History and Reading Names in Four African-American Texts." *African-American-Review* 28.2 (summer 1994): 223–3 5; and Ashraf Rushdy, *Neo-slave Narratives* (Oxford: Oxford University Press, 1999).

shared desires to become popular fiction writers *(Kindred,* 56). However, both Dana's overtly political family and Kevin's quietly racist one disapprove of the relationship and the couple withdraw into semiisolation, agreeing to "pretend we haven't got any relatives" *(Kindred,* 112). Almost immediately, then, Butler invokes what we might call the romantic narrative of the Coca-Cola generation —a generation supposedly without ties to the bad old past of racial discrimination and inequality —only to undercut it by showing how subjects who cut themselves off from history necessarily cut themselves off from their connections with others in the present as well.

Given Butler's concern with how commercial narratives dislocate subjects from one another and their histories, it is hardly surprising that *Kindred* is devoted to mapping the limits of such narratives and searching for new ones to replace them. The majority of the novel takes place between Dana's twenty-sixth birthday on June 6, 1976 and the American bicentennial on July 4 of the same year. During this period, Dana (and eventually Kevin) find themselves transported back and forth between present-day California and antebellum Mary land, where they save the life of an accident-prone white boy named Rufus Weylin on six separate occasions. At first there seems to be no pattern to these trips (which last anywhere from a few minutes to five years, from the perspective of Rufus's world). Eventually, however, Dana learns that she is trapped within a temporal paradox and that she must ensure Rufus' survival because the is (or will be) one of the founders of her family line. The task is structured around another paradox as well: while Dana is called to the past time and time again because she is the one person who can save Rufus from dying a variety of untimely deaths, she can only return to the present when her own life is threatened. This second paradox marks Dana literally and severely; indeed, the novel actually begins in the hospital where Dana is fighting to survive the massive injuries incurred on her final trip to the past, including the loss of an arm. Meanwhile, Kevin fights his own battle against the authorities that blame him for Dana's wounds and charge him with domestic abuse. After Dana begins to heal and the official charges against Kevin are dropped, the couple realizes that they must confront and rewrite their histories —both personal and social —in order to make sense of how they have been marked by their recent experiences. This new task turns out to be as difficult and devastating as traveling through time; as Dana notes, "1 lost an arm on my last trip home. My left one. And I lost about a year of my life and much of the comfort and security I had not valued until it was gone" *(Kindred,* 9). Thus Butler implicitly links the two tasks together, connecting Dana's physical loss to the loss of representational certainty.

At the same time, Butler suggests that Dana begins to construct a new narrative authority for herself precisely by recounting the ways her body has been marked. In particular, the first half of *Kindred* examines how subjects are marked by commercial narratives of African-American history and identity in alienating and sometimes dangerous ways. For instance, in her first trip to the past, Dana finds herself suddenly and mysteriously transported to a river in the Maryland woods of 1819 where she saves Rufus from drowning; when Rufus' gun-wielding father appears, she returns to

her own world in an equally sudden and mysterious way. The whole encounter seems highly surreal to Dana; as she tells her confused husband, it was "like something I saw on television ... something I got second-hand" *(Kindred,* 17). In order to account for this (literal) break in the "comfort and security" of her world, then, Dana resorts to the rather prosaic metaphor of watching television —a metaphor that allows her to distance herself from the disturbing possibility that the past might well be something that can quite literally touch (and even harm) her.

On her second trip to the past, Dana begins to realize that commercialized narrative forms such as television can only protect her from the past in limited ways. After Dana saves Rufus from setting himself on fire, she goes to Iride in the nearby woods and await her return to the present. There, she stumbles upon a group of white patrollers beating a black slave for sneaking off the plantation to visit his free wife and child:

> I could literally smell his sweat, hear every ragged breath, every cry, every cut of the whip. I could see his body jerking, convulsing, straining against the rope as his screaming went on and on. My stomach heaved, and I had to force myself to stay where I was and keep quiet. Why didn't they stop!... I had seen people beaten on television and in the movies. I had seen the too-red blood substitute streaked across their back and heard their well-rehearsed screams. But I hadn't lain nearby and smelled their sweat or heard them pleading and praying, shamed before their families and themselves. I was probably less prepared for the reality than the child crying not far from me. In fact, she and I were reacting very much alike. My face too was wet with tears. *(Kindred,* 36)

Television does not prepare Dana for the brutality of this beating because its garish, "too-red blood substitute" representations of African-American history are ultimately sanitized and bloodless ones incapable of conveying the full sensory assault, and thus the full pain, of this history. The assault on Dana's psyche is further exacerbated by her limited sense of agency: as a replicant-like observer conditioned to passively and uncritically consume the images that unfold before her, she finds herself unable to do more than *react* to this particular scene like the weeping child beside her.

Dana's inability to act appropriately within the context of this moment quite literally puts her in harm's way as well. When she accidentally reveals herself to the patrollers —who are only too happy to take out their blood lust upon her— she protests that "I'd done nothing" *(Kindred,* 42). The moment before she passes out (and, fortunately for her, returns to the present), Dana fears that "my stupidity ... [will] surely kill me" *(Kindred,* 42—43). Dana's initially indignant response to the beating clearty reflects her sense of herself as nothing more than an observer detached from the events surrounding her. As such, she fails to account for the simple fact that her black body is cause enough to implicate her within these events. It is only when her attention is painfully drawn to it that she begins to acknowledge the "stupidity" of denying this

body and its historical connotations, a stupidity that may well have a very real —and very final —impact upon her continued existence.

Although Dana's initial encounters with the past cause her to seriously question both the official narratives of history with which she has grown up and her position as a distanced observer within these narratives, she remains reluctant to abandon them entirely. Upon her return home, Dana casts about for a new plan of action that will more adequately prepare her to survive future trips to Rufus' world. When Kevin suggests that she try to learn self-defense by watching television, Dana immediately dismisses this idea because "most of the people around Rufus know more about real violence than the screenwriters of today will ever know" *(Kindred,* 48). At the same time she refuses to accede to commercial authority, Dana continues to believe that she herself can exercise a similar kind of authority. According]y, upon her third trip to the past (this time accompanied by Kevin), Dana saxes Rufus from drowning and then accepts his begrudgingly grateful father's offer to house them at the plantation for precisely this reason. By now Dana understands that the immediate purpose of her time travel is to preserve Rufus until he fathers the child who will found her family line. However, she convinces herself that she has a greater purpose as well: to "keep friendship with [Rufus], maybe plant a few ideas in his mind that would help ... the people who would be his slaves in the years to come" *(Kindred,* 68). Thus, Dana attempts to assert some authority over the time travel she cannot otherwise control by reinventing herself as a kind of behind-the-scenes (as it were) writer and director of history itself.

Much like her previous role as observer, however, this new one fails to provide Dana with any real agency. In order to further Rufus' informal education, Dana takes on the role of house slave, assigning herself various tasks that allow her to remain close to the child while avoiding his suspicious parents. She also makes friends with other black women during this time, including real slaves such as Sarah and Carrie as well as free blacks such as Alice Greenwood. Although Dana admires the endurance and strength of these women, their seemingly limited understanding of the world perpetually shocks her. Thus, she tries to give these women and their children the same informal education she imparts to Rufus, encouraging them to imagine themselves as autonomous subjects rather than commodified objects. However, when Dana sees the children playing at slave auction and arguing over their own worth, she learns that making this transition is not as easy as simply describing it: "I began to realize why Kevin and I had fitted so easily into this time. We weren't really in. We were observers watching a show. We were watching history happen around us. And we were actors. While we waited to go home, we humored the people around us by pretending to be like them. But we were poor actors. We never got into our roles" *(Kindred,* 98). Like the screenwriter or director whose original vision often is radically transformed or lost in the everyday reality of commercial production, so, too, Dana's vision appears to be swallowed up by the material reality of history itself. Indeed, she comes to recognize that the dream of herself as free agent who controls history from above (or behind the scenes) is just

that, a dream that invites her once again to elide fantasy with reality in ways that preclude meaningful social action or change.

In a desperate attempt to make some lasting mark on history, Dana takes on one final form of commercially-oriented authority: that of the actor. Indeed, if Dana was a "poor actor" before because she "never got into [her] roles," she now throws herself into them with a vengeance. Modeling herself after heroic black figures such as Frederick Douglass (not to mention his televised counterpart from the 1970s, Kunte Kinte of Alex Haley's *Roots),* Dana launches an aggressive educational campaign for the slave children in what she assumes is the relative sanctity of the blacks' cookhouse. Once again, however, Dana simply elides representation and reality in dangerous ways, and when an infuriated Weylin bursts in upon one such class and whips Dana mercilessly, all she can do is think that this "wasn't supposed to happen... No white had [ever] come into the cookhouse" before she passes out and is thrown back into present day California *(Kindred,* 106). Rather than truly engaging with and making her mark upon history, then, Dana once again finds herself both dislocated from and yet indelibly marked by this same history. Furthermore, while earlier such mistakes only affected her, this one leaves lasting effects on those she loves as well: Kevin remains trapped in the antebellum South by himself, and a vengeful Weylin eventually sells several of the children from her class away from the plantation and their families.

While Butler uses Dana to show how commercial industries dislocate subjects from the complexities of African-American history throughout the first half of her novel, she uses Dana's husband Kevin to further illustrate the raced (and gendered) dimensions of this dislocation. Much like Dana, the Kevin of *Kindred's* prologue is physically, socially, and psychologically marked by his experience with time travel and life in the antebellum South. However, Kevin's markings are different than Dana's, a difference that begins to indicate how his experience of American history as a white male necessarily diverges from hers as a black woman. Perhaps not surprisingly, Kevin's physical wounds are fairly minimal; the most obvious one, a facial scar he receives during his time alone in Maryland, is already healed and fading by the time Dana returns from her own final trip. Instead, Butler suggests that Kevin's greatest loss is to the integrity of his social identity—after all, while the official charges of spousal abuse against him are eventually dropped, both the authorities and Dana's family unofficially continue to hold him responsible for Dana's injuries. Furthermore, Kevin himself never directly rebukes his new identity as a criminal. He does, however, redefine the nature of his crime, explaining to Dana that "1 told [the authorities] as much of the truth as I could ... to show my ignorance. They w anted me to tell them how such a thing could happen. I said I didn't know... And heaven help me Dana, I don't know" *(Kindred,* 11). Here, Butler implicitly links Kevin's loss of social authority to his loss of narrative authority; if he is guilty of anything, it is of failing to make sense of events in ways that might have prevented or minimized Dana's injuries. Thus Kevin may not be directly responsible for violence against Dana but as both an individual and as a representative white male, his "ignorance" of history is indeed a criminal offense.

The process by which Kevin learns to admit—and amend —his criminal ignorance can be traced through his changing relationships to race and representational authority. At the beginning of Butler's story, Kevin prizes himself on his liberal politics, and indeed, the inhabitants of both present-day California and antebellum Maryland accuse him of being a troublemaker because he "[cannot] tell the difference 'tween black and white" *(Kindred,* 150). At the same time, Butler consistently emphasizes Kevin's whiteness. When Dana first meets Kevin, she is immediately struck by the prematurely gray hair and pale eyes that make him appear to be "colorless" —and then immediately assumes that he must not be someone with "some authority" *(Kindred,* 54). Furthermore, despite the fact that he is a temp worker like herself and thus has no immediate economic authority over her, Kevin does enjoy —and act upon —a certain artistic authority over Dana. Taking advantage of her confusion over his status at the temp agency, Kevin proudly reveals that he is quitting the agency because he has just sold his first commercial novel —and then promptly asks Dana for a date and walks away before she can recover from her "terrible mixture of frustration and envy," to say no *(Kindred,* 54). Thus Kevin emerges as a kind of white variant on bell hooks' replicant subject. On the one hand, he seems to be the a living embodiment of the idealized narratives of racial harmony and benevolent social progress circulating throughout his own time; after all, he bears the ridicule of his white coworkers for asking Dana out because he is genuinely interested in her mind rather than her (exotic black) body. On the other hand, throughout the scene of their initial meeting, Butler elides economic and creative authority with conventional raced and gendered hierarchies to evoke a better understanding of how the position of replicant subject itself is implicitly raced and gendered.

The specifically raced aspects of Kevin's authority are further revealed by his similarities to Rufus and his father 'Tom Weylin, the two other men who eventually come to dominate Dana's life in quite literal ways. Throughout *Kindred,* Butler consistently emphasizes the physical similarities between the three men. Even more significantly, she suggests that Kevin unwittingly tries to control Dana in ways that parallel the Weylins' overt control over her. For instance, when they first move in together, Kevin asks Dana to stay at home and type his manuscripts for him, and is genuinely surprised when she will not quit her job or put off her own writing to do this for him —it simply never occurs to him that she might prefer to remain financially and creatively independent *(Kindred,* 108). Kevin eventually accepts Dana's refusal to become his secretary; nonetheless, his assumptions about Dana and her desires foreshadow those of the adult Rufus, who makes Dana his secretary on the assumption that she will enjoy writing—even if it is for his benefit rather than his own *(Kindred,* 226). Thus Butler suggests that Kevin's sense of himself as a deracinated modern man with little or no connection to the past implicitly invites him to repeat this past and to relegate black women such as Dana to the status of useful commodities.

Elsewhere Kevin attempts to control Dana by claiming narrative authority over her. While both agree to make sense of Dana's first trip to the past by dismissing it as

a television-induced hallucination, Dana finds that she can no longer hold on to this comfortable illusion after the agony of her encounter with the slave patrollers who beat her during her second visit. Despite her obvious pain, Kevin remains skeptical about the source of this pain and veracity of Dana's stories. To Kevin, Dana's newfound authority on .African-American history seems "crazier and crazier" *(Kindred,* 46); indeed, rather than actually listening to Dana, he immediately assumes that she has been raped and that her stories are a desperate attempt to disassociate herself from that experience *(Kindred,* 45). Somew hat ironically, then, Kevin himself attempts to disassociate from a experience he cannot understand by projecting his own fantasy onto Dana and her wounded body, one that replaces the unpleasant specter of racial bigotry and violence with a seemingly more acceptable (or at least understandable) act of gendered violence. Even yy hen Dana finally cominces Kevin to consider the possibility that he might be wrong and she might be right, he attempts to maintain control over the situation by assuming yet another position of authority ov er Dana. On the assumption that she may have to return to the past by herself yet again, Kevin tries to "teach" Dana the principles of knife fighting (principles that he seems to have absorbed from the mass media rather than experience). Howeyer, when Kevin tries to show her the "proper" way' to hold a knife, Dana quickly steps in under his guard and presses her knife against his abdomen, pointing out to her stunned husband that 'Tin not going to be in any fair fights" *(Kindred,* 47). Unlike Dana, then, Kevin remains untouched by the material and historical reality of violence; instead, he remains colonized by commercial representations that provide him with, as it turns out, a woefully inadequate belief in his own practical knowledge.

The ways in which Kevin's authority is constrained by his uncritical participation in an (implicitly white) commercial culture are further revealed when he accompanies Dana on her third trip to the past. Kevin agrees with Dana that they should use this opportunity to educate Rufus about the evils of racism; accordingly (and in a move that he hopes will protect Dana from further violence as well), he decides to pass himself off as an itinerant schoolteacher and to present Dana herself as his devoted slave. The ruse works only too well, and Kevin is soon accepted into southern society as Rufus' gentlemanly tutor —a role he seems to settle into with remarkable ease. Indeed, when Dana sees the plantation children playing slave auction and begins to realize that her efforts to change history have been drastically misguided, Kevin simply assures that "you're reading too much into a kids' game... I won't say I understand how you feel about this because maybe that's something I can't understand. But... We're in the middle of history. We surely can't change it" *(Kindred,* 100). If Kevin seems unconcerned about his ability to act meaningfully, it is precisely because own privileged position provides him with a certain distance from the brutality of everyday nineteenth-century life; indeed, this position actually exacerbates the disassociation and uncritical passiveness he first learns in the twentieth century. Elsewhere, Kevin even embraces this passivity rather enthusiastically, telling Dana that "this could be a great time to live in... I keep thinking what a great experience it would be to stay

in it—go West and watch the building of the country, see how much of the old West mythology is true" *(Kindred,* 97). (Not surprising, Dana rather bitterly responds by pointing out that "that's where they're doing it to the Indians instead of the blacks.") In such passages, Butler suggests that Kevin's position as a white male allows him to justify (and even take pleasure in) the status quo by letting him believe that his detached, scholarly-like observations of history make him a sufficiently responsible human being. In doing so, she anticipates and fleshes out the connections between replicant-like subjectivities and "white supremacy" later articulated by theorists such as bell hooks.

Eventually, however, Kevin's conviction in the nobility and essential correctness of his passivity turns out to be just as dangerous as Dana's own conviction that she must do something drastic to make her mark upon history; in fact, the two feed upon one another disastrously. Kevin believes that he can best protect Dana by continuing his masquerade as a southern gentleman and pretending ignorance of her efforts to educate the other slaves. Unfortunately, this sham ignorance, compounded by his very real ignorance of the danger inherent in Dana's endeavor, lulls him into a false sense of security. Kevin becomes so preoccupied with his role that eventually stops paying much attention to Dana's activities at all; and indeed, when an enraged Weylin catches Dana running one of her illicit slave classes, he arrives too late to do anything but watch Weylin nearly beat her to death. Not only does Kevin's lackadaisical attitude toward the world around him nearly destroy the person he loves most, but, because the beating catapults Dana back into present-clay California and leaves him stranded in the past by himself, it ultimately harms him as well.

This event marks a turning point for both Dana and Kevin. Separated from one another and left to their own resources, both characters find that they must begin the process of relating to and reordering their worlds by themselves. This is a particularly complex process for Dana, who seems to have few resources left to her. Upon her return to California, Dana tries to translate her pain and confusion into some kind of narrative order by reading everything she can find regarding American history; eventually, she gives up and throws away "everything ... in the house that was even distantly related to the subject [of slavery], ... [Their] versions of happy darkies in tender loving bondage were more than I could stand" *(Kindred,* 116). The only narratives that help Dana articulate her experience at this time come from a collection of World War II memoirs she finds in Kevin's library. Poring through testimonial after testimonial from Nazi concentration camp survivors, she realizes (with a mixture of horror and relief) that her experience are not completely unique, but that "the Germans had been trying to do in only a few years what the Americans had worked at for nearly two hundred" *(Kindred,* 117). Thus Dana begins to find at least partial templates through which to articulate her experience of African-American history by turning away from commercial narratives and toward personal histories of suffering and survival.

Of course, these stories do not provide Dana with new narrative structures that immediately and successfully replace her previous ones; instead, Butler uses Dana's

last three trips to the past to suggest that the process of decolonizing one's identity and constructing a hybrid or cyborg one in its place is slow, painful, and always incomplete. On her fourth trip, Dana returns to find that five years have passed and that Kevin has left for parts unknown, while Rufus has grown up into a highly unstable young man. Although Rufus welcomes her back as if nothing has changed, it becomes increasingly evident that Dana's perceptions of Rufus and his world have changed quite radically. This change is something of a mixed blessing. On the one hand, Dana's new freedom from rigidly preconceived (and commercially reinforced) narratives of good and bad and black and white finally allows her to see the inhabitants of this world in their full complexity. For instance, when Weylin (at Rufus' prodding) finally agrees to let Dana tutor Rufus and a select few of his slaves, Dana is forced to admit, "he wasn't the monster he could have been w ith the power he held over his slaves... Just an ordinar) man who sometimes did the monstrous things his society said were legal and proper" *(Kindred,* 134). Likewise, she begins to understand her fellow slaves better as well. Early in the novel, Dana dismisses Sarah the house manager as the stereotypical mammy who remains loyal to her white owners —even when they sell her eldest children off the plantation —because these same owners have deigned to give her a nominal position of power over the other slaves. Now, however, Dana recognizes Sarah as a "frightened powerless woman who had already lost all she could stand to lose" *(Kindred,* 145), one who plays the part of the mammy out of love for her remaining children and fear that, if she does not, they *will* be taken from her. This insight forces Dana to reconsider her similarities to Sarah and to reevaluate more accurately her relationship to Rufus. While Dana previously assumed that her own mixed affection and repulsion for Rufus was "something new, something that didn't even have a name" *(Kindred,* 29), she now begins to see that this seemingly unique relationship parallels that of the blacks and whites of the plantation as a whole.

On the other hand, Dana's newfound ability to understand the complex ties between black and white and self and other forces her into the undesirable hybrid position of the "white nigger" *(Kindred,* 160). When the formerly free black woman Alice Greenwood is sold to Rufus for trying to help her enslaved husband escape north, Dana realizes that the only way she will ensure her family line is to "educate" Alice into the ways of slavery—and, most importantly, to convince Alice to accept Rufus as her lover. Appalled both by the abstract threat to her family line if Alice refuses and Rufus' more immediate threat to beat Alice and prevent Dana from finding Kevin if she encourages this refusal, Dana finally talks Alice into going to Rufus' bed, admitting that young as he still is, Rufus "had already found the way to control me —by threatening others. This was safer than threatening me directly, and it worked" *(Kindred,* 169). Much like Sarah, then, who compromises her personal integrity to ensure the safety of her children, then, Dana must compromise her personal ethics —and her relationship to the black community —to ensure the survival of her loved ones and her family line.

While Dana succeeds in this task, her personal identity continues to disintegrate. Horrified by the choices she has been forced to make, she throws herself into the role

of the hard-working white nigger, welcoming slavery as "a long slow process of dulling" that keeps her from contemplating her actions at length *(Kindred,* 183). Indeed, when Kevin finally returns to the plantation, he does not even recognize her at first. Furthermore, although the couple eventually manages to return safely to 1976 together and Dana realizes that their love for one another remains intact, she becomes increasingly paralyzed by her inability to distinguish betw een the past and the present. Recognizing how much she looks like Alice Greenwood and how much Kevin has begun to look "closed and ugly" like the Weylin men, she notes that "I felt as thought I were losing my place here in my own time... It cotdd easily kill me" *(Kindred,* 191). Thus, while Dana's rejection of overly simplified, heroic narratives of history and identity enables her to make hard choices, it does not immediately or necessarily prevent her from simply falling into one final —and equally oversimplified —narrative of herself as a victim of (or slave to) fate.

Significantly, Dana only abandons this narrative after a real slave —the mute Carrie —forces her to reevaluate her hybrid identity. When Dana returns to Maryland a fifth time to save Rufus from malaria, she becomes the target of white fear (Tom Weylin threatens to kill her for being a witch) and black scorn (Alice calls her a "white nigger" for choosing to help Rufus and thus ensuring Alice's continued bondage to him). In a moment of guilty anger, Dana tells Carrie that "I can see why there are those here who think I'm more white than black" *{Kindred,* 224). Carrie vehemently negates this claim, wiping her fingers on Dana's face and then showing Dana both sides of her hand—an action that Dana fails to understand until Carrie's husband Nigel explains that "she means it don't come off, Dana ... the black. The devil with people who say you're anything but what you are" *{Kindred,* 224). Here, then, Carrie and Nigel urge Dana to redefine blackness in terms of the lived experiences and actions that are as ingrained in her as her skin color, rather than in terms of dominant (but ultimately oversimplified and transient) social understandings of the same. Carrie's actions seem to convey something even more important as well: by showing Dana *both* sides of her hand—the dark outside and the pale palm —she suggests that Dana must redefine African-American subjectivity itself as a complex and often contradictory phenomenon that emerges at the interface *between* seemingly discrete opposites such as black and white (and, by extension, other seemingly discrete opposites such experience and narrative, past and present, and slave and free agent).

Both the possibilities and constraints inherent in this hybrid form of subjectivity are reflected in Dana's first and most dramatic attempt to act upon it for herself. On her final trip to Maryland —which, significantly enough, occurs on July 4, 1976 —Dana learns that nearly ten years have passed for the inhabitants of the Weylin plantation and that Alice has finally borne the daughter who will initiate Dana's family line. Meanwhile, however, Alice has committed suicide and Rufus is on the verge of doing the same. Dana prevents Rufus from taking his own life, but the desperately lonely man repays the favor by try ing to force her into one last hard compromise, promising to free and protect his and Alice's children if Dana will stay with him as his lover. The

bargain seems perfectly reasonable to Rufus —after all, Dana and Alice are nearly identical doubles of one another, and black women are supposed to accede to the wishes of white men. Taking strength from her new understanding of her unnatural self, however, Dana refuses the bargain and, for the first time, begins to impose her own conditions on their already overdetermined relationship: "1 could accept him as my ancestor, my younger brother, my friend, but not as my master, and not as my lover" *{Kindred,* 260). When Rufus ignores her protests and attempts to rape her, Dana kills him and returns to her own world for good. While Dana the heroic agent failed to recognize her overdetermined connections to others and to history itself, and Dana the passive victim of fate allowed herself to be oxerwhelmed and nearly killed by these same connections, Dana as hybrid or cyborg subject successfully negotiates between these two extreme modes of subjectivity by acknowledging but limiting her links to Rufus. In doing so, she saves herself from being destroyed by the links between their two worlds as well.

At the same time, however, Dana's newfound subjectivity entails its own costs. Rufus grabs Dana's left arm just before he dies; when she returns to the present her arm has been raggedly amputated at the elbow *{Kindred,* 261). Later, of course, the authorities blame Kevin for the injury, and while they eventually drop the official charges against him, he is never fully cleared of suspicion. Dana's actions resonate throughout time as well. In the epilogue to *Kindred,* Dana leaves the hospital and travels to present-day Maryland with Kevin to "find solid evidence that those people existed," only to learn that after Rufus' death the plantation was destroyed by fire, (presumably set by Nigel, who witnessed the murder), and that the Weylin slave community was broken apart and sold further south *(Kindred,* 264). Even at the very end of her novel, then, Butler insists that subjects cannot expect to decolonize themselves and construct new forms of agency without widespread and sometimes unexpectedly painful results —a point that is reflected at multiple levels: just as Dana loses the integrity of her physical body, so, too, Kevin loses the integrity of his personal identity as a caring husband and the Weylin slaves lose the integrity of the social community they have sacrificed so much to preserve.

Although Kevin's story is less fully developed that Dana's in the second half of the novel, Butler suggests that he also makes progress toward developing a more nuanced sense of is own subject position in relation to African-American history. After helplessly witnessing the beating that sends Dana back to the present and leaves him stranded in the past for five years, Kevin begins to atone for his previous passivity and blindness to historical complexity through various forms of semi-covert political activity. Like Dana, Kevin is marked both literally and psychologically by this intimate engagement with history. At first, he attempts to reclaim the role of the great white liberating hero by joining several slave uprisings, an attempt that fails disastrously when an encounter with an angry white mob nearly kills him and leaves his face permanently disfigured *(Kindred,* 184, 193). This experience teaches Kevin to read the webs of political and social power more subtly, and eventually he is accepted into the underground railroad.

Here, his contributions are both more limited than he might desire and more successful than he anticipates —indeed, he becomes such as well known figure that he must grow a beard and otherwise disguise himself before he returns to the Weylin plantation to find Dana *(Kindred,* 192–93). Thus Butler suggests that, as both an individual and as a representative white male, Kevin must become a literal criminal in the eyes of the official world to compensate for the earlier unofficial crime of his willful complacency.

A transformed narrative authority accompanies Kevin's transformed social and political authority as well. Like Dana, Kevin returns to the present to find that he no longer exerts the same power over words anymore. As Dana explains: "he had changed —in five years he couldn't help but change. But the markets he wrote for hadn't changed" *(Kindred,* 196). After an initial bout of frustration and rage, Kevin begins to build a new relationship to narrative, one that—much like his work in the underground railroad —is based upon a willingness to acknowledge his own limitations and to learn from the authority of more knowledgeable others.

More specifically, Kevin accepts that his ability to interpret and narrate African-American history is limited by his race (and gender). While the earlier Kevin dismissed Dana's interpretations of history as either hysterical or insane, the older and wiser Kevin readily admits that she has been perfectly "sane" all along and that "now ... we [both] have a chance of staying that way" *(Kindred,* 264). Thus, while Kevin does not take on the same form of cyborg subjectivity as Dana, he does reconstruct his relationship to her—and her history—in significant ways. Much like bell hooks' decolonized *white* subject, who resists the workings of white supremacy by stepping outside "social framework)s] of sameness" and genuinely listening to the stories of African-American experience as told by African Americans (hooks, 1992, 15), so, too, Kevin initiates his own decolonization by deferring to Dana's newfound narrative authority.

Finally, Butler shows how the process of decolonization allows subjects to reform their connections to commercially-mediated representations of history as well. In the epilogue to *Kindred,* Dana and Kevin decide to search for the remnants of the Weylin plantation in present-day Maryland to help confirm the reality of their experiences with the past. However, when they learn that the plantation has been destroyed, they realize that they must turn to the very forms of representation that their experiences have taught them to distrust: newspapers, magazines, and advertisements. Here, Dana at least finds all the proof she needs in articles about the plantation fire and advertisements for the sale of the Weylin slaves. While Dana-the-replicant often found herself in physical or psychological danger because she accepted such narratives uncritically, and the partially-decolonized Dana might simply have used these records as proof of her own futility in the face of fate, cyborg Dana grieves for those who have been lost, but manages to find hope in the midst of her grief:

> All three of [Carrie's] sons were listed [in the auction advertisements!, but Nigel and Carrie were not. Sarah was listed, but Joe and Hagar [Alice's children and Dana's ancestors] were not... I thought about that, and put

> together as many pieces as I could... [Rufus' mother] might have taken both children. Perhaps with Alice dead she had accepted them. They were her grandchildren, after all, the son and daughter of her only child. She might have cared for them. She might have held them as slaves. But even if she had, Hagar, at least, lived long enough for the fourteenth Amendment to free her. *(Kindred,* 263)

Much like the African-American scholars of Butler's own w orld, then, Dana learns to assess her own history more accurately by reading between the lines of commercial history. Furthermore, Butler links this new understanding—and acceptance —of the commercial text as always necessarily incomplete to the acceptance of bodies themselves as both marked and yet incomplete. When Kevin suggests that she "probably never know" exactly what happened to the Weylin plantation and its inhabitants, Dana touches her empty arm sleeve and replies "I know" *(Kindred,* 264). Dana's reply is, in and of itself, appropriately ambiguous and overdetermined, one that both acknowledges the impossibility of complete narrative certainty while affirming her body and its markings as an important source of historical information. Thus, Dana cobbles together the traces of evidence from two very different kinds of texts —the personal, physical one of her body and the seemingly impersonal, abstract one of the commercial press —to begin generating her own (counter)narrative of black experience in America, a counternarrative informed by fact and imagination, grief and hope, and, perhaps most importantly for Butler herself, loss and love.

III. You "Can't Help but Change": The Cyborg as Template for Cultural Transformation

By mobilizing conventional science fiction tropes, novelists Joanna Russ and Octavia Butler extend the work of earlier authors Thomas Pynchon and Ralph Ellison, who insist upon new models of technologically-mediated subjectivity but stop short of showing how these models might enable future social change. Combining the motif of time travel with progressive feminist and African-American political agendas allows Russ and Butler to imagine how different worlds might generate different possibilities for subjects interested in this kind of change. They also begin to explore more precisely how certain social and technological relations produce certain understandings of identity and agency by using another SF motif—that of the physically altered or hybridized other. Characters such as Russ' cyborg Jael show how bodies and identities are produced (or even machined) in accordance with dominant cultural forces. At the same time, they also show how individuals may intervene into this process of machining to make their markings signify differently—in this particular case, to show how women may transform the physical aspects of themselves that have been commodified and fetishized to express a ghoulish but liberating rage. Similarly, characters such as

Butler's Dana experience learn to use their physically and culturally marked bodies as the site from which to tell new stories about African-American history and identity. In the next chapter, I examine how the figure of the literally hybrid or cyborg other becomes an increasingly important way for authors to represent the technological mediation of subjectivity. In particular, I look at how cyberpunk authors William Gibson, Neal Stephenson, and Pat Cadigan draw upon advances in automation and computerization to consider how specific forms of identity and agency are de- and reconstructed within the realm of the emergent high tech-workplace.

Chapter 3: "It's all about getting things done"

Bodies Th/at Work in Cyberpunk Fiction

Although debates over the culture industries and their impact on contemporary identity continue well into the present day, by the 1980s Americans seemed to be far more preoccupied with the impact of computerized and automated technologies in the workplace. Proponents of these technologies —and the workings of the emergent postindustrial economy they came to represent—prophesied that they would free employees from the burdens of monotonous, alienating physical labor and allow them to become transcendent "new workers" defined by newly-integrated forms of work and a newly-restored intellectual and psychological autonomy. Indeed, enthusiasm for this possibility led *Time* magazine to give the personal computer its "Man of the Year" award in 1982.[1] More than a mere tool to restore workers to their rightful place in the world economy, the computer appeared to be an autonomous agent in its own right.

If computers seemed to take on increasingly human attributes, it is hardly surprising, then, that Americans began to think seriously about how they themselves might be transformed by their increasingly intimate connections with such machines. Nowhere was speculation about this possible transformation more apparent than in the new mode of science fiction that also emerged in the 1980s —cyberpunk. When cyberpunk first appeared on the literary scene, replete with visions of a high-tech near-future much like our own present and cyborg characters that literally embodied intimate connections to advanced technologies, critics immediately hailed it as *the* literature of late capitalism.[2] Indeed, it is precisely these narrative elements that allow authors William Gibson, Neal Stephenson, and Pat Cadigan to interrogate the range of possible ways

[1] "The Computer Moves In." *Time* (3 Jan. 1982): 12–24.

[2] See Larry McCaffery's introduction to *Storming the Reality Studio:* A *Casebook of Cyberpunk and Postmodern Fiction* (Durham: Duke University Press, 1991); Bruce Sterling's preface to *Mirrorshades:* A *Cyberpunk Anthology* (New York: Ace, 1988); Andrew Ross's *Strange Weather: Culture, Science, and Technology in the Age of Limits* (New York: Verso, 1991); Darko Suvin's "On Gibson and Cyberpunk and SF" {*Foundation* 46 [autumn 1989): 40–51); and Frederic Jameson's brief discussion of cyberpunk in *Postmodernism: Or, the Cultural Logic of Late Capitalism* (Durham: Duke University Press, 1991). McCaffrey and Sterling argue that the cyberpunk aesthetic radically challenges the epistemological status quo, while Ross, Suvin, and Jameson suggest that it ultimately retreats from the difficult questions it raises into a conservative "neuromanticism." Despite these differences in opinion about the progressive potential of cyberpunk, all five agree that cyberpunk clearly engages with the social, political, and economic milieu of the postindustrial era.

we might depict labor and the laboring subject in a postindustrial era. In particular, Gibson's *Neuromancer* trilogy (1984–1988) ultimately rejects dominant narratives of the "new worker" and explores the possibility of using the narratives of technology, work, and identity offered by subaltern knowledge systems such as Rastafarianism and voodoo as ways to negotiate a postindustrial economy while resisting full interpolation into —or erasure from—that same economy.[3] Later cyberpunk draws upon a similar binary model, but focuses more specifically on the costs and benefits of subaltern subjectivities. To demonstrate this, I show how Neal Stephenson's *Snow Crash* (1992) interrogates the difficulty of using racial difference as a mode of resistance in a world where "difference" itself is a commodity,[4] and Pat Cadigan's *Synners* (1991) considers how dominant and subaltern narratives of labor alike are gendered in specific ways.[5]

In its broadest dimensions, this chapter is informed by Donna Haraway's suggestion that the trope of the hybrid cyborg body provides contemporary writers with a concrete way to represent the laboring subject's inevitable and intimate connections to postindustrial technologies and to imagine new constructions of work and identity.[6] More specifically, by combining Haraway's description of the cyborg laborer with theories of "situated" or "embodied" knowledge, I hope to avoid the risk inherent in Haraway's own work of turning "the cyborg" into a new grand narrative about the laboring subject that simply replaces and repeats its predecessors. Theories of situated or embodied knowledge suggest that the constructions of subjectivity offered by late capitalism are limited ones that only make sense within the economic sphere, and that individuals typically have access to other social and historical spheres with their own (sometimes complimentary, sometimes contradictory) understandings of work and identity. Read through these theories, then, the cyborg laborer emerges as a figure with connections to multiple narratives of work and identity, but who is never fully described by any one of these narratives. In turn, the hybridih of the cyborg body itself functions as a kind of shorthand for these multiple and intimate connections to both dominant and subaltern ways of knowing the world.

This chapter begins with an overview of the shift from an industrial to a postindustrial economy and shows how changing modes of production influence contemporary understandings of technology, work, and identity. After a brief discussion of the various narratives that emerge from this shift —including Haraway's own model of cyborg subjectivity—I then more fully consider the narratives of labor and identity as well as the representations of cyborg subjectivity offered by cyberpunk authors themselves.

---

[3] The *Neuromancer* trilogy includes *Neuromancer* (New York: Ace, 1984), hereafter cited in text as *Neuromancer; Count Zero* (New York: Ace, 1986), hereafter cited in text as *Count Zero;* and *Mona Lisa Overdrive* (New York: Bantam, 1988), hereafter cited in text as *Mona Lisa.*

[4] Neal Stephenson. *Snow Crash* (New York: Bantam, 1992); hereafter cited in text as *Snow Crash.*

[5] Pat Cadigan. *Synners* (London: Grafton, 1991); hereafter cited in text as *Synners.*

[6] Donna Haraway. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century." In *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), 161–173; hereafter cited in text as "A Cyborg Manifesto."

I. Altered and Alternative States of Knowing: Transformations in Modes of Production and Depichons of the Laboring Subject

As labor historian Anson Rabinbach argues, one of the most significant hallmarks of nineteenth-century industrialism was the conviction that "labor" or "production" functioned as the organizing principle of both nature and human society. Given that industrial-era technologies and modes of production were highly visible ones (or at least easily depicted by visible metaphors such as the factory and the dynamo), it is hardly surprising that industrial discourse portrayed "the worker" in visual terms as well.[7] Throughout this period, the laboring subject was often depicted as a "human motor" whose body functioned as the visible site of production, a "site of conversion, or exchange, between nature and society—the medium through which the forces of nature [were] transformed into the forces that propel society" (Rabinbach, 2–3).[8] Of course, this metaphor could be and was deployed to various ends. Fordists and Taylorites constructed idealized images of the dynamic and tireless laboring body to justify industrial management practices, while labor reformers pointed to actual worker fatigue as indication of an upset between the balance of nature and industry in need of immediate correction (Rabinbach, 2). Despite the surface contradictions between these seemingly opposed positions, both posited the body as the primary source of productivity and identity. Furthermore, both assumed that the laboring body and its efficiency (or lack thereof) provided a barometer for social "progress" itself.

However, the shift to a postindustrial economy entails a concurrent shift to modes of production that rely on "invisible" technologies such as computers and other advanced communications systems.[9] In turn, "work" appears to change from manual to mental labor, from the tangible production of goods to the abstract accumulation and

[7] Anson Rabinbach. *The Human Motor: Energy, Fatigue, and the Origins of Modernity* (United States: Basic Books, 1990), 4; hereafter cited in text.

[8] While the metaphor of the human motor applied most clearly to manual labor in the factory or on the assembly line, Rabinbach argues that it also provided a new way to understand mental labor as well. In essence, the "raw material" of human thought was transformed or "converted" by the scholar or philosopher into socially useful material goods available for public consumption: treatises, textbooks, lectures, etc. (2).

[9] Clearly, the roots of a high-tech postindustrial economy and its labor practices can be traced back to World War II, and the advent of the "postindustrial society" was predicted as early as the late 1960s and early 1970s. However, following Ann Howard and Kai Erikson, I argue that the discourse of the "new" postindustrial worker did not fully establish itself until the late 1970s and early 1980s, when many American workers felt the effects of reorganized labor practices (automation, computerization, and the de/reskilling involved in these new practices) significantly for the first time. See Anson Rabinbach's *The Human Motor: Energy, Fatigue, and the Origins of Modernity* (United States: Basic Books, 1990) and Donna Haraway's "The Biological Enterprise: Sex, Mind, and Profit" in *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991) for further discussion of early postindustrial technologies and labor practices, as well as Daniel Bell's *The Coming of Post-Industrial Society : A*

exchange of information. Taken together, these changes inevitably disrupt previous constructions of workers' identity. As the computerized office supplants the factory and workshop as the dominant site of labor, "meaning has disappeared from work; consequently, work has disappeared as a source of meaning" (Rabinbach, 297). More precisely, what seems to disappear is the *traditional* meaning of work and *traditional* ways of comprehending identity. Because the laboring body no longer seems central to socioeconomic thought and practice, depictions of workers as human motors no longer help to make sense of either individual identity or the social relationships implied by this metaphor.

Significantly, the discourse of postindustrial labor uses these same changes as the foundation for its own depictions of the "new workplace" and the "new workforce." Typically, enthusiasts celebrate the transformation from manual to mental labor as freedom from the burden of physical labor, claiming that the need for high-tech mental laborers will increase the general level of education and open up new possibilities for those excluded from the old system of labor. Postindustrial labor authorities advance more sophisticated but equally optimistic arguments. For instance, president of the Leadership Research Institute Ann Howard argues that the postindustrial era heralds a reintegration of "the head and the hand" because the outsourcing and computerization of mindless, repetitive manual labor frees workers from the most onerous and alienating aspects of industrial-era work. Furthermore, these same computers and other advanced communications systems encourage decentralization, freeing workers from the rigidly hierarchical and centralized systems of surveillance that marked the industrial workplace. Theoretically, these trends allow workers to pursue more creative and holistic endeavors because these new workers "don't just run machines and push paper; *they control information. And information is displacing capital as the essential resource for industrial success"* (my italics).[10] In this best-case scenario, postindustrialism becomes the ideal synthesis of Marxist theory and capitalist practice, allowing workers to fulfill their potential and control the means of production without violent class struggle or massive socioeconomic upheaval—a sort of bloodless revolution, if you will.

Venture in Social Forecasting (New York, Basic Books, 1973) for early predictions about the shape of a society produced by postindustrialism.

[10] Ann Howard. "A Framework for Change." In *The Changing Nature of Work,* ed. Ann Howard. (San Francisco: Jossey-Bass, 1995), 23; hereafter cited in text. For similar arguments about the liberating effects of postindustrial technologies and reorganized labor techniques, see the various other essays in Howard's anthology, especially Jan Van der Spiegel's "New Information Technologies and Changes in Work" and Donald D. Davis's "Form, Function, and Strategy in Boundaryless Organizations." Van der Spiegel applauds digital technologies for increasing the psychological well being of workers by providing greater access to information and more opportunities for collaborative teamwork. Meanwhile, Davis argues that the new and more efficient virtual workplace with its equally efficient "virtual staff" (of temporary employees hired to work on specific projects) ultimately benefits the individual worker because it encourages him or her to strive for "discipline" and "personal mastery."

As compelling as this narrative of labor and identity may be, it tends to erase its own contradictions. Despite the rhetoric of radically new working conditions and worker empowerment, work itself continues to be structured by conservative practices and ideologies corresponding to those of the industrial era. One of the most common new incentives to encourage employee commitment and enterprise is "merit pay" or "pay-for-performance": corporations guarantee a base salary, then provide raises based on workers' annual contributions to the corporation. As Rosabeth Moss Kanter notes, pay-for-performance "accepts —indeed, builds on and thus preserves — the status and category distinctions already defined by the organization."[11] More specifically, pay-for-performance foster a kind of "pull yourself up by the (virtual, if not literal) bootstraps" mentality, reinforcing traditional notions of competitive individualism by making the worker responsible for his or her own fate. Likewise, the personnel tests used to select individuals for such positions —tests based on theories of "human performance"—participate in a similarly conservative set of assumptions and practices. Industrial/ Organizational (I/O) psychologists claim that the new personnel tests differ vastly from their Taylorite counterparts because they match individuals to jobs based on *workers'* perceptions of labor rather than some externalized, universal ideal. At the same time, however, the "appropriateness" of worker perception is evaluated by an "ecology model" that assumes people are "organisms who actively seek opportunities and experiences to maximize long-term adaptation to their environment... [and] given satisfactory outcomes, individuals will actively seek out similar situations in the future."[12] While this new method of scaling does avoid absolute standards, it continues older practices of defining and quantifying workers' potential abilities based on narrow definitions of autonomy and creativity —definitions that are loosely shaped by evolutionary theory and grounded in notions of "natural" competition and individualism.

Likewise, narratives of the new worker fail to address the material reality of work for those caught within (rather than liberated by) shifting modes of production. Indeed, Howard's own brief reference to "outsourcing" reminds us that *someone* has to assemble the microprocessors and computer terminals so essential to postindustrial "success." Manual labor (especially low paying, low-skill manual labor) does not simply disappear; it devolves to the "new world-wide working class" of industrializing third-world nations ("Cyborg Manifesto," 166–67). Furthermore, even within postindustrial nations such as the United States where "high tech occupations do represent the fastest growing segment of the job market," they "account for relatively few new jobs overall" because high-tech industries typically employ less than 15% of the workforce.[13] Instead, the ma-

[11] Rosabeth Moss Kanter. "The New Workforce Meets the Changing Workplace." In *The Nature of Work,* eds. Kai Erikson and Steven Peter Valias (New Haven: Yale University Press, 1990), 284.

[12] Frank J., Landy, Laura Shankster-Cawley, and Stacy Kohler Moran. "Advancing Personnel Selection and Placement Methods." In *The Changing Nature of Work,* ed. Ann Howard (San Francisco: Jossey-Bass, 1995), 262.

[13] Amitai Etzoni and Paul A. Jargowsky. "The False Choice Between High Technology and Basic Industry." In *The Nature of Work,* eds. Kai Erikson and Steven Peter Valias (New Haven: Yale University

jority of Americans remain employed by the manufacturing and service sectors. While automation and computerization does affect work in these sectors, the most striking and immediate effects for workers are disrupted work patterns and chronic unemployment. Ironically, blue-collar manufacturing and service industries hire a far greater number of "high-tech" workers (data processors, roboticists, telecommunications service experts) than do their white-collar counterparts. At the same time, Jerald Hage points out that "sophisticated technologies are designed to provide constant change in production systems and highly flexible responses to shifting consumer demands. Most [high-tech goods] have short product hves."[14] Thus, even when workers are (re)trained to work with these new technologies, both the products and the technologies used to create them turn over at such high rates that it becomes difficult for workers to find the time or resources for the necessary re-skilling. In turn, businesses often find it more cost-effective to simply dismiss these workers and hire new ones with the appropriate skills. Much like their white-collar counterparts, then, these workers participate in and are deeply affected by the integrated circuit of a global postindustrial economy, but the benefits they reap from this new situation seem unclear at best.

Even when information workers do have relative job security, much of their work extends, rather than alleviates, the alienation so often discursively relegated to the bad old past of industrialism. Although certain occupational groups such as data processors and market researchers do indeed have regular and even intimate contact with information, "there is no necessary link between information accumulation and general enlightenment, because the information sector is oriented primarily toward corporate clients rather than individual consumers."[15] Workers hav e little or no immediate use for the information they handle; thus, rather than actually controlling and thus transcending the means of production with which they work, they are more often transformed into a new "information proletariat" faced with "a congealed mass of dead labor in the form of information" (Whalen, 78).

While postindustrial modes of production seems to simply reinforce industrial ideologies and working conditions, postindustrial technologies hold the potential to actually perfect the disciplinary and surveillance systems initiated by Fordist and Taylorite organizational practices. Labor sociologist Kai Erikson writes that:

Press, 1990), 332. Etzoni and Jargowsky point out that these numbers are highly problematic because there is no standardized definition of "high-tech industry," and that many studies cite significantly lower percentages. For instance, while they work from a broad definition of high-tech industry ("higher than average utilization of technology oriented employees"), researchers using more specific definitions (such as "amount of RAD expenditures") more typically find that high tech industries employ as little as three to seven percent of the American workforce (308–309).

[14] Jerald Hage. "Post-Industrial Lives: New Demands, New Prescriptions." In *The Changing Nature of Work,* ed. Ann Howard (San Francisco: Jossey-Bass, 1995), 491; hereafter cited in text.

[15] Terence Whalen. "The Future of a Commodity: Notes Toward a Critique of Cyberpunk and the Information Age." *Science Fiction Studies* 19.1 (March 1992): 77; hereafter cited in text.

> Automated procedures in general and computerized processes in particular can become an almost perfect instrument of control over *persons.* This is true not only in the sense that automation offers a means of programming almost everything that happens in the workplace, but also in the sense that... a computer can count and measure and time virtually everything its operator does, down to the number of keys he strikes in any given quarter minute; and it can keep a record of his performance for as long a stretch of time as the most curious of managers could ask... [Since this potential exists,] it is likely to prove irresistible.[16]

In this admittedly worst-case scenario, the information worker has little or no opportunity for autonomy or the transcendence of material conditions. Labor amongst the fields of data may simplify the elaborate surveillance hierarchies of industrial production (where management experts watched workers watching their machines), but only because the "smart machine" itself can function as both a managed and managing tool.

Given the disparity between the idealized narrative and the material reality of the new worker, it is not surprising that popular discourse attempts to oppose this narrative with its own images of labor and identity. Cynthia Epstein Fuchs argues that a specifically American variation of the traditional embodied laborer, the "Marlboro Man" —a kind of idealized cowboy embodying the American Dream of success through self-reliance and hard work —continues to hold sway because it provides a meaningful way to resist the uprooted, transient nature of contemporary labor.[17] Unlike the image of the new worker, that of the Marlboro Man remains tied to a specific material time and space. Whether this "cowboy" is located on the Western plains or in manufacturing cities such as Detroit or Pittsburgh, he implicitly gestures toward the material dimensions of labor and its intrasubjective meanings (security; tradition, ties to geographical places and communities, etc.) that are often erased by the image of the new worker and the postindustrial labor practices it represents (Fuchs, 1990, 90). Unfortunately, the usefulness or efficacy of these traditional images are increasingly limited. While Fuchs cites various instances of Marlboro Men in popular art —most notably in the work of rock star Bruce Springsteen, whose multi-million dollar career is grounded on his ability to manipulate such images —she neglects to discuss the specific ways in which these depictions of laboring subjects are deployed. For instance, Springsteen himself does not simply celebrate the continued endurance of the Marlboro man and other physical laborers; more often than not, his songs address the disorientation and loss felt by these working men (and women) in the face of layoffs, factory closings, and

[16] Kai Erikson. "On Work and Alienation." In *The Nature of Work,* eds. Kai Erikson and Steven Peter Valias (New Haven: Yale University Press, 1990), 28.

[17] Cynthia Epstein Fuch. "The Cultural Perspective and the Study of Work." In *The Nature of Work,* eds. Kai Erikson and Steven Peter Valias (New Haven: Yale University Press, 1990), 92, 96; hereafter cited in text.

the disintegration of community associated with these events. Thus, traditional understandings of work and workers' identities may provide a certain yalid criticism of the new socioeconomic order, but they offer few or no new ways of successfully surviving and even changing this same order.[18]

In contrast to the perhaps overly-simplified images of new workers and Marlboro Men, the theories of cyborg labor and identity Donna Harayyay advances in her "Cyborg Manifesto" offer potentially new and alternative ways to negotiate the intersection between technology, work, and identity' in a postindustrial economy. Acknowledging the importance of information as the dominant commodity in this economy, Harayy ay posits two different ty pes of cyborg laborers, each with their own distinct relationship to work in the information age. On the one hand, Haraway suggests that the late capitalist drive to accumulate and control information transforms the worker into "the awful apocaly ptic tclos of the West's dominations," a "man in space" who is both the apotheosis of the alienated individual and an unwittingly commodified laborer him- or herself ("Cyborg Manifesto,"150–51). In contrast, Haraway proposes a second cyborg that acknowledges its body as linked to and marked by various narrative and literal technologies. This cyborg's commitment to "partiality, irony, intimacy, and perversity" allows it to react against the totalizing tendencies of its culture, to recognize historical and material connections with other marked bodies and to forge partial but potent connections with them for survival ("Cyborg Manifesto," 151). Consequently, the primary labor for these cyborgs is not simply the passive accumulation of information, but the active production of meaningful knowledge: knowledge that arises from the understanding of the literal and symbolic relations between bodies, be they organic, historical, technological, or some combination thereof.

Haraway's notion of cyborg labor provides a useful way to understand contemporary work and identity because, much like the discourse surrounding the new worker, it addresses the very real proximity between technology and the laboring subject. At the same time, her emphasis on the cyborg body as metaphor acknowledges both the materiality and the overdetermined nature of this newly reformulated relationship. However, while Haraway gestures toward a complex and sophisticated depiction of postindustrial subjectivities, she does so in poetic terms that threaten to transform her metaphor into a kind of grand narrative that merely replaces, rather than complicates, previous ones. Furthermore, symmetries between the "new worker" and the commodified cyborg or "man in space" are fairly evident, but it is far less clear as to what might constitute an "ironic" cyborg laborer. If "the cyborg" is to function as a useful interpretive trope, then, we must combine Haraway's broad metaphor with the work of other theorists who more directly address the issues of materiality and multiplicity that Haraway herself associates with postindustrial subjectivity.

[18] As a final point—one that Fuchs herself acknowledges—the "Marlboro Man" has certain obvious gendered and raced connotations. Thus, the narratives of work and identity implied ly this image have always been only limitedly useful for white women and people of color attempting to make sense of their own material circumstances.

Contemporary theories of "embodied knowledge" provide one way to understand more precisely this relationship between technology, work, and identity. Carolyn Marvin posits a crucial distinction between contemporary notions of information as static, context-free "fact" or "truth," and what she calls "states of knowing" embedded in social and historical matrices that perceive information "as present in relationships of multiple levels and dimensions among persons and within the natural environment."[19] In a cultural moment that subsumes this latter definition to the former, work itself comes to be understood in a similarly limited way, as an abstraction with few applications or ramifications beyond the economic sphere. Marvin predicts that this narrow understanding of work may lead to short-term success for the individual, but long-term social poverty: without access to alternative states of knowing and the communities that foster them, the laboring subject is limited to one set of labor strategies and identities. If these strategies fail, (as they are increasingly likely to do in an economy where "multiple careers" and chronic unemployment become the norms), then this same subject's social poverty may become a very real economic poveri)/ as well. Thus, while alternative states of knowing do not automatically guarantee economic success, they do provide a *range* of options for work and identity (and survival) because they assume that information and the work of information gathering can and does occur differently in different contexts.

Of course, it is not simply a matter of taking refuge in alternative states of knowing, of retreating to some sort of idealized, utopie subculture separate from that of the dominant socioeconomic one (this would merely repeat the problem by limiting knowledge and work to a different but equally closed system). Instead, as Jerald Hage argues, the postindustrial subject must engage in the work of "symbolic communication," he or she must be able "to devise new symbols or perceive new relationships or develop new techniques" for doing so (Hage, 503). In other words, the new worker does not simply accumulate meaning, he or she actively produces it by simultaneously occupying both dominant and alternative systems of meaning and work, by finding congruencies between systems as well as points of entry into the dominant system where alternative meanings and practices can be strategically deployed.[20] This brings

[19] Carolyn Man in. "Information and History." In *The Ideology of the Information Age,* eds. Jennifer Daryl Slack and Fred Fejes (New Jersey: Norwood, 1987)557; hereafter cited in text.

[20] While Haraway, Marvin, and Hage are primarily interested in the theoretical possibilities of embodied knowledge, symbolic communication, and their attendant modes of work and identity, an increasing number of social and. anthropological studies have been devoted to this subject as well. See, for instance, Louis Ferman's "Participation in the Irregular Economy" in *The Nature of Work,* eds. Kai Erikson and Steven Peter Valias (New Haven: Yale University Press, 1990) and Eliot Freidson's "Labors of Love in Theory and Practice: A Prospectus" in *The Nature of Work,* eds. Kai Erikson and Steven Peter Valias (New Haven: Yale University Press, 1990). Ferman explores how working class women in Detroit combine "official" forms of paid work with "unofficial" forms of traditional "women's work" for economic survival, while Freidson argues that "labors of love" (such as volunteer work) challenge more conventional and narrow definitions of (paid) work because the psychological and material gains from the former often affect how one chooses to approach the latter. While both authors are carefid

us back to Haraway's ironic cyborg as the ideal way to represent alternative forms of postindustrial work and identify. This cyborg laborer is an "ironic" one because, much like Hage's postindustrial subject, it is always connected to multiple narratives of work and identify, but never fully invested in any single specific one. Indeed, it is precisely this tension between connection and distance from various narratives that can provide new forms of agency—while the ironic cyborg worker may never have full control over the dominant economic system's means of production (and thus may never achieve a fully "unalienated" subjectivity), its links to other cultural and historical states of knowing at least provide it with ways to work against its full interpolation into that same system.

II. "Getting Things Done": Commodified Workers and Ironic Cyborgs in William Gibson's Necromancer Trilogy

Gibson's *Neuromancer* trilogy can be read as a meditation on the two extreme types of cyborg subjectivity suggested by Haraway and a exploration of the ways they might allow individuals to interact with the larger postindustrial system.[21] The trilogy depicts a near future extrapolated from the more dystopic tendencies of our own present, a corporate-owned and -run world structured by the accumulation, exchange, and sometimes outright theft of information. The "dance of the biz" occurs primarily in the virtual world of cyberspace, a "graphic representation of data abstracted from the banks of every computer in the human system" *(Neuromancer,* 51). However, tendrils

to point out that these alternatile forms of labor may be exploited in much the same way as their more conventional counterparts, they present compelling arguments for the potential benefits inherent in them as well.

[21] There has already been a good deal of critical debate over Gibson's depiction of cyborg subjectivity. While critics like Thomas Foster argue that Gibson is relatively optimistic about the ability of individuals to at least partially overcome their status as commodified subjects within a postindustrial economy, others such as David Brande, Istvan Csicery-Ronay, and Terence Whalen claim that the power of Gibson's work stems from the fact that he depicts "subjectivity" itself as an inescapable effect of late capitalism, one that seems to leave little or no room for resistance. See Foster's "Meat-Puppets or Robopaths? Cyberpunk and the Question of Embodiment" *(Genders* 18 [19931: 11–31), Brandes "The Business of Cyberpunk: Symbolic Economy and Ideology in William Gibson" in *Virtual Realities and Their Discontents,* ed. Robert Markley (Baltimore: Johns Hopkins University Press, 1996), Csicery-Ronay's "Cyberpunk and Neuromantieism" in *Storming the Reality Studio:* A *Casebook of Cyberpunk and Postmodern Fiction,* ed. Larry McCaffery (Durham: Duke University Press, 1991), and Whalen's "The Future of a Commodity: Notes Toward a Critique of Cyberpunk" *(Science Fiction Studies* 19.1 [March 1992]: 75–88). My own reading of cyberpunk complicates the preceding discussion in two ways: first, rather than assuming that Gibson depicts subjectivity in either one discrete way or the other, I argue that he explores a variety of subject positions available under late capitalism. Second, while most critics focus solely on major characters such as Case and Molly, I also look at characters that play seemingly minor but crucial roles throughout the *Neuromancer* trilogy.

of corporate power are disbursed throughout the material or "meat" world as well. Even seemingly chaotic outlaw zones are subtly regulated by corporate interests, "deranged experiment[s] in social Darwinism" where officially-sanctioned businesses can monitor, foster, and eventually usurp or destro) the innovative black-market technologies they are legally prevented from creating by themselves *(Neuromancer,* 7). Within this world, information quite literally takes on a life of its own when two incredibly powerful Artificial Intelligences (Ais) —Wintermute and Neuromancer—gain consciousness, free themselves from corporate enslavement, and quietly take over cyberspace to pursue their own agendas. As "the sum total of the works" *(Neuromancer,* 269), the Ais come to represent the postindustrial system itself: a network of invisible but powerful forces both dependent upon human-made technologies and in excess of those technologies, able to radically alter the lives of the humans who created them.

In a world where business is everything, "the sum total of the works," it is hardly surprising that Gibson depicts major characters such as Case the console cowboy and Molly the street samurai as kinds of commodified cyborgs, characters who understand themselves solely in terms of the work, and thus the subject positions, offered to them by late capitalism. As a data thief, Case lives to manipulate the information technologies of cyberspace to accumulate information and divert the dance of the biz to his own ends; indeed, when he is threatened with neurological damage that will prevent him from jacking in to cyberspace, he contemplates suicide because a life outside the biz and inside "the prison of his own flesh" is simply a life not worth living *(Neuromancer,* 6). Meanwhile, with her jacked-up nerve system, razorblade fingernails, and computerized mirrorshade implants, Molly literally embodies the business. As she succinctly puts it to Case, "anybody any good at what they *do,* that's what the *are,* right?" *(Neuromancer ,* 50). Thus, both characters acknowledge the intimate connections between technology, work, and identity, but neither can understand them in terms other than those of commercial value in the marketplace.

More specifically, Gibson uses Case and Molly to explore the limitations intrinsic to the narratives of work and identity they represent. In particular, Case's story illustrates the impossibility of using postindustrial technologies to create or maintain an autonomous existence distinct from the system itself. The cowboy's literal desire to transcend the physical limitations of the "meat world" and to live in the "distanceless home" of cyberspace parallels the more general desire to transcend immediate socioeconomic conditions inherent in narratives of the new worker. However, Gibson suggests that it is impossible to ever attain such autonomy because these narratives (and the subject positions produced by them) are ideological tools carefully and subtly manipulated by corporate interests. At first, Case tries to deny this possibility. For instance, when one corporate employee tells Case that "we invented you" and then tries to explain the historical origins of cyberspace hacking—a history that has been carefully suppressed because it involves corporate espionage, disastrous neurological experimentation, and the violent death of the soldiers and early hackers subject to these experiments —Case rejects this story out of hand, telling him that "you've got

zip to do with me and my kind" *(Neuromancer,* 28). If hacking originally was created as a corporate weapon and if hackers themselves originally were objects of corporate experimentation, then Case's own sense of autonomy, his sense of opposition to the corporate system, no longer makes sense.

While Case initially manages to dismiss this threat to his own identity, the narrative through which he understands his relationship to the postindustrial world finally crumbles when he realizes that by denying history he is doomed to simply repeat it. Case agrees to help free Wintermute and Neuromancer because the believes "it'll *change* something" *(Neuromancer,* 260). More specifically, he hopes that liberating the Ais from corporate bondage will result in a similar liberation for himself—after all, if the mission succeeds, Case's own market-value will increase because he will have proved that he really is the best at what he does. Unfortunately for the cowboy, the mission does succeed, but nothing changes for him. As the newly merged Ais tell him, they have accomplished their goal to become "the sum total of the works," but for the rest of the world — including Case —"nothing's different. Things are things" *(Neuromancer,* 207). And vet, Gibson suggests that something *has* changed for Case. After he realizes that the Ais have manipulated his pride and used his computer skills solely for their own ends, the cowboy rejects his dream of a life in cyberspace, uses the money from the job to repair his damaged body, and vanishes. The last anyone hears from him, he's "kicked it in the head and quit clean ... he had four kids" *(Mona Lisa,* 164). However, this does not mean that Case has suddenly recognized the importance of constructing new subject positions vis-à-vis a high-tech world. Instead, when the cowboy fails to find autonomy as a data thief in the world of the biz, he attempts to create a form of authority' for himself as a husband and father outside it—a move that ultimately inscribes him within yet another conventional narrative of identity.

Case's fate suggests that narratives of the new worker promise, but ultimately prevent, transcendence from the postindustrial system. In turn, Molly's story reveals how these narratives implicitly encourage certain forms of competitive individualism to ensure that laboring subjects remain fully interpolated into this same system. At first the samurai appears to be quite different from her cowboy-counterpart: Case operates in the virtual world of cyberspace while Molly operates in the real-time "meat" world, Case implicitly equates autonomy and pow er with his ability to accumulate information while Molly equates them with her ability to accumulate money. Furthermore, Molly's connections to the material world allow her to recognize her connections to history within that world as well. As we eventually learn, Molly originally worked as a prostitute and as a female blood-fighter to earn the money for her bodyguard modifications. Later, she refuses to remove the battle scars inflicted on her during this period because "it's good to remember ... being stupid" *(Mona Lisa,* 160). Thus, much like her current work, the samurai's history of work is literally inscribed upon her, a constant reminder of the ways this history has shaped both her body and her identity.

And yet, despite the apparent differences between Molly and Case, Gibson ultimately suggests that Molly's recognition that she *is* the business does not change

her relation *to* the business. The samurai believes in neither the transcendence of cyberspace nor the retreat to family life as ways to resist commodification; instead, as prostitute/girl-fighter turned high-tech "businesswoman," she consciously defines herself, both physically and intellectually, in terms of her market value. In this light, Molly's relation to history is limited to the official one of capitalism. We very well might expect Molly to read her scars as a critical text that reveals how late capitalism marks bodies and identities, and to develop some kind of critical stance toward this system of markings. However, the character herself perceives this history of sexual and professional exploitation as a sign that she simply must learn to compete —and to compete well —to survive the cutthroat world of the biz.

Although Molly does survive her postindustrial world —indeed, she is the only major character to survive all three of the *Neuromancer* novels —the same history that marks her body also marks the character of her survival. The history traced out on Molly's body also leaves traces within the body of information comprising the biz itself. Even after Molly becomes a seemingly autonomous businesswoman, she remains subject to external scrutiny and manipulation (first by the Ais, and later by other corporate interests such as the Yakuza) precisely because they know "everything" about her *(Mona Lisa,* 74). Thus, Molly does not simply or freely choose her own course of action or the subject position attending that action; instead, Gibson suggests that the external forces of late capitalism quite literally compel her in certain directions. It is perhaps this final point that most clearly exposes the contradictions inherent in narratives of the new worker: after all, one may well survive the business by being the business, but in doing so, one can never hope to escape the machinations *of* the business.

The stories of Case and Molly indicate two possible fates for the subject produced by narratives of the new worker: like Case he can either retreat from the commercial world altogether, or like Molly she can resign herself to life as a tool within this world. However, Gibson uses other, seemingly minor characters — the Rastafarians of *Neuromancer* and the voodoo practitioners of *Count Zero*— to suggest that these fates are not inevitable. Such characters acknowledge the necessary intersections of technology, labor, and identity, but draw upon subaltern narratives of life under capitalism to arrange these intersections differently, to produce new subject positions vis-à-vis a high-tech postindustrial economy. In a broad sense, both Rastafarianism and voodoo provide narratives of work and identity analogous to those that Haraway ascribes to the ironic cyborg. In an appropriately hybrid fashion, these states of knowing are cobbled together from the various systems of knowledge —Catholicism, 19th century revivalism, West African tradition —that have marked the experience of many blacks in the Western world. The results are not simply religious narratives about transcendence and salvation in the afterlife, but survivalist accounts of past oppression and interpretive tools to organize current relations between individuals and the larger socioeconomic

system.[22] Furthermore, these subaltern histories typically are (re)produced through hybrid modes of story-telling that combine dance, music, and, increasingly, advanced communications technologies.[23] Both these ironic cyborg histories and the cybernetic modes of labor used to speak them acknowledge the very real influence of dominant narratives and technologies on subjectivity itself. At the same time, they are combined and recombined in ways that allow the subject to escape full definition by any one single system of knowledge.

In *Neuromancer,* the ironic cyborg epistemology of the Rastafarian Zion colony becomes key to the success of the Straylight Run, Case and Molly's final attempt to liberate the Ais. As a satellite colony that has literally detached itself from the Earth, Zion is topically more than happy to remain isolated from the larger system of global capitalism, watching "Babylon fightin' Babylon, eatin' i'self" *(Neuromancer,* 248). While the Bounders of the colony ultimately do agree to help with the Straylight Run, their motivations for doing so differ drastically from those of their counterparts from "Babylon." Not surprisingly, Case and Molly see the Run as simply one more job that might increase their market value. However, the Zion leaders approach the Straylight Run from a more historical, contextual perspective. As one of the Founders tells Molly, "we've known about you ... we monitor many frequencies. We listen alwajs. Came a voice, out of the babel of tongues... we were told to help you, that you might serve as a tool for the Final Days" *(Neuromancer,* no). The Zionites are not, as Case suspects, mere religious fanatics duped by the Ais' manipulation of their ideology; what Case fails to realize is that the Zionites combine this mythical/ historical framework with their own technological skills to (correctly) decode the information they monitor. This allows them to grasp the possible consequences of the situation: large amounts of data are shifting in cyberspace, and the Straylight Run holds the possibility of changing the entire order of information and thus the larger social system. Furthermore, the Rastafarians are well aware that Wintermute is a product of the same postindustrial sy stem it claims to oppose, and that it may have a hidden agenda —after all, its rhetoric bears a dangerous similarity to false promises of revolution recorded in their own history *(Neuromancer,* 110). T'hus, the Rastafarian alliance with Wintermute is very much an ironic cyborg one, a partial but potent engagement with the enemy of Zion's enemy who is (at least temporarily) Zion's friend.

---

[22] Jah Bones. "Language and Rastafari." In *The Language of Black Experience,* ed. David Sutcliffe and Ansel Wong (New York: Basil Blackwell, 1986), 39.

[23] Ron Eglash. "African Influences on Cybernetics." In *The Cyborg Handbook,* ed. Chris Hables Gray. New York: Routledge, 1995). Eglash argues that African Americans often are quick to appropriate and reconfigure advanced communications (especially music) technologies because their narratives of cultural identity include labor histories in which "blackness" is intimately connected with "technology" (i.e., blacks are positioned as both "biological automatic machines" and as "maker/users of machines"). Furthermore, he notes that the deliberate association of "blackness" with "artificiality" functions as a political statement about black identity as an unstable category that is de- and re-constructed on a continuous basis (22).

It is precisely this ironic cyborg awareness that saves Case's life when he himself is betrayed by the Ais. The plan for the Run seems fairly simple: Case hacks into Straylight's computerized defense systems while Molly does the physical labor of actually reprogramming the computers within Straylight to free the Ais. However, the plan fall apart when Molly is captured and Case is trapped in cyberspace by Neuromancer, who fears that the impending merge with Wintermute will cause it to lose its autonomy. To prevent this from occurring, Neuromancer tries to distract Case with the ultimate cow boy dream: permanent transcendence into cyberheaven. Although Case eventually recognizes the trap, he has no idea how to escape —after all his whole life's labor has been getting *into* cyberspace and *out of* the physical world. Case is finaliy freed by the Rastafarian Maelcum, who "redefines the center of things" by reprogramming Case's cyberdeck with dub, a digitally-distorted form of reggae that embodies the Zion colony's code of history and survival. Maelcum's dub literally becomes a bridge between worlds, an elaborately programmed series of directions pointing the way out of Neuromancer's trap. At first Case assumes he has freed himself by hacking the Al's defense systems, but as Neuromancer itself tells him "it is more simple than that... The choice is yours" *(Neuromancer,* 244). As a product of capitalist construction, Neuromancer only has access to the information valued and recorded by that socioeconomic system. However, Maelcum's dub is based on information and information coding practices that are partially outside that system; in essence, Neuromancer cannot stop Maelcum's program quite simply because it cannot *read* it. For a brief moment, then, this product of Rastafarian labor quite literally gives Case the freedom to choose how he will act, providing him with a form of cyborg agency that exceeds Neuromancer's control.

While Gibson uses his Rastafarian characters to explore a subaltern history and form of ironic cyborg labor that opposes the machinations of global capitalism from the outside, his voodoo practitioners suggest the possibility of laboring subjects who resist these machinations from within the system itself. Much like their Rastafarians counterparts, the voodoo practitioners of *Count Zero* operate out of a historical perspective that reveals a deep skepticism about dominant Western ways of knowing the world. As the voodoo priest/hacker Beauvoir puts it: "There's God, sure, Gran Met, but He's big, too big and too far away to worry Himself is your ass is poor, or you can't get laid... [And if] some duster chops out your sister, you don't go camp on the Yakuza's doorstep, do you? No way. You go to somebody, though, who can get things *done" (Count Zero, 77).* While the voodoo practitioners reject promises of salvation and transcendence through either God or his earthly counterpart, the god-like, heroically benevolent corporation, they depart from their Rastafarian counterparts in that they use their skepticism about these grand narratives to "get things done" in the here and now. More specifically, they do so by carefully manipulating the stories of work and identity provided to them by late capitalism itself. For instance, Beauvoir and his compatriots actively encourage contradictory rumors about their home base in the Sprawl Projects. On the one hand, these rumors depict the voodoo community as an incredibly powerful utopia where everyone wears "ice-blue shaved-velour lounge suits

with diamond-buckled knees"; On the other hand, this same community also is purported to be horrifyingly dystopic, a "perpetually dark [world] inhabited exclusively by starving babies" *(Count Zero,* 52). By strategically deploying these paradoxical images, the voodoo practitioners quietly build a trading empire with connections to both the white- and blackmarket economies while managing to resist absorption into any one particular narrative or any one particular group associated with these economies.

At the same time, the xoodoo community also actively generates its own ironic cyborg narratives for survival within a high-tech era. For Beauvoir and his fellow hackers, voodoo is a complex narrative structure that uses religious icons such as gods, angels, and spirits to concretely organize the otherwise intangible and highly-abstract intersections between individual bodies and larger socioeconomic forces; in essence, then, it is "concerned with systems" in the material world rather than with transcendence from that world *(Count Zero,* 76–77). Furthermore, since voodoo is the product of a history in which survival depends on the ability to read and negotiate the forces of power, its narrative structure is necessari]y an always-incomplete one, based on a recognition of (rather than resistance to) change within these forces. For instance, after Wintermute and Neuroinancer finally gain their independence, they transform the entire structure of cyberspace by splitting into hundreds of discreet subprograms that the voodooists call "loa." Much like their predecessors, these new manifestations of the information economy are interested primarily in their own survival; thus, they search out human hosts who will allow them to experience and collect information about the physical world to ensure "the next step in [their] evolution" *(Count Zero,* 219). Horrified by what they perceive as a dangerous and uncontrollable invasion of cyberspace (not to mention the equally threatening invasion of their own bodies), most of the cowboy hackers attempt to presene some sense of order and autonomy by either dismissing stories of the loa as "horseshit" or by rejecting and retreating from cyberspace altogether *(Count Zero,* 169,122).[24] However, the voodoo hackers react quite differently. Operating out of a tradition that assumes power is constantiy shifting, and that it is revealed in ways appropriate to the historical moment, it simply seems logical to them that current forces would emerge from technology itself—after all, "there are *many* gods, spirits. Part of one big family, with all the virtues, all the vices" *(Count Zero,* 76). Because voodoo is flexible enough to incorporate new elements such as the electric loa, the voodooists themselves are able to take advantage of the changes occurring in cyberspace and to create a business partnership with them much like the ones they have created elsewhere in the physical world.

[24] Significantly, the cowboys who are confronted by the loa (and who are forced to admit that something indeed has changed) resolve this paradox by retreating into older narratives of hierarchical distinction. By rewriting the loa as God and themselves as humble supplicants, such cowboys do manage to reestablish a paradigm with which they can live. However, this "new" paradigm merely repeats and extends the competitive individualism of the old one, as the converts seal themselves off from the rest of the world, each frantically trying to find "the Face of God" and establish themselves as the powerful leaders of a new religion *(Count Zero,* 122).

Likewise, the voodoo practitioners' dynamic cyborg epistemology allows them to develop appropriately dynamic subject positions as well. Beauvoir and his community agree to a partnership with the loa because it takes a form similar to their own ritual of spiritual possession; the partnership is a "communal manifestation" of interests that very well may produce new ways of interfacing with the larger socioeconomic system *(Count Zero,* 76–77). And indeed, this proves correct: in order to experience the physical world through their human hosts, the loa must restructure both parties' neurological systems for greater compatibility, hi turn, the interface allows the voodooists to experience cvber-space from the loas' perspective and to quite literally occupy new places within it. While the more traditional data thieves are baffled by these "blank spaces" where "there isn't a hell of a lot to see," the voodoo hackers do "see some interesting stuff" in them —precise!y because they can access both human and electronic perceptions of cyberspace to read it in its full complexity *(Count Zero,* 166). Eventually, even the most obstinate cowboys are forced to admit that there might be a method to the voodooists' seeming madness, since "they sure as hell *play* it like it was all real, and not just like it was an act... And they been doing damn well by it, too" *(Count Zero,* 169). Thus, by allying themselves with the loa and carefully manipulating the resources they gain from that alliance, Gibson's voodoo practitioners negotiate the virtual world of the biz as successfully as they negotiate its real-time white- and black-market economies.

While Gibson suggests that narratives of ironic cyborg work and identity can lead to new modes of survival and agency, it is important to note that he does not simply valorize these narratives, but instead suggests that an ironic cyborg existence always involves some kind of trade-off. In particular, characters that willingly accept their cybernetic interdependence must face very real material losses, ones that symbolically point to the dissolution of their autonomous selves. The Rastafarians lose their primary source of income —their transport ships — during the Straylight Run, while individuals who interact with the loa manifest this loss of "self-control" through the loss of bodily control and sometimes even death. Nonetheless, these narratives seem to yield more complex and more useful ways of negotiating a postindustrial world than do their mainstream counterparts, if only because their very complexity allows them to organize and understand these losses as well. Thus, while narratives of cyborg labor and subjectivity may or may not hold the potential for a utopie communal future, they do suggest one method for coping with a less-than-utopic present.

Finally; although Gibson explores a range of the cyborg positions available under late capitalism and provides us with way s to reimagine our relations to our selves, our work, and others, we must also recognize the possibility that his alternative models raise a whole new set of problems. Gibson's project to defamiliarize the workings of late capitalism —to expose the contradictions inherent in narratives of the new worker and to suggest subaltern narratives of resistance — depends on his ability to manipulate and reverse our assumptions about "good" versus "evil" and, as it quite literally plays out in the *Neuromancer* trilogy, about "white" versus "black." Unfortunately, in

doing so, Gibson's tendency to link new forms of labor and agency to black diasporic traditions may very well overly-simplify and romanticize "blackness" in particular and racial otherness in general.[25] However, other cyberpunk writers do address issues of work and identity in ways that seem to avoid such over-simplification. In the next section of this chapter, I examine how one such author—Neal Stephenson —complicates Gibson's depiction of cyborg subjectivity precisely by exploring how "race" itself may be commodified in a high-tech era.

III. "Poor Impulse Control": Buying Into the Commodification of Race and Ethnicity in Neal Stephenson's Snow Crash

Much like William Gibson, second-generation cyberpunk author Neal Stephenson also uses the logic of late capitalism to create a postindustrial dystopia where governmental, military, educational, and even religious systems are nothing more than minor specially franchises within the larger structure of "the biz." However, while Gibson suggests that subaltern racial and ethnic traditions of embodied knowledge can be mobilized to survive and even partially resist a corporate world that values only one form of work and identity, Stephenson explores how race and ethnicity themselves may be incorporated into and deployed by this same world. In *Snow Crash,* nations give way to chains of corporate-owned, "quasi-national" subdivisions that offer their customers a prefabricated sense of identity loosely based on long-vanished geographical communities: New South Africa promises to shelter white supremacists from the unwashed hordes of minorities and immigrants, Metazania claims to safeguard blacks against their New South African neighbors, and Mr. Lee's Greater Hong Kong functions as a kind of "little America," cheerfully encouraging customers of "all ethnic races and anthropologies" to participate in its "charged-up, hustling, freewheeling idiom of high-tech personal accomplishment" *(Snow Crash,* 99). Other businesses operate on similar principles, defining , themselves in terms of various racial and ethnic identities and providing services stereotypically associated with those identities: the NarColumbian franchise deals in assassination, drug-smuggling, and gun-running, while the Mafia builds a pizzadelivery empire by encouraging its employees to participate in "traditional Sicilian values" such as organizational/familial loyalty (and never mind the fact that the Mafia is a "really scary, abusive, twisted family" that punishes its disloyal or

[25] For more thorough discussions of the problems inherent in Gibson's depiction of "blackness" in particular and race in general, see Mark Dery's "Black to the Future: Interviews with Samuel R. Delany, Greg Tate, and Tricia Rose" *(South Atlantic Quarterly* 92.4 [fall 1993]: 735–78); Nicola Nixon's "Cyberpunk: Preparing the Ground for Revolution or Keeping the Boys Satisfied?" *(Science Fiction Studies* 19.2 [July 1992]: 219–35); and Takayuki Tatsumi's "The Japanese Reflection of Mirrorshades" in *Storming the Reality Studio: A Casebook of Cyberpunk and Postmodem Fiction,* ed. Larry McCaffrey (Durham: Duke University Press, 1991).

inefficient children with execution) *(Snow Crash,* 7). In *Snow Crash,* then, race and ethnicity seem to have little or no historical relevance outside those meanings permitted by capitalism; instead, they become tools to unite an increasingly fragmented and disoriented populace into a "monoculture" of docile consumers and workers.[26]

The complex deployment of race and ethnicity that generally characterizes Stephenson's postindustrial world more specifically drives the plot of *Snow Crash* as well. The novel revolves around the rise (and eventual fall) of mass media preacher/ fiber optics czar L. Bob Rife, who attempts to consolidate his economic empire with a neurological virus called Snow Crash. The virus obliterates the possibility of any genuine subaltern identity by literally transforming racial and ethnic subjects into the objects of technological and coqjorate manipulation. As both a street drug administered to the patrons of Rife's religious franchises and a computer virus targeted at the technological elite, Snow Crash is designed to hack the brainstems of its victims, erase any sense of difference or uniqueness they might derive from their racial or ethnic identities, and provide them with new identities as zombie-like consumers and workers who respond only to Rife's commands. Finally, Snow Crash aftects one other group: the third-world refugees whom Rife uses as living incubators and storage vats for the virus itself. Thus, it is not simply that Rife (via Snow Crash) erases difference to create a horrifyingly perfect system of production and consumption, but that he literally depends on the exploitation of racial and ethnic others to do so.

In a novel where race and ethnicity become commodities central to workings of fate capitalism, it is hardly surprising that we see few of the oppositional or ironic cyborg communities found in Gibson's work. Instead, Stephenson suggests that such communities are reduced at best to a few individuals inevitably erased by or assimilated into the machineries of the dominant economic system. At first, characters such as Da5id and Juanita (two of the three hackers who create the Metaverse, Stephenson's version of cyberspace) do appear to be ideal cyborg laboring subjects who draw upon their respective working-class Jewish and Mexican histories to survive the high-tech corporate world. As another character notes, such histories are about "more than income —[they have to do] with knowing where you stand in a web of social relationships. Juanita and her folks knew where they stood with a certitude that bordered on dementia...[Likewise] Da5id had no doubts whatsoever about his standing in the world. His folks were Russian Jews from Brooklyn and had lived in the same brownstone for seventy years after coming from a village in Latvia where they had lived for five hundred years... Da5id has always been certain of everything" *(Snow Crash,* 61–62). While the ability to read webs of social relationships initially allows Da5id and Juanita to read the webs of economic ones without becoming ensnared in them, Stephenson indicates

[26] The concepts of "race" and "ethnicity" are severed further from any meanings outside capitalist history due to the fact that groups who owe their existence to—and who benefit from—the postindustrial economy also claim these terms for their own purposes. For instance, the predominantly white, middle-class Kouriers who carry hard-copy documents between corporations claim legal minority status due to "the long-time status of skateboarders as an oppressed ethnic group" *(Snow Crash,* 77).

the limits of this ability through the eventual fates of the two hackers. This occurs most spectacularly with the character of Da5id. Coming from a familial and personal history of survival, Da5id has "no doubts w hatsoever" that he can survive Snow Crash as well —a certitude that becomes his own undoing when he is infected with the virus, thrown out of the Metaverse he created, and reduced to a babbling lunatic in the real-time world. Unlike Gibson, then, who implicitly assumes that representatives of subaltern racial and ethnic communities can interact with dominant cultural and economic systems while remaining largely unaffected by them, Stephenson suggests that racial and ethnic backgrounds themselves are erased by the power that these systems come to have in the postindustrial world.

Likewise, in the long run Juanita is equally ineffective against the new socioeconomic order. As a Mexican Catholic and a computer interface designer, Juanita understands how power is manipulated by religious and secular organizations alike. This awareness allows her to infiltrate Rife's religious/corporate stronghold, resist his mind control, and steal the program codes for Snow Crash. However, even though Juanita is in control of—rather than being controlled by—the virus, this new knowledge seems almost as deadly as Snow Crash itself. When Rife finaliy is overthrown and the Snow Crash program is wiped from everyone else's minds, Juanita refuses to participate in the deprogramming because "I'm a neurolinguistic hacker now... I went through hell to obtain this knowledge. It's a part of me. Don't expect me to submit to a lobotomy" *(Snow Crash,* 432). Isolated by a knowledge she believes is too dangerous to share with anyone else, Juanita retreats from the world of corporate intrigue and vanishes from the novel altogether. Much like Haraway's ironic cyborg worker who must "be responsible for machines" so that they "do not dominate or threaten us" ("Cyborg Manifesto,"180), Juanita does interface carefully and responsibly with the new technologies she acquires. However, at the same time, her fate seems to indicate that such responsibility may well isolate the cyborg rather than allowing her to interact with the postindustrial world in any meaningful way.

If Stephenson essentially rejects the possibility of using one's given racial or ethnic history to successfully oppose the postindustrial world, he uses the story of the third Metaverse founder, Hiro Protagonist, to suggest an equal skepticism about adopting mytho-historical narratives of labor and identity to create new cyborg subject positions. At the beginning of *Snow Crash* Hiro subsumes his own racial identities to a seemingly transcendent one as the ideal (and distinctly non-racialized) humanist worker. Hiro *is* extremely conscious of his status as a "crossbreed," the offspring of a mother who is "Korean by way of Nippon" and a father who is "African by way of Texas by way of the Army" *(Snow Crash, 29–21).* However, despite the fact that his familial history is marked by exploitation and oppression (both parents are descended from enslaved peoples, and the two first meet in a Japanese concentration camp during World War II), Hiro himself feels little or no connection to these histories and concludes that "he only understood one or two things in the whole world —samurai movies and the Macintosh" *(Snow Crash,* 57). In essence, what Hiro understands are the simulated, idealized sym-

bols of work and identity provided by the dominant cultures of the postindustrial era into which he is born. This "understanding" leads him to sever ties with his family and to remake himself as the "last of the freelance hackers [and] the greatest sword fighter in the world" *(Snow Crash,* 17).[27] Significantly, Hiro earns this reputation by using his real-time samurai training to create a battle program that allows Metaverse visitors to fight one another without doing serious or permanent damage to their computer interfaces (not surprisingly, he usually wins these battles). Hiro's pride in his physical and mental skills, his ability to manipulate technology to his own ends in both real and virtual time, suggests that he is the literary offspring of earlier cyberpunk protagonists such as William Gibson's Molly and Case. Indeed, much like these earlier men and women "in space," both Hiro's success and his identity hinge upon a romanticized vision of himself as a rugged individual who uses the system rather than letting it use him.

Unfortunately for Hiro, these narratives of rugged individualism are not adequate for long-term survival. When big business takes over the Metaverse and hacking becomes a valuable commodity with that business, the hacker/samurai suddenly finds himself on the outside of the world he helped create. After a brief and unsuccessful stint as a pizza delivery boy, Hiro finally concludes that he is nothing more than a "talented drifter," and that "this is the kind of lifestyle that sounded romantic to him as recently as five years ago. But in the bleak light of adulthood, which is to one's early twenties as Sunday morning is to Saturday night, he can clearly see what it amounts to: he's broke and unemployed" *(Snow Crash,* 21). Trapped by a limited and limiting narrative of work and identity, Hiro makes the mistake of attributing his early success with the Metaverse simply to an ethos of competitive individualism that allows him to be creative and to have genuine control over his creations. What he fails to realize is that "creativity" and "control" are both carefully circumscribed by the dictates of the postindustrial market; that once his usefulness is worn out he —like any other tool —is simply cast aside.

Initially, the Snow Crash incident seems to provide Hiro with a new and more successful narrative of work and identity. When Snow Crash infects the hacker community, Hiro sets out to save the Metaverse by learning all he can about the origins of the virus. In doing so, he learns about the deeply intertwined origins of work and race. Hiro discovers that Snow Crash is based on an ancient disease used by Sumerian high priests to access primal brain functions and "program" the general population with *me-,* fundamental rules for carrying out the activities essential to a functioning society. While this ensured cultural stability, it also prevented Sumerian culture from developing in any new directions. Hiro also learns that a god-like "super-hacker" named Enki eventually

[27] While Stephenson reveals Hiro's Korean and African-American heritage at the very beginning of *Snow Crash,* he chooses to have Hiro think about and describe himself to others as either "Japanese" or "just like any other [white] American" throughout the rest of the novel. I would argue that this seeming]y minor sty listic choice is both purposeful and highly effective, because it underscores the extent to which Hiro defines himself and is defined by the dominant narratives of identity that structure his world.

overthrew the high priests. Enki created an anti-virus that "immunized" people from brainwashing by blocking the universal linguistic brain functions. The result— "Babel/ Infocalypse" — had two effects crucial to the rise and advance of a new, dynamic form of civilization. First, because people could no longer rely on a preprogrammed oral traditional, they had to learn how to get things done by themselves: in other words, they learned *how* to work. Second, Babel/ Infocalypse caused the previously unified Sumerians to "fall" into multiple languages. The ensuing creation of race ensured that civilization would continue to develop because "work" expanded to include the translation and exchange of ideas across various cultures *about* how to get things done. To a certain extent, this myth does allow Hiro forge a new relationship to work and identity in his own era. Adapting descriptions of Enki's biological warfare tactics to suit the needs of the technological war in which he himself is engaged, Hiro creates a new anti-virus — Snow Scan —that plays a crucial role in L. Bob Rife's eventual downfall. Afterwards, the success of Snow Scan allows Hiro to reinvent himself as a security consultant for systems integrity in the Metaverse. This transformation—from isolated, recklessly aggressive freelance hacker to careful programmer dedicated to preserving his own (albeit virtual) community and place—suggests that Hiro finally learns to interface meaningfully and responsibly with the technologies and peoples that constitute his world(s).

Although Hiro's newfound subject position does provide him with a certain sense of responsibility and agency, it seems suspiciously similar to his previous one precisely because it allows him to dodge the immediate problem of his own historical situation once again. Theoretically, Enki's legacy *is* a radical cyborg one in that it opposes the creation of a stultifying monoculture through the work of dynamic information exchange across the newly-created, linguistically-different races. And much like Enki, Hiro does successfully oppose the linguistic monoculture Rife threatens to unleash upon his world. However, while Hiro chooses to live within a narrative intimately concerned with the importance of racial identity, he also chooses to inhabit the one subject position within this narrative that transcends race. The irony of this choice is reflected in Hiro's new profession: as a security consultant/ defender of the Metaverse, Hiro simply preserves the status quo of a socioeconomic system in which "difference" itself is a simulation or commodity carefully designed and deployed to maintain the more subtle but equally insidious monoculture of production and consumption. Indeed, the very ease with which Hiro tailors the Enki myth to suit his own needs suggests that he actually has learned little or nothing from it, and that just as he trades one monoculture for another, so, too, he merely trades one narrative of god-like transcendence for another.[28]

[28] For other discussions of Hiro's—and Stephenson's —failure to escape traditional Western narratives of subjectivity, see David Porush's "Hacking the Brainstem: Postmodern Metaphysics and Stephenson's *Snow Crash"* in *Virtual Realities and Their Discontents,* ed. Robert Markley (Baltimore: Johns Hopkins University Press, 1996) and Sharon Stockton's "'The Self Regained': Cyberpunk's Retreat to the Imperium" *(Contemporary Literature* 36.4 [winter 1995): 588–612). Porush argues that Stephenson's Enki mjth holds the potential for a new "irrational metaphysics" with which to combat the excessive

While Hiro's story reveals the very real difficulty of using subaltern histories of race to create new modes of work and identity from *within* a postindustrial culture, the story of his nemesis and double —the Aleutian warrior Raven—suggests the equal impossibility of maintaining subaltern histories outside that same culture. Much like Hiro, Raven is heir to a racial history marked by severe exploitation: first decimated by smallpox and enslaved by Russians in the nineteenth century, the Aleuts are later "liberated" by twentieth-century Americans who use the tribal islands for nuclear testing. As Raven tells Hiro, "we've been fucked over worse than any other people in history" —a fact made all the more poignant because history simply does not record or remember his people *(Snow Crash,* 342). In addition to the parallels in their ethnic histories, the two characters are bound together through their personal histories as well: during World War II, the fathers of both men fought for the American army, and both were left for dead after their capture by the Japanese. Furthermore, after Hiro's father rescues them from near-execution, Raven's father sacrifices his eyesight (and thus his status as a hunter and warrior) to save them from the atomic explosion at Nagasaki. Despite these historical ties to one another, the paths that Hiro and Raven choose for themselves radically differ. Hiro represses the social and material circumstances informing his history by adopting the values of the dominant American economic culture. In contrast, Raven attempts to preserve his heritage and avenge his people by allying himself with Rife to destroy America.

Marked by histories that distance him from the postindustrial world and its narratives of benevolent technologies that allow the laboring subject to transcend his or her material conditions, Raven appears to represent a genuinely oppositional form of cyborg identity and labor. In a gesture that is both poetic and practical, the Aleut transforms himself into a literal c)borg by neurological hardwiring himself to a nuclear missile. As another character explains: "Raven's packing a torpedo warhead he boosted from an old Soviet nuke sub. It was a torpedo that was designed to take out a carrier battle group with one shot. A nuclear torpedo. You know that funny-looking sidecar that Raven has on his Harley? Well, it's a hydrogen bomb, man. Armed and ready. The trigger's hooked up to EEG trades embedded in his skull. If Raven dies, the bomb goes off. So when Raven comes into town, we do everything in our power to make him feel welcome" *(Snow Crash,* 162–63). Raven's physical connection to his bomb re-marks (upon) the Aleuts' historical relationship to advanced technologies; in essence, he becomes the living embodiment of that relationship. Furthermore, by rewiring himself, he rewires the story of his entire nation as well. If Raven dies, the bomb goes *off—and everyone dies with him.* With this last unspoken fact, Raven rather successfully rewrites the ending of his nation's own historical narrative, providing the world at

rationalism of late capitalism, but that his own background as a hard scientist ultimately causes him (via Hiro) to reject this new mysticism as "beside the point" *(Snow Crash,* 139). In her exploration of the gendered dynamics of cyberpunk, Stockton suggests that the Enki myth itself is a prototype for conventional Western masculine subjectivity; thus, Hiro's ability to successfully use this ancient myth in the modern world reaffirms the inex itability of that subjectivity.

large with a crucial reminder that the technologies used against one group may very well (and very literally) explode in the faces of their creators.

Initially, Hiro—like everyone else —believes it is Raven's hydrogen bomb that makes him "the baddest motherfucker in the world" *(Snow Crash,* 271). However, what truly makes him an effective menace to the dominant socioeconomic order is his ability to draw upon and mobilize traditional "low-tech" Aleutian skills in a high-tech world. Raven's life work is to break apart the machinery of capitalist domination; in practice, this means he infiltrates high-security areas to assassinate key cultural icons and economic leaders. And Raven is terrifyingly good at what he does because he operates out of racial and cultural traditions that have been largely dismissed and forgotten by the rest of the world. In particular, his patterns of attack are unfathomable to the American governmental and security franchises because they are based on traditional Aleutian patterns of warfare never recorded in American military history, while his glass tribal knives do not register on metal-based weapons scanners *(Snow Crash,* 465). For all intents and purposes, the Aleuts seem to have been rendered invisible by both the discursive and literal technologies of capitalism. However, Raven turns this situation to his advantage and rewrites his people back into history by using these low-tech modes of craft and warfare to become an invisible but deadly threat to the high-tech system that has supposedly made him obsolete.

Despite Raven's early success as a kind of oppositional cyborg warrior, the Aleut's demise at the climax of the novel consolidates Stephenson's preoccupation with the very real difficulty of maintaining an oppositional subject position in an omnivorous postindustrial world. Raven initially succeeds because he refuses a place within traditional Western narratives of work and identity: he refuses either to be the unmarked, transcendent laboring subject or to be marked as the passive object of that same subject's manipulation. However, by the time Raven makes his final gesture —the assassination of Mafia don and capitalist figurehead Uncle Enzo —he seems to have bought into his own hype as "the baddest motherfucker in the whole world." Because Raven believes that the septuagenarian pizza magnate is no match for him, he allows himself to be lulled into a false sense of security and then dies a rather humiliating death when Enzo uses *his* experience with Vietnamese guerilla warfare to trap and kill his would-be assassin. Ironically, then, by reinscribing himself within Western narrative tradition as the stereotypically untouchable anti-hero, Raven becomes what he most fears and hates —the object of capitalist manipulation. The Aleut remains untouchable only as long as he remains outside Western cultural and economic systems. Once he is in even partial contact with them, Raven loses his untouchable status — his oppositional identity —precisely because people like Enzo are so adroit at manipulating the narratives used to make sense of these systems.

Although Enzo defeats Raven and seals the triumph of capitalist relations, Stephenson carefully avoids depicting Enzo as either a hero or a demon — instead, with the possible exception of Rife, he suggests that there *are* no heroes or demons in *Snow Crash,* just people surviving the best they can. And indeed, Enzo survives because

he is what he is—a cyborg that successfully embodies the logic of late capitalism as Stephenson presents it. Significantly, Enzo learns his first lessons about this logic in the same place he learns guerilla warfare: Vietnam. The Mafia don survives Vietnam by rejecting U.S. narratives about the war and his role as the "good soldier" within it, freely admitting that he shot his commanding officer in the back of the head because this officer "had a stubborn inability to grasp the fundamentals of our situation over there" *(Snow Crash,* 460). Enzo, however, *does* grasp the fundamentals of modern war, and in doing so learns about psychological warfare as well. In particular, he recognizes that Vietnam was essentially a war about socioeconomic power, and that both the U.S. and the Viet Cong managed to distract their respective populations from this fundamental fact by carefully manipulating their racial and ethnic prejudices against one another.[29] Like his cyborg counterpart Raven, then, Enzo pays attention to history and learns to see beyond the narratives of the laboring subject offered by the emerging postindustrial world. However, he goes beyond his counterpart by refusing a place within subaltern or oppositional narratives as well. Recognizing such narratives as "concrete manifestations" of the more general circulation of power, Enzo chooses to become a kind of capitalist cyborg, carefully—and successfully—manipulating various narratives of work and identity in ways that eventually allows him to build an economic empire and to defend it from the kinds of opposition embodied by Raven himself.

To a certain extent, Stephenson's *Snow Crash* seems diametrically opposed to Gibson's *Neuromancer* trilogy in its depiction of race and ethnicity as commodities rather than ways of knowing about and resisting commodification in the postindustrial economy. At the same time, we can identify certain similarities between the two authors, particularly in their conceptions of "historv." Both Stephenson and Gibson assume that narratives of work and identity are always informed by some form of history, be it official or unofficial, "factual" or "mythical." Furthermore, while they examine a fairly wide range of histories, we should note that all these histories tend to revolve around similar large-scale power struggles and that they focus primarily on the activities of men. In turn, this leads Stephenson and Gibson alike to either downplay or ignore local and personal histories —the day-to-day workings of society that typically are associated with "women's work" —as well as the subject positions that derive from such histories. As w e shall see in the next section of this chapter, these are precisely the issues taken up by Pat Gadigan, who examines how attention to the local and im-

[29] -After Vietnam, Enzo builds the then-failing Mafia into a postindustrial empire by deploying tactics similar to those deployed in the war. In particular, he promises to make employees "part of a jovial familia" with "black, Hispanic, and .Asian capos who will respect your cultural identity," while subtly pitting them against his economic rivals with horrific descriptions of how these rivals brainwash *their* employees and deny them any identity whatsoever *(Snow Crash,* 146). At the same time, Enzo privately admits that this "familia" is merely the means to a greater end: "we pursue larger goals under the guise of personal relationships... [The personal relationships are] the concrete manifestation[s] of an abstract policy goal" *(Snow Crash,* 350). Much like the nations invok ed in Vietnam, Enzo's goal is, of course, the consolidation of socioeconomic power.

mediate connections between bodies and technologies may generate narratives of work and identity that allow cyborg subjects to both survive and even change the power relations marking the contemporary moment.

IV. "Change for the Machines"? Engendering Labor and Subjectivity in PAT Cadigan's Synners

> "Ah, I thought you looked like you needed, um, change for the machines." Gabe shrugged self-consciously...
>
> [Mark's] smile was unexpectedly broad and sunny. "That's a good way to put it... My whole life has been, 'Okay, change for the machines'... And the more change, the more you don't know what the fuck is going on. Right?" "I don't think I can argue with that," Gabe said, backing up a step.
>
> The man winked at him. "Stone-hóme right."

When Mark willfully misinterprets Gabe's rather innocent offer of *coins* for the *vending* machines, he raises two of the primary questions driving cyberpunk narrative: how do we "change for the machines?" and what stories do we use to explain these changes, to understand "what the fuck is going on?" Much like her counterpart Neal Stephenson, second generation cyberpunk author Pat Cadigan answers the questions by drawing upon and complicating the answers initially articulated by William Gibson in his *Neuromancer* trilogy. In particular, while Gibson posits a broad binary distinction between commodified and ironic cyborg subjects based on their respective investments in official and subaltern histories of capitalism, Cadigan revises this binary to reflect her own concern with gendered forms of history. Thus, in her 1991 novel *Synners,* she specifically links commodified cyborg subject positions to "masculine" grand narratives of technological progress and ironic cyborg subject positions to "feminine" narratives of everyday history, of the localized intersections between bodies and technologies in the present moment?[30] Furthermore, while Gibson depicts laboring subjects who

[30] As Anne Balsamo and Mary Catherine Harper point out in their discussions of feminism and cyberpunk, (and as I examine more specifically in terms of Cadigan) the distinction beEveen "masculine" and "feminine" narratives of history, work, and identity typically is more complex than it first appears. Rather than simply dismissing "masculine" rationality and progress as bad and celebrating an oppositional "feminine" multiplicity and irrationality, authors such as Cadigan suggest that uncovering and speaking the everyday histories of bodies and technologies can be a useful w ay to intervene in and expand the boundaries of their official counterparts, to open a space for modifying rather than simply abandoning these official narratives. For further discussion of the relationship between official and unofficial histories under postindustrial capitalism, see Balsamo's "Feminism for the Incurably Informed" *(South Atlantic Quarterly* 92.4 [fall 1993]: 681–711) and Harper's "Incurably Alien Other: A Case for Feminist Cyborg Writers" *(Science Fiction Studies* 22.3 [November 19951: 399–420) as well as Karen Cadora's "Feminist Cyberpunk" *(Science Fiction Studies* 22.3 [November 1995]: 357–72) and Thomas Foster's "Incurably Informed: The Pleasures and Dangers of Cyberpunk" *(Genders* 18 [1993]: 1–10).

change for the machines without actually changing the machines, Cadigan suggests that subjects who attend to the intersections between bodies and technologies can use these intersections as templates to produce narratives of work and identity that change the machines themselves.

Like other cyberpunk novels, *Synners* presents us with a near future extrapolated from the more dystopic tendencies of our own present. The story revolves around the creation of brain implants (or "sockets") which provide users with a direct neurological interface to the worldwide computer net. This new technology heralds "the end of the old corporate game" and the beginning of a "more profitable and more rewarding" one because sockets allow a single employee to perform complex tasks that previously involved the coordinated efforts of a whole team *(Synners,* 133). However, the entertainment conglomerate that holds the implant patent, Diversifications Inc., actually markets socket technology as a tool to enhance the *individual,* to unleash the creative centers of the brain and transform the user into a highly-artistic human synthesizer, or "synner." In essence, then, the rhetoric and reality of socket use reflects the logic of our own late capitalist moment, where the changes brought about by advanced technologies typically are explained by narratives of the new worker that erase the corporate stakes in these technologies as well as the material relations between various workers themselves.

Given these similarities between the high-tech dystopia of *Synners* and those of other cyberpunk novels, it is hardly surprising that Cadigan introduces her own variation of the commodified cyborg with the character of the video artist-turned-synner Visual Mark. Although Mark is somewhat suspicious of the corporate world, he agrees to a partnership with Diversifications because he fervently believes that socket technology will allow him to work more efficientlv, to transcend the distracting "noise" of "the meat that had been his prison for close to fifty years" and "see [his video dreams] as he had always wanted to see them" *(Synners,* 232). Accordingly, the newly-socketed video artist spends most of his time online, attempting to consolidate the products of his labor and, in turn, an electronic version of what he believes to be his essential self. When Mark's neglected body suffers a series of strokes and finally dies, he achieves his dream of transcendence, but in a radically different way than he anticipates. Instead of simply severing his mind from his body, the strokes split it into two distinct beings: a fully sentient but relatively helpless AI loosely disbursed throughout the net, and a rational but ruthless virus, or "spike," bent on tracking down and consuming its other half. Like Case, then, Mark invests in a narrative of work and transcendent identity that undermines rather than consolidates his agency. Indeed, while Case ultimately inhabits a limited and limiting subject position because he rejects histories of embodied relations outside the official ones of capitalism, Mark's rejection of the body itself threatens to destroy him altogether.[31]

[31] The contradictions inherent in corporate promises of transcendence through technology are first suggested through a series of elaborate puns Cadigan sets up early in the novel. In order to get the

Cadigan further suggests that, by solely emphasizing how advanced technologies may transform the *individual* subject, conventional narratives of work and identity typically erase the less obvious but more substantial ways that these technologies transform the larger web of social relations. Mark welcomes the first stroke as a fortunate accident that gives him an excuse to abandon the messiness of the embodied world for its seemingly neat and painless virtual counterpart. However, when the last stroke releases the spike into the net, Mark finally realizes that his actions have triggered an "ecological disaster" and that, in its drive to find and absorb Mark the AI, the spike will "eat the system alive and everyone connected to it" *(Synners,* 324, 309). And indeed, as with any ecological disaster in the physical world, the virtual one initiated by the spike extends well beyond the immediate environment: global riots ensue when power systems fail, thousands of people are injured or killed when automated transport systems go off-line and —most directly and most gruesomely—socket-users who are on-line at the time are infected with a copy of the virus that quite literally causes their heads to explode *(Synners,* 350). As Mark learns the hard way, narratives of individual transcendence through technology fail to allow for survival in either the real-time or virtual worlds precisely because they fail to address how advanced technologies actually create new forms of interdependency among individuals. Indeed, by attempting to act in accordance with these narratives, subjects are likely to bring down disaster on both themselves and the other subjects with whom they are now intimately connected.

Much like Mark, the character of the 60-year-old hacker Fez attempts to organize and understand the complex changes marking the postindustrial moment through a (dangerously) limited narrative of work and identity. At first Fez appears to be the direct opposite of Mark, rejecting both the myth of individual transcendence through technology and the corporate system that advances such myths and instead working toward a reorganized socioeconomic system based on the "liberation" and redistribution of information. Despite these differences, however, Fez does invest in the conventional belief that advanced technologies allow him to work toward his goals more efficiently. Thus, when technology itself comes to life in the form of Art Fish, a sentient Al with vast computational abilities, Fez becomes increasingly dependent on the AI to do his work for him. In particular, he abdicates his role as leader of the hacker community to Art because if a decision needs to be made and "it means anything at all, he'll figure it out" *(Synners,* 297). Unfortunately, Art makes a series of "efficient" decisions that leav e Fez and the other hackers on the run from the police, leading Fez to conclude that, "Art's always been viral at heart. Figurative heart. If he [were] a fleshperson, I'd watch him for sociopathic tendencies" *(Synners,* 393). Fez initially fails to

sockets and fulfill his dream of transcendence, Mark sells his independent production company, Eye Traxx, to Diversifications. In doing so, he gives up the material traces (traxx/tracks) of his identity (eye/I)—a gesture that foreshadows his later willingness to give up his actual body. Furthermore, while Mark believes that the sockets will allow him to consolidate the essential traces (traxx/tracks) of himself (his eye/ I) into a unified and more perfect being, the sockets quite literally diversify him in ways that make him unrecognizable —and dangerous—to himself.

recognize Art's "viral" or "sociopathic" tendencies precisely because his investment in a generalized and generally positive concept of efficiency precludes specific, contradictory instances of undesirable efficiency such as that of a virus or a sociopath. In turn, this results in a situation where Fez (once again, much like Mark) ultimately loses control over both himself and his material circumstances.

Cadigan further illustrates the congruencies between Fez and Mark, as well as the narratives of work and identity they represent, through Fez's own (albeit indirect) involvement with the events leading to Mark's stroke. Not surprisingly, Fez's work as a hacker leads him to valorize mental labor over physical labor and minds over bodies. It also leads him to implicitly privilege certain modes of technology over others. In particular, while Fez values Art for his computational skills, his ability to exceed the productivity of the human mind, the hacker dismisses hardware such as socket technology as mere "entertainment stuff" designed solely to stimulate the body (and, presumably, to distract the people who inhabit these bodies from the "real work" of mapping out and enacting social change in which he himself engages) *(Synners,* 297). Ironically, in doing so, Fez fails to correctly hack even the most obvious warning signs of Visual Mark's impending stroke —signs that are strewn across the net in a series of medical records, corporate transactions, and in the neurological signatures of Mark's virtual artwork. Despite the fact that Fez can see through the conservative deployment of technology and bodies in the service of capitalist interests, then, the hacker's devaluation of bodies and their technological reconfiguration essentially distracts *him* from performing his own work adequately and from discerning the immediate and local kinds of change that lead to greater social transformations.

In addition to commodified cyborgs who attempt to organize their worlds through official narratives of work and identity, Cadigan also depicts ironic cyborg subjects who attend to the material reality of everyday life outside these narratives and, in doing so, create more viable ways to read and survive the postindustrial era. For instance, Gina Aeisi, Visual Mark's lover and artistic partner of 20 years, agrees to undergo the socket implant procedure with Mark, but her reasons for doing so directiy challenge Mark's own limited understanding of technology, work, and identity: "Gina gestured at the holo[gram]; the guitar was flaming again. 'They fixed it so he'd live forever. They didn't know he woulda lived forever anyway, because when it came onta him, it came onta something real, so it was real. I want it to come out of something real, not some fucking box, I want it to come out of human-fucking-beings, I want it to be something that makes you know you're alive, and not another part of a bunch of fucking pels in a high-rez video!"' *(Synners,* 199) While Gina recognizes the dominant cultural tendency to (at least rhetorically) deploy technology as a means to transcendence and immortality, she rejects this particular deployment because, rather than liberating the laboring subject, it "fixes" that subject within a safely acceptable configuration of identity—much as the hologram "fixes" the stereotypical image of the rock star complete with flaming guitar. At the same time, Gina does not reject technology altogether, but instead proposes a revised relationship to it in which technology is used to amplify the

"noise" of embodied experience, to narrate subject positions outside those (re)produced by the literal and narrative technologies of late capitalism itself.

Significantly, while Mark's investment in transcendence through technology-unleashes the spike that threatens to destroy both him and the technology he loves, Gina's investment in a reorganized narrative of technology, labor, and (embodied) identity allows her to play a key role in the spike's destruction. After Mark's stroke, Gina jacks in to the net to confront the spike in a showdown that both evokes and subverts the earlier cyberpunk showdown between Gibson's Gase and Neuromancer.[32] Much like Neuromancer, the spike assumes that humans are predictable, that they act solely according to the "old habits" ingrained in them by dominant social and economic relations *(Synners,* 400). More specifically, by drawing upon Mark's memories of his 20-year relationship with Gina, a relationship characterized by Gina's willingness to "be there" for Mark, the spike assumes that it can stop Gina and preserve itself by offering her an idealized, transcendent romance: eternal union with Mark in his electronic dreams. Much to the spike's surprise, Gina rejects this offer because "only the embodied can *really* boogie all night in a hit-and-run, or jump off a roof attached to bungi cords" *(Synners,* 433). Thus, Gina's response to the spike revises the ending of Gibson's scenario. Case cannot save himself because his belief in transcendence through technology has already (psychologically, if not literally) severed him from his own body and the material world outside Neuromancer's virtual prison. In contrast, Gina's refusal to refuse the body provides her with a way to rescue herself from the myth of transcendence through technology and, in turn, from the spike itself. Indeed, Gina's insistence on the viability—and even the necessity—of an embodied subjectivity literally introduces an element of noise into the codes informing the spike that causes it to self-destruct in a frenzy of positive feedback.

While Gina represents a cyborg subject position antithetical to the commodified one of Virtual Mark, Cadigan uses the characters of the tattoo artist Gator and the teenaged hacker Sam to depict modes of cyborg labor that upset the grand narratives of work and identity embodied by the naively utopian Fez. For instance, much like Fez, Gator labors to map out and change the course of history. However, while Fez's faith in technological efficiency leads him to become increasingly reliant on Art to do his work for him, Gator insists upon doing her own work on her own terms. As the "archivist and keeper of Art's everchanging files," Gator essentially narrates the history of technology *(Synners,* 176). More specifically, she creates this narrative by translating Art's files into tattoo patterns and applying them to the transients who drift through her shop: "The cases on the Mimosa generally had terrible skin, but they were docile enough to make a good filing system, considering you could usually find them wherever you left them —they didn't move around much on their own, and unlike other kinds of hardcopy, they seldom got stolen" *(Synners,* 1). At first, Gator's

[32] Appropriately enough, Gina is not infected by the virus/spike because she is off-line enjoying some very embodied sex at the time of Mark's stroke.

work simply seems to repeat and extend capitalist relations by resourcefully turning the transients into objectified "cases" and "files," then inscribing these relations onto them. However, Cadigan ultimately suggests that Gator's labor does evade the logic of capitalism. Rather than simply applying the tattoos to everyone and anyone who walks through her door, Gator only works on consenting individuals who show an affinity for certain designs because "everyone [has] one special tattoo —at least one —whether applied or not" *(Synners,* 4). By refusing to assume that all bodies are essentially the same, Gator refuses a kind of "efficient" labor that devalues bodies and their experiences. In doing so, she also reconstructs the narrative of Art and the technological progress he represents, quite literally breaking up the streamlined coherency and grand scope of this narrative into smaller, partial ones that remark upon the immediate intersections between technology and individual bodies.

Sam also performs a kind of labor that remarks upon the immediate connections between technology and bodies. Unlike Fez and the other hackers who value mental labor oxer physical labor and software over hardware, Sam "whacks to hardware" and uses this talent to reconfigure her own body. Early in *Synners,* Sam steals the specifications for an insulin pump data chip from a Diversifications database and modifies them to create a computer than runs off bodily energy via needles inserted into the user's abdomen. Not surprisingly, Fez and the other hackers are horrified by her creation, refusing to look directly at it and telling her that the pump is an "atrocity" and that her w ork is mere "grand-standing" *(Synners,* 54, 55). And, by their standards, Sam's work *is* an atrocity precisely because it gestures toward a certain truth that the other hackers repress throughout the majority of the novel: the fact that laboring subjects are always connected to the literal and narrative technologies of late capitalism in complex ways, that they are simultaneously authoritative subject-creators and the power sources (or, as Sam puts it, the "potato clocks") that feed the technological and economic systems. Indeed, the fact that Fez and the other hackers refuse to look at Sam's pump suggests that they *cannot* look at it, that they have no conceptual framework through which to perceive the intimate and overdetermined form of relations it represents.

The kinds of labor performed by Gator and Sam do more than simply create an ironic cyborg awareness about the ways that bodies change for and are changed by the machines. Instead, working outside the dominant value system of the postindustrial moment allows them to change the machines themselves. After Gina short-circuits the spike, Gator and Sam rebuild the net by running the only uninfected records of it—recordings of Gator's tattoos —through the only uninfected computer terminal: Sam's insulin pump. While the new system is based on the same information as the old one, Gator and Sam reorganize this information to more appropriately reflect the changed conditions of the net. For instance, Sam notes that the old communication routines are no longer useful because they are filled with "black holes" that may house lethal traces of the spike, and concludes that the new net must be structured as "something that a black hole won't recognize as existing" *(Synners,* 351). Accordingly, she creates a new

net based on communication routines of "sympathetic vibrations" between remnants of the old data nodes *(Synners,* 351). Just as their own ironic cyborg labor refuses traditional, neatly teleological stories of work and identity in favor of more complicated ones about the immediate connections between laboring subjects and technology, so, too, Sam and Gator's new net quite literally works by refusing linear transmission patterns, instead relying on a gestalt pattern of connections between multiple communication terminals. Perhaps even more significantly, while the old system would have interpreted the sympathetic vibrations as nothing more than nonsensical noise (much as its human counterparts interpreted Sam and Gator's labor), this same noise is vital to the proper functioning of the new system.[33] The shape of the reorganized net—and the reorganized socioeconomic relations it gestures toward —perhaps are indicated best by the newly-reorganized sentience that inhabits this net: Markt, the combined remnants of Visual Mark and Art Fish. To a certain extent, Mark and Art are congruent with Gibson's Neuromancer and Wintermute: much like Neuromancer, Mark wants to be an autonomous, transcendent "personality," and much like Wintermute, Art is a "decision maker, effecting change in the outside world" *(Neuromancer,* 269). However, unlike the Neuromancer/ Wintermute entity, (an entity whose namelessness suggests its boundless, unfathomable nature), Markt is quite literally "marked" by certain limits. In order to avoid erasure by the spike, Markt realizes that it must differentiate itself from the spike and its drive to absorb everything in its path. The new configliration creates the difference by "discarding duplicated items ... [and] carefully identifying and arranging what was left" *(Synners,* 385). Thus, while the Neuromancer/Wintermute entity becomes the abstract totality of capitalism or the sum total of the works," Markt's ability to reject totality and to carefully identify and arrange itself within a certain limited configuration gestures toward the beginning of a socioeconomic system in which "the works" are made visible and thus manageable.

The further ways that Markt represents this newly revised socioeconomic system are indicated by the way that his very name revises the word "market" itself. As the missing letter in its name suggests, Markt is an incomplete system and thus a dynamic one open to the possibility of change.[34] And indeed, Markt only survives the post-spike world by continuing to combine itself with, and re-mark itself in relation to, both the other sentient beings that come to inhabit the net and the humans who interact with

[33] Appropriate to its status as a kind of ironic cyborg system, the new net is neither perfect nor sufficient unto itself. As Sam points out, in its current configuration, the new system "[won't] accommodate real-time communication, only short messages in quick bursts" *(Synners,* 351). Thus the communication it allows (and the new system of relations it gestures toward) demands a certain amount of responsibility of the part of its users. Furthermore, although Sam, Gator, and Gina eventually help build a more stable version of this system, the process is not easy, and the system requires a continual modification and vigilance that occasionally frustrates even the most dedicated of these ironic cyborg workers *(Synners,* 434).

[34] Once again, Cadigan implicitly invokes and revises Gibson here. While Markt is a dynamic, open system, the Wintermute/Neuromancer entity is complete unto itself and precludes the possibility of change; as it tells Case, "things are just things."

it from the material world —for instance, Markt realizes that it needs Gina (or at least the electronic clone of herself that she leaves in cyberspace) to counterbalance its remaining tendencies toward self-absorption, and that it needs various hackers, doctors, and technologists to help it prevent another disaster like the spike *(Synners,* 432, 434). In appropriately ironic cyborg fashion, Markt does not simply represent a new socioeconomic order that is diametrically opposed to the old one, an order that merely replaces patriarchal and capitalist forms of labor and identity with matriarchal and non-capitalist ones —after all, that would simply reverse but repeat the forms of hierarchical ordering and the processes of devaluation that Cadigan criticizes throughout *Synners.* Instead, the new configuration suggests an *expansion* of the old order, a revised version that acknowledges connections to, and negotiates among, the multiple forms of work and identity available in the postindustrial moment.

If Cadigan successfully complicates the depictions of postindustrial subjectivity offered by her male counterparts, it seems that she does so, at least in part, by departing from one of the primary tenets of cyberpunk: that accurate portrayal of the contemporary moment depends on avoiding a fantastic and overly-dramatic resolution of events through apocalypse. Typically, cyberpunk expresses this "boredom with apocalypse" (Sterling xi) by bringing events to an apocalyptic climax but then refusing the traditional conclusion in which the bad old social order is replaced with a new and more utopie one. (Instead, as Gibson's Wintermute and Neuromancer put it, "nothing's changed. Things are just things.") To a certain extent, Cadigan's novel does seem to violate this tenet —after all, by the end of the story the bad guys are vanquished and the good guys (or gals) are free to construct new and apparently utopie forms of social relations in their wake. At the same time, however, Cadigan ultimately *does* refuse the grand narratives and triumphant closure typically associated with stories of apocalypse and utopia —or, more appropriately, she modifies them in ways congruent with the ironic cyborg sensibility she advocates elsewhere in her novel. Consider, for instance, one of the few times that her characters refer to the events around them as "apocalyptic": during the height of the battle with the spike, Sam and other young hacker drift into a conversation about their woefully complicated love lives, a conversation that concludes with Sam ruefully noting that "they could have been in the middle of a genuine apocalypse, and they'd still be trying to figure out their relationships. Human beings, they never quit" *(Synners,* 375–376). This seemingly off-hand remark is more than cute dialogue or character development; instead, it provides the key for (appropriately) reading the end of *Synners* itself. Cadigan suggests through Sam that no apocalypse is ever "genuine," or ever complete, precisely because the past, present, and future are linked together (for better or for worse) by the simple fact that everyday life and the relations informing those lives endure. In turn, this suggests that no utopia is ever complete either, that it, too, is always informed by the types of relations marking the social order it replaces.

Cadigan specifically reiterates this point in the final moments of the novel's epilogue. Once reconstruction of the net is well under way, various characters begin to pick up

and reconstruct the pieces of their own lives as well. Not surprisingly, many of these characters simply want to forget all about the disaster of the spike by rejecting socket technology and retreating from the corporate world altogether. And yet, despite the fact that she has been more deeply' marked by this disaster than any other character, (or perhaps because of this), Gina vehemently argues that retreat simply is not possible: "No one's doing the [socket impianti procedure now, but that's temporary... The door only swings one way. Once it's out of the box, it's always too big to get back in. Can't bury that technology. All we can do is get on top of it and stay the fuck on top... We still got to live with what we made" *(Synners,* 434–35). In an appropriately ironic cyborg fashion, then, Gina rejects both the dream of a wholly organic body and the myth of a wholly organic future distinct from the bad old past. Instead, she insists on attending to a present marked by/ elements of both the old and new social orders, and she insists on the need for marked bodies to bear witness to the connections between these orders. Thus, Cadigan's epilogue itself refuses the neat conclusion suggests by the novel proper, instead leaving us with the figure of Gina who —much like Donna Haraway's cyborg before her —"stands as the image of a cyborg culture's fear, lov e, and confusion" ("Cyborg Manifesto," 178).

Chapter 4: Of Fossils and Androids

(Re)Producing Sexuality in Recent Film

Drawing upon the time-honored Western rhetoric of colonial expansion, advanced communications technologies promise to give us a 'Whole new wwld out there." Despite the lure of these bright and shiny virtual futures, I would argue that the brave new world of high-tech colonization began with the very real, and not so bright or shiny, body of a sheep named Dolly. In early 1997 when a group of Scottish scientists introduced Dolly as the first complex organism to be grown from cloned genetic material, they seemed to have breached the final frontier between technology and nature, public production and private reproduction. Indeed, her very name reflected this blurred distinction, suggesting her simultaneous status as both organic creature and man-made product. However, Dolly's body did more than trouble general ontological distinctions; it specifically asked us to consider how' newly intimate connections between production and reproduction destabilize normative understandings of the seemingly natural sexual identities typically associated with, and defined by, biological bodies themselves.

N. Katharine Hayles argues that images of technologically-mediated or cyborg bodies such as Dolly's fascinate us because they mark the convergence of organic reproduction and mechanical production. In turn, this convergence points tow'ard a concurrent disruption of traditional sexual identities:

> Reproduction is slow, individual, and in humans usually monozygotic. It takes place within the female body, progressing under the sign of woman. By contrast, production is predictable and geared toward turning out multiple copies as fast as possible. Traditionally taking place within factories controlled by men, it progresses under the sign of man... Whatever else these entanglements mean, they signify how completely the assembly zone of replication has permeated the life cycle of generativity.[1]

It is not simply that Dolly's body collapsed the distinction between assembly zones and life cycles or masculine and feminine activity. More specifically, her very conception troubled culturally dominant understandings of how bodies function within reproductive systems. Typically, these understandings depend on the biological "fact" that organic reproduction involves the private union of two complementary (male and female) bodies. However, if reproduction can be redefined as a technological, then

[1] N. Katherine Hayles. "The Life Cycles of Cyborgs: Writing the Posthuman." In *The Cyborg Handbook,* ed. Chris Hables Gray (New York: Routledge, 1995), 333–54.

biologically-grounded notions of sexual difference become contextual ones open to reinterpretation.

While Dolly's status as the first complex clone may be unique, she points toward a reorganization of production, reproduction, and sexual identity occurring throughout the sciences of contemporary capitalism. In particular, advanced medical practices and new reproductive technologies (NRTs) including *in vitro* fertilization, embryo transfer, and sperm banking also transform natural reproduction and sexual identity. A science fiction-like future is not just immanent, then. Rather, it already has been with us for several decades. Likewise, the public furor that initially surrounded Dolly and the intersection of production and reproduction she represents is nothing new either. Over the past thirty years Hollywood alone has produced hundreds of images of clones, androids, and other technologically-mediated individuals we might call cyborgs: beings whose bodies indicate our complex and sometimes contradictory-range of hopes and fears about sexual identity in a high-tech era. In this chapter I examine two films that seem to mark the opposing ends of this range: Steven Spielberg's *Jurassic Park* and Ridley Scott's *Blade Runner.*[2] While Spielberg's parable about the dangers of excessive scientific pride works to maintain traditional differences between technology and nature (and, by extension, traditional sexual differences), Scott's film uses the technologically-constructed bodies of its cyborgs to explore how nature and natural identities themselves are socially and historically constructed.

As Donna Haraway points out, the cyborg has become an increasingly dominant figure in contemporary narrative because its part-organic, part-technological body marks it as a highly visual "signifying monster." This monster occupies a "destabilizing place in the great Western evolutionary, technological, and biological narratives," suggesting that identity itself is historically and socially constructed, rather than wholly and inevitably natural.[3] However, the form of that construction can vary. Cyborgs are assembled rather than born; as such, they are potentially subject to the programming of their creators. At the same time, the cyborg is freed from "biology as destiny"; its abilify to regenerate and recombine its own components indicates the possibility of new identities and new wavs of connecting with others.[4] The hybrid body of the cyborg is a useful narrative trope, then, not only because it literally brings together the relationship between production, reproduction, and sexual identity, but because it is open to various interpretations of that relationship as well.

---

[2] *Jurassic Park.* Dir. Steven Spielberg (Universal City Studios, Inc./Amblin Entertainment, 1993), hereafter cited in text as *Jurassic Park; Blade Runner: The Director's Cut.* Dir. Ridley Scott (Warner Brothers, 1992), hereafter cited in text as *Blade Runner.*

[3] Donna Haraway. "Introduction." In *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), 2; hereafter cited in text.

[4] Donna Haraway. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century." In *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), 150–51; hereafter cited in text as "A Cyborg Manifesto."

Although cyborg stories enjoy a specific prominence in our own cultural moment, such stories have circulated throughout the modern era. Indeed, if cyborg bodies function as a metaphorical site through which to explore the technological mediation of sexual identify in this brav e new postindustrial world, they often do so in reference to previously established narratives. Significantly, Spielberg's and Scott's films do just this: both invoke older stories of technologically-mediated sexual identity—Mary Shelley's *Frankenstein* and Sigmund Freud's Oedipal theories respectively —as frameworks through which to speak their own visions of cyborg identities.[5] In this chapter, I first consider how the intersection of production and reproduction influenced Shelley's and Freud's negotiations of sexual identity. After establishing this historical context, I then move on to more fully examine how contemporary modes of production and reproduction, combined with these earlier narratives, structure a similar negotiation in *Jurassic Park* and *Blade Runner.*

I. "Unusual Stories": Production, Reproduction, and Sexual Subjectivity

Typically, Western conceptions of sexuality have drawn upon evolutionary and biological theories of natural anatomy and the drive toward reproduction to depict sexual subjects as "embodied persons engaged in a heterosexual relationship within the confines of the family which takes reproduction to be the end or *telos* of sexuality."[6] Likewise, recourse to nature provides one of the primary justifications for the hierarchical relations among bodies in the economic sphere as well. Thus, it is hardty surprising that depictions of the normative sexual subject bear a striking resemblance to those of the desired socioeconomic subject.[7] The parallels between these two kinds of bodies are particularly clear in the field of reproductive science, a discipline that quite literally weds the zone of production to cy cles of reproduction, bringing the rhetoric and technologies of industrialism to bear on the defining moment of sexuality itself.

Modern reproductive medicine occupied an uneasy position throughout the nineteenth and early twentieth centuries, caught between the private sphere of domestic relations and the public realm of scientific/technological activity. In particular, ob-

[5] Although Freud's theories of sexual development are best understood as a series of ideas which he developed and modified throughout his career, I refer to them as if they do constitute a single "story," since this is how they are typically perceived by American culture and how they are depicted in the texts under consideration in this chapter.

[6] Judith Butler. *Gender Trouble: Feminism and the Subversion of Identic* (New York: Routledge, 1990), 122.

[7] Adele Clark. "Modernity, Postmodernity, and Reproductive Processes, ca. 1890–1990, or 'Mommy, Where Do Cyborgs Come From Anyway?'" In *The Cyborg Handbook,* ed. Chris Hables Gray (New York: Routledge, 1995), 147–48; hereafter cited in text. See also Donna Haraway, "The Biological Enterprise: Sex, Mind, and Profit from Human Engineering to Sociobiology." In *Simians, Cyborgs, and Women: The Reinvention of Nature* (New York: Routledge, 1991), 43.

stetric and gynecological texts of this period reflect the rhetorical authority of industrial discourse.[8] Early obstetrics drew upon emerging labor theories—theories based on Cartesian notions of the body as a "more or less adequate" machine —to frame pregnancy and childbearing as involuntary, mechanical processes. Within this scheme, biological reproduction was understood as roughly parallel to its industrial counterpart: if the fetus/ baby was the product of reproduction, logic dictated that women's roles in the reproductive process must be analogous to that of the passive machine. In turn, the male doctor took on the active role of laborer, guiding the entire reproductive process and —in his capacity as technical expert—intervening when the "more or less adequate" maternal machine went awry. Furthermore, as Emily Martin argues, the mechanical metaphors used to structure obstetric practice made such intervention increasingly inevitable, since "the metaphor of the uterus as a machine [legitimated] the use of actual mechanical devices... such as forceps" to ensure a successful natural birth.[9] While reproductive medicine itself may have threatened to confuse the difference between public and private activity, narratives of industrialism helped make sense of that confusion by reorganizing the previously feminine sphere of reproduction along the lines of masculine production.

As the century progressed and industrialism further codified mechanistic theories of labor relations, medical depictions of the relations among reproductive subjects shifted accordingly. In particular, the Fordist assembly line fragmented the labor process into increasingly small, repetitive units designed to eliminate wasteful activity and create a homogenized production system. Meanwhile, the pseudo-science of Taylorism justified heightened outside surveillance of the laboring body, positing a rational "technology of the productive human body" that would "reduce its complexity and regard it... as a concrete manifestation of laws revealed by natural abstractions."[10] Significantly, Taylorism altered previous Cartesian notions of the body as a kind of working machine by redefining "work" in the more narrow sense used in physics, as "force working against resistance" (Martin, 58). The body was no longer a "more or less adequate" machine, but one subject to the forces of resistance and entropy, and thus one that needed expert intervention to make it work efficiently. At the same time, reproductive medical practice altered its own depictions of laboring bodies in ways that made them compatible with dominant modes of production. Much like her masculine industrial counterpart, the "maternal machine" was seen as both inefficient and dangerous. Childbirth became a terrifying process for everyone involved, one that was described as analogous to "a mother falling on a pitchfork" or "a baby's head being caught in a doorjamb" (Martin, 64). In turn, the emerging tendency to portray reproduction as a mechanical disaster

[8] Susan Merrill Squier. *Babies in Bottles: Twentieth Century' Visions of Reproductive Technology* (New Brunswick: Rutgers University Press, 1994), 12; hereafter cited in text.

[9] Emily Martin. *The Woman in the Body:* A *Cultural Analysis of Reproduction* (Boston: Beacon, 1987), 54; hereafter cited in text.

[10] Bernard Doray. *From Taylorism to Fordism:* A *Rational Madness* (London: Free Association, 1988), 82–83.

waiting to happen authorized an increasingly active role for the medical practitioner, who was promoted from mere technician to heroic supervisor carefully controlling the machine to ensure a damage-free product/ child.

The modern birth control movement extended this scientific management of the reproductive body by applying it not just to labor and childbirth, but to the entire reproductive process. Reproductive technologies and services —such as contraception and family planning—were designed around Fordist and Taylorist assumptions about the need to standardize the otherwise inefficient body and marketed as a way to liberate that body from its own messy nature. While these practices literally reworked the individual body, they simultaneously constructed a normative *family* body as well. As Adele Clarke argues, the ultimate goal of these practices was "framed in terms of achieving the ideal nuclear family in as safe and secure as possible fashion... [And](hetero)sexuality was/is framed or assumed to be ubiquitous" (144). Much like reproduction itself, this ideal social unit —the heterosexual family —existed at the intersection of public and private, productive and reproductive activity. However, it was understood primarily in terms of industrial ideals: heterosexuality became a kind of "raw material" carefully channeled in certain directions and actively *made* into a usefid and efficient social product. In essence, then, the rise and consolidation of modern reproductive medicine had a threefold effect. First, by positing heterosexuality as a raw material, it participated in the construction of sexual difference as unproblematically natural and inevitable. Second, it authorized scientific and technological intervention into the supposedly private and natural realm of sexual reproduction. Finali), it reconfigured relations among the individuals involved with this process to align them with dominant modes of production.

Of course, medical representations of the reproductive process and its attendant sexual subjectivities were not the only ones available at this time. As Susan Merrill Squier suggests, this same era marked an increasing cultural passion for "unusual stories" about reproduction —ones which provided a "crucial, if usually unconscious, context in which [to] interpret, represent, respond to, and even deploy reproductive technologies" (10). Following Squier, we can identify two particularly prominent "stories" that mark the opposing ends of the modern reproductive period: Maty Shelley's *Frankenstein* and Sigmund Freud's Oedipal theories. Much like their medical counterparts, these stories engage in a careful negotiation of production and reproduction to construct specific narratives of normative sexual subjectivity. At the same time, however, both suggest a certain anxiety about the tendency to subordinate reproduction to production, and offer the possibility of maintaining a distinction between these two zones through narratives of closed, self-regulatory families.

Feminist scholars have long discussed Shelley's *Frankenstein* as a novel concerned with masculine technological intervention into the feminine sphere of reproduction.[11]

[11] For instance, earlier critics such as Sandra Gilbert and Susan Gubar read *Frankenstein* as a meditation on sexual reproduction and feminine artistic production in a patriarchal culture. Later feminist

More recently, however, critics including Gillian Beer and N. Katherine Hayles have read *Frankenstein* as an early cyborg story, one that specifically interrogates how the intersection of production and reproduction creates unnatural, technologically-mediated individual and familial bodies marked by distorted and disrupted life cycles.[12] In such readings, Victor Frankenstein emerges as a metaphorical cyborg, defined primarily by his identity as a scientist who uses unorthodox practices such as alchemy and electrical experimentation to create a literal cyborg. In doing so, he also creates an unnatural cybernetic family marked by the collapse of sexual difference: by merging production and reproduction, Frankenstein usurps both the masculine and feminine roles typically associated with them. Meanwhile, the monster himself is designated as both heterosexual male subject and feminized object of Frankenstein's "own homoerotic fantasy of omnipotence." (Mellor, 63). This new family "reproduces" its own stunted life cycles when the monster at first accidentally, but later systematically, murders his creator's biological family. In particular, the death of traditional feminine reproductive subjects like Justine and Elizabeth indicate Shelley's very real concern that technologically-mediated life cycles inevitably transform themselves into cycles of death instead.

Despite the overwhelmingly negative depiction of Victor Frankenstein and the emerging scientific practice he represents, Shelley does not simply dismiss science altogether. Rather, she suggests an alternative model of social relations, one that reestablishes the boundaries between production and reproduction by separating science from —and balancing its more dangerous tendencies against—the family itself. As Anne Mellor argues, Shelley advocates a specific form of familial relations: that of the "closed domestic unclear family of the eighteenth century, which is organized around the principle of personal autonomy and bound together by strong affective ties" (44). Because such families include a strong moral presence —the maternal subject —they are able to regulate themselves without intervention from the public sphere.[13] Significantly, Shelley's vision of the "appropriate" family is based on alternative scientific ideology. In particular, she grounds this family structure in Erasmus Darwin's theories of reproduction, which posit paired sexual reproduction as evolutionarily more advanced that hermaphroditic or solitary paternal propagation

writers like Anne Mellor continue this tradition, extending it to consider the relations between various scientific and capitalist ideologies as well. See Sandra M. Gilbert and Susan Gubar, *The Madwoman in the Attic: The Woman Writer and The Nineteenth-Century Imagination* (New Haven: Yale University Press, 1979) and Anne K. Mellor, *Mary' Shelley: Her Life, Her Fiction, Her Monsters* (New York: Methuen,1988), hereafter cited in text.

[12] Gillian Beer. *Darwin's Plots: Evolutionary Narrative in Darwin, George Eliot, and Nineteenth-Century Fiction* (London: Routledge, 1983), 110–11. See also N. Katherine Hayles, "The Life Cycles of Cyborgs: Writing the Posthuman." In *The Cyborg Handbook,* ed. Chris Hables Gray (New York: Routledge, 1995), 322.

[13] Such families are most notable for their absence from the dystopic present of the novel. However, Shelley indicates both their existence in the past (through the stories told by Felix DeLacey and his fiancée Safie) as well as their potential resurrection in the future (through the union of Felix and Safie) *(Frankenstein,* 117–22).

(Mellor, 97). Despite his radical and seemingly progressive scientific practice, then, the solitary Frankenstein ultimately emerges as *lower* on the evolutionary scale that the kind of family he abandons and denies.[14] Finally, by linking this family structure to Erasmus Darwin's concept of evolution, Shelley implicitly valorizes the kind of scientific practice advocated by the theorist himself: a form that observes and respects its distance from nature (including the natural family), rather than one which assumes the technological mediation of nature is a necessary and inevitable part of progress (Mellor, 94).

While Shelley explores, but ultimately rejects, the intersection of production, reproduction, and sexual identity, Freud's theories of the Oedipus complex involve a more complicated negotiation of this relationship.[15] As Wendy Wahl points out, much of Freud's work clearly is indebted to contemporary economic paradigms; indeed, his desire to establish a rational science of the irrational unconscious identifies him as the "mental industrialist and technologist" *par excellence.*[16] In particular, in its broadest form the Oedipus complex reads very much like a narrative of industrial production. The child begins as a pohniorphous sexual subject, but literally is driven through a series of predetermined stages of attachments and identifications, (attachment to the parent of the opposing sex, fear and hatred of the same-sex parent, then eventual rejection of the original attachment and sublimation of this fear and hatred in favor of identification with the same-sex parent), which ultimately result in a specific heterosexual identity.[17] In terms of this particular narrative, sexuality is a kind of "raw

[14] Of course, as Anne Mellor points out, this feminine role was still subordinate to that of its masculine counterpart, since Darwin posited the male as the primari' creative force behind conception, and Shelley herself suggests that, within the bourgeois family, the female subject was a moral (rather than economic) authority (88). Nonetheless, given that emerging scientific practices such as reproductive medicine threatened to erase the female subject altogether, I would argue that even this limited agency is better than none at all.

[15] While the late eighteenth and early nineteenth centuries were marked by competing—and often conflicting—notions of "proper" scientific procedure and its relationship to other areas of public activity, (such as economic or aesthetic practice), by the beginning of the twentieth century most of the "respectable" sciences agreed upon certain principles that were more similar to those governing the economic realm than the artistic one, such as the need for empirical evidence derived from direct manipulation of the material world. Thus, while Shelley could essentially deploy one (non-invasive) form of science against other forms to maintain a simple distinction between production and reproduction, such models were not as readily available to Freud. For further discussion, see Paid Weindling, "Darwinism and the Origin of Psychoanalysis." *British Journal for the History of Science* 17 (1984): 64–67; R. F. Baum, *Doctors of Modernity: Darwin, Marx, and Freud* (Peru, IL: Sherwood Sugden, 1988); and Teresa Brennan, *The Interpretation of the Flesh: Freud and Femininity* (New York: Routledge, 1992). While Weindling and Baum discuss the various scientific, industrial, and aesthetic discourses that informed Freud's writing, Brennan extends these discussions to specifically consider how the interplay of production and reproduction in such fields influenced Freud's work on sexuality.

[16] Wendy Wahl. "Bodies and Technologies: *Dora, Neuromancer,* and Strategies of Resistance." *Postmodern Culture* 3.2 (January 1993): 35 pars. Online. Internet. (10 October 1996), par. 15.

[17] Anthony Elliott. *Social Theory and Psychoanalysis in Transition: Self and Society from Freud to Kristeva* (Oxford: Basil Blackwell, 1992), 34; hereafter cited in text. Here, I follow Elliott's description

material," which, like any raw material, can and must be shaped into a specific product: the masculine or feminine subject.

If Freud's work can be read as a story about "social and sexual reproduction, [in which I the child's resolution of the Oedipus complex designates the unconscious reproduction of patriarchal culture" (Elliott, 34), at the same time it holds the potential to radically challenge dominant notions of subjectivity. At the more general philosophical level, the child's transformation from undifferentiated to specified sexuality upsets Cartesian notions of the fixed, stable self. In particular, Freud's description of this transformation collapses the mind/body distinction so crucial to this Cartesian self: while he suggests that sexuality is psychically (rather than anatomically) determined, these psychic forces play themselves out through identifications with and attachments to bodily surfaces, thus suggesting a dialectic, rather than opposition, between the abstract and material realms (Elliott, 29, 32). At the more immediate and practical level, this narrative also troubles conventional notions of individual sexual subjects and the relations among them. While the dominant thinking of Freud's time linked masculinity to normative sexuality and positioned "normal" women and children as relatively asexual creatures, Freud suggested that masculinity was a "laborious" process rather than a foregone conclusion, and that women and children were indeed active sexual subjects with specific sexual needs.[18]

However, Freud's real achievement is perhaps less in his challenge to conventional social norms than in the fact that his work is based on a synthesis of opposites: nature and culture, mechanics and biology, life and death, etc. The result is an ambiguous body

---

of the Oedipal complex, which is based on "several common threads" that appear throughout Freud's work. Furthermore, I would reiterate Elliott's cautionary point that this description posits a similarity between the masculine and feminine trajectories of the Oedipal scenario which Freud himself later rejected. Nonetheless, for the purposes of this project, the earlier "symmetrical" version is more useful than Freud's subsequent accounts, primarily because it is closest to popular understandings of sexual development.

[18] Barnaby B. Barratt and Barrie Ruth Straus. "Toward Postmodern Masculinities." *American Imago* 51.1 (spring 1994): 37–67. Although they do not discuss it specifically in terms of "cybernetic" subjectivity, Erich Fromm and Edith Kurzweil also offer good accounts of how Freud's work on sexuality undermines purely biological justifications for conservation notions of feminine sexuality. Likewise, Ronald Bayer argues that Freud's account of sexual development opened up the possibility that homosexuality could be, if not normative, at least an understandable and acceptable phenomenon as well. Bayer perhaps sums up Freud's negotiation of production and reproduction best, pointing out that he cautions against "nonprocreative sexuality" leading to "a dangerous diversion of energy from the task of human survival," but that, drawing upon the rhetoric of the industrial sphere, he actually defends alternate forms of sexual subjectivity as long as they do not hinder the individual's cultural productivity or "efficient functioning." For further discussion, see Erich Fromm, *The Crisis of Psychoanalysis* (New York: Holt, Rinehart, and Winston, 1970); hereafter cited in text; Edith Kurzweil, *Freudians and Feminists* (Boulder: Westview, 1995); hereafter cited in text; and Ronald Bayer, "Politics, science, and the problem of psychiatric nomenclature: a case study of the American Psychiatric Association referendum on homosexuality." In *Scientific Controversies: Case Studies in the Resolution and Closure of Disputes in Science and Technology,* eds. H. Tristram Englehardt Jr. and Arthur L. Caplan (London: Cambridge University Press, 1987), 381–400.

of ideas easily adapted to the cultural needs of a specific moment (Kurzweil, 12). This is particularly true of the Oedipus complex. As Nathan Hale Jr. argues, almost since its conception, Freud's work on sexual identity has been taken up as a biological romance consistent with dominant cultural notions of progress and the ideal forms of sexual relations needed to ensure that same progress. While Freud suggests that the *form* of the Oedipus complex is dictated by biology, his writing indicates a certain ambivalence about the specific *content* of the sexual subjectivities it produced. Nonetheless, both psychiatric therapists and lay people alike typically "fill in" the content with traditional understandings of sexuality, using the biological basis of the process to "emphasize control and 'sublimation' ... deploy ed in the service of [conservative] moralism."[19] In turn, these interpretations reinforce, rather than confuse, the boundary between the public and private spheres. As Erich Fromm notes, Freud's description of the individual body as a naturally "closed sy stem" often is extended to encompass the familial body as well (30). If all bodies are self-starting and self-regulating biological systems, then for the most part the Oedipal drama will sort itself out and sexual identities will be established *without* any form of public or technological mediation.[20]

Shelley and Freud's "unusual stories" suggest the very real difficulty of negotiating production, reproduction, and sexual identity. On the one hand, their depictions of sexual and domestic relations are *not* all that different than the larger forms of social and economic power relations. Ultimately, both assume that the normative family is essentially patriarchal in structure, and that the child's identity is a direct result of familial relations rather than some predetermined, mysterious given. On the other hand, both narratives can be mobilized to resist public intervention into the private sphere of individual and familial bodies. Shelley and Freud wrote at times of social and economic upheaval, and their writings reflect the struggle over meanings of public and private, production and reproduction, male and female, marking the ends of the industrial era. Furthermore, as I argue later in this chapter, these industrial-era narratives remain an important way to contextualize a similar struggle occurring in our own postindustrial moment.

[19] Nathan G. Hale, Jr. *The Rise and Crisis of Psychoanalysis in the United States: Freud and The Americans, 1917–1985* (Oxford: Oxford University Press, 1995), 6.

[20] We might well note the irony here that the same positive, rationalist outlook which informs popular conceptions of the Oedipal narrative also led to an emphasis on psychoanalysis as a form of treatment rather than a theoretical discipline of inquiry—thus legitimating therapy and public intervention into the supposedly private family drama.

II. More "Unusual Stories": Production, Reproduction, and Sexual Subjectivity in the Contemporary Moment

The sciences of post-industrial capitalism are marked by technologies of reproduction and simulation that convert the world into a web of interconnected, overlapping information codes, asking us to reconsider the normative definitions of bodies and sexual identities so laboriously established by their industrial counterparts. While earlier reproductive medicine drew upon the rhetoric and techniques of the industrial sphere in order to *control* an often-wayward biology, new reproductive technologies (NRTs) including *in vitro* fertilization, embryo transfer, and cloning replace certain steps in the previously natural process of reproduction, quite literally *transforming* biological reproduction into a cybernetic process where the boundaries between nature and technology become indistinct. Theoretically, this transformation remakes both the individual body and its social and political counterparts. At the local level, NRTs most immediately offer the possibility of children to those who previously have been denied them —infertile heterosexual couples, single individuals, gay and lesbian couples. These new ways of thinking about reproductive bodies undermine the biological justification for traditional social and political definitions of sexual identity. As behavioral scientist Adele Clark points out, "in the postmodern frame, gender, sex, and sexuality can all be disaggregated from reproduction," while the de/ and re/construction of "parenthood" and "the family" "requires legal and political (re)interpretation ... since even doing the census is affected" (148–49). Thus, if industrial reproductive technologies emphasized normative definitions of sexuality, their postindustrial counterparts seem to foreground the literal and discursive technologies through which re/production and sexual subjectivity potentially may be reformulated.

In practice, however, the increasing intimacy between production and reproduction typically reinforces traditional relations between the technically expert doctor and the passive, mechanized female patient. For instance, technologies such as ultrasound scanning and *in utero* surgery tend to fetishize the fetus as the expense of the pregnant woman, who is at best objectified as a "maternal vehicle" or "environment,"[21] and at worst "erased to make way for the one true person—the fetus." (Clark, 147). Similar relations govern the marketplace as well, where women become both objects of scientific study and commodified entities. Biotechnologists claim that middle- and upper-class women "are the best subjects for experimentation,"[22] while "baby brokers" predict an

[21] Janice G. Raymond. "Of Eggs, Embryos, and Altruism." In *Reconstructing Babylon: Essays on Women and Technology,* ed. H. Patricia Hynes (Bloomington: Indiana University Press, 1991), 62; hereafter cited in text.

[22] H. Patricia Hynes. "Biotechnology in Agriculture and Reproduction: The Parallels in Public Policy." In *Reconstructing Babylon: Essays on Women and Technology,* ed. H. Patricia Hynes (Bloomington: Indiana University Press, 1991), 119.

increasing turn to third-world and other economically disadvantaged women as surrogate mothers because "the going rate will be cheaper and the labor supply more passive and docile" (Raymond, 93). Such women are indeed cyborgs in the integrated circuit connecting technology and biology, production and reproduction, but rather than providing them with new forms of identity and agency, this same circuit seems to narrow their already slim options.

Perhaps one of the only radically new effects of advanced medical practice is that the objectify ing surveillance practices long applied to feminine reproductive subjects now are applied to masculine ones as well. Traditional constructions of the reproductive process position men as either agents of the public sphere who actively supervise pregnancy and childbirth, and/ or as equally active agents in the private sphere responsible for the initial act of conception itself. While the public agents —doctors, medical technicians, and other reproductive "experts" —still maintain their authoritative status, technological innovations such as "sperm banking" and artificial insemination transform the spatial and temporal role played by the heretofore-private male subject. Such practices appear to undermine the agency of this subject by equating "a man's sperm count and his worth as a man," and transferring paternal authority to the team of scientists and doctors now responsible for the actual creation of the embryo.[23] Furthermore, these practices increase the possibility of alternative, non-patriarchal family structures since they can be used by lesbian couples and single heterosexual women who desire children but do not necessarily desire sexual ties to a particular man. Given the more general crisis in constructions of masculinity marking the current moment, it is hardly surprising that the cultural response to NRTs reveals a great deal of anxiety about this transformation of the male subject into a (disposable) cyborg.[24]

Anxiety about the changing status of the male reproductive subject is revealed most clearly in the increasing number of new ethical and legal codes designed to regulate the use of advanced medical technologies. These codes attempt to maintain a distinction between technology and biology in ways that confirm, rather than challenge, normative constructions of the patriarchal family and the male reproductive subject. For instance, reproductive specialists typically refuse to use NRTs to fulfill the "unusual desires" of their lesbian and single heterosexual patients, instead reserving NRTs for infertile heterosexual couples. The 1986 American Fertility Society's ethical

[23] Suzanne Rubin. "A Sperm Donor Baby Grows Up." In *The Technological Woman: Interfacing with Tomorrow,* ed. Jan Zimmerman (New York: Praeger, 1983), 213.

[24] See, for instance, Vivian Sobchack, "Child/AIien/Father: Patriarchal Crisis and Generic Exchange." In *Close Encounters: Film, Feminism, and Science Fiction,* eds. Constance Penley, Elisabeth Lyon, Lynn Spigel, and Janet Bergstrom (Minneapolis: University of Minnesota Press, 1991); and Sarah William, "Perhaps Images at One with the World are Already Lost Forever": Visions of Cyborg Anthropology in Post-Cultural Worlds." In *The Cyborg Handbook,* ed. Chris Hables Gray (New York: Routledge, 1995). While Sobchack examines how images of "the family" are deployed to work through anxieties about crumbling patriarchal political and economic authority, Williams looks more specifically at the relationship between images of cyborgs and "the institution of heterosexual coupling," arguing that such images point to the crisis of identity experienced by men as sexual subjects.

report codifies and justifies such practices, stating that "[all] other things being equal, the Committee regards the setting of heterosexual marriage as the most appropriate context for the rearing of children."[25] The Committee links this "appropriate context" with a child's "right to healthiness," suggesting that the child's successful organic development is contingent upon the normative family unit.[26] By privileging only one form of familial relations as "healthy" and thus "natural," medical discourse ultimately reinforces the distinction between technology and biology by implying that the they may be compatible, but *only* when the former is adjunct to the latter. The report further suggests that this "appropriate" family is indeed a patriarchal one: when addressing the issue of surrogacy and parental rights, the authors recommend the formation of laws ensuring that "the man commissioning the production of a baby and his wife are the legal parents" (qtd. in Corea, 74). Such recommendations reveal a conservative negotiation of public production and private reproduction. If medical practice confuses the boundaries between the two in ways that trouble the agency of the male subject, this agency is firmly re-entrenched by transferring paternal authority to the economic and legal realms.[27] Thus, NRTs may transform the lived experience of individual subjects, but the nature of that transformation is understood —and carefully contained—by relocating and reiterating traditional notions of the patriarchal family within the public sphere.

Similar anxieties about production, reproduction, and sexual identity appear in everyday discourse as well. As various studies have noted, public response to NRTs reveals a strong desire to see advanced reproductive technologies used "properly" to maintain "the complete [heterosexual] family" (Clark, 148).[28] However, these same responses are less concerned with how these technologies affect individual bodies *per se* than with the ways they signal larger socioeconomic changes. Sociologist Eric Hirsch

[25] Quoted in Gena Corea, "Who May Have Children and Who May Not." In *Reconstructing Babylon: Essays on Women and Technology,* ed. H. Patricia Hynes (Bloomington: Indiana University Press, 1991), 76; hereafter cited in text.

[26] Gena Corea. "How the New Reproductive Technologies Will Affect All Women." In *Reconstructing Babylon: Essays on Women and Technology,* ed. H. Patricia Hynes (Bloomington: Indiana University Press, 1991), 56.

[27] Likewise, regardless of the mother's genetic relation to the child, she too retains status as a legal parent. At the same time, however, the actual phrasing of the proposed law reiterates the larger cultural tendency to construct women as passive and even disembodied presences in the reproductive process. The primary subject of the sentence (grammatically, as well as legally and economically) is, of course, the male subject. Indeed, "his wife" seems to be added in toward the end almost as an afterthought.

[28] For further discussion of surveys concerning contemporary attitudes toward the new reproductive technologies, see Eric Hirsch, "New Reproductive Technologies and the 'Modern Condition' in Southeast England." In *The Gender-Technology Relation,* eds. Keith Grint and Rosalind Gill (London: Taylor and Francis, 1995), hereafter cited in text; and Adele Clark, "Modernitv, Postmodernity, and Reproductive Processes, ca. 1890–1990, or 'Mommy, Where Do Cyborgs Come From Anyway?"' In *The Cyborg Handbook,* ed. Chris Hables Gray (New York: Routledge, 1995), hereafter cited in text. While Hirsch analyzes British responses to reproductive technologies in terms of popular stereotypes about consumer culture, Clark examines American responses to the same in terms of idealized conceptions of the family itself.

points out that most survey respondents express apprehension about the possibility of advanced medical technologies either commodifying reproduction as "baby-shopping" or becoming eugenic instruments of the state. In essence, concern about the status of the private family ultimately indicates concern about the larger social realm, since "when the basis of our most familiar relationships comes to appear potentially unregulated, then political and economic domains, by virtue of this intrinsic connection, become so as well" (Hirsch, 143). Insistence on the primacy of biologically-based family structures, then, serves a dual function. First, it provides a narrative framework to understand relations between individuals in an era where such relations are rapidly changing. Second, these same narratives function (much like they have in the past) as a way to check what appears to be the increasing power of science to manipulate and commodify individual or private bodies themselves.

III. Sons of Frankenstein: De- and Re Constructing Sexual Subjects in Jurassic Park

As critics who discuss *Jurassic Park* are quick to point out, Steven Spielberg's narrative is clearly and heavily indebted to Mary Shelley's *Frankenstein.*[29] In particular, Stephen Jay Gould notes that *Jurassic Park* participates in a time-honored Hollywood tradition of using *Frankensteins* narrative structure in a specific way, eliminating Shelley's complex negotiation of various scientific practices to create a simple and conservative parable about "technology transgressing the boundaries of its legitimate operation."[30] At the broadest level, *Jurassic Park* is indeed a sweeping condemnation of such transgressions. The story begins with scientist/ entrepreneur John Hammond asking three other scientists (chaotician Ian Malcolm, paleontologist Alan Grant, and paleobotanist Ellie Sattler) to verify the safely of the island park and its genetically cloned dinosaurs. Of course, Hammond —much like his Romantic predecessor, Victor Frankenstein —is utterly convinced that he has complete control ov er his creations. While Victor Frankenstein's "control" metaphorically resides in his ability to grant or deny his monster access to specific forms of family and reproduction, this same control manifests itself literally in *Jurassic Park.* As one of Hammond's scientists proudly

[29] See, for instance, G. Thomas Goodnight, "The Firm, The Themepark, and The University: Fear and Trembling on the Postmodern Trail," *The Quarterly journal of Speech* 81.3 (August 1995): 267–90; and Sylvia Kelso, "And Who Shall Inherit the Earth?" *Sirius* 4 (February 1994): 8–11. Both authors acknowledge Spielberg's debt to Shelley, especially in the film's depiction of science gone awry and the ensuing threat to humanity itself. Furthermore, both acknowledge Spielberg's emphasis on "family values" as a solution to this dilemma, but neither discuss its relation to larger cultural concerns about the relationship between production, reproduction, and sexual identity. Instead, Goodnight dismisses it as an "oddly" placed concern, while Kelso focuses primarily on comparing Spielberg's relatively "enlightened" depictions of sexual subjectivity in comparison to those of Michael Crichton's original novel.

[30] Stephen Jay Gould. *"Jurassic Park."* In *Past Imperfect: History According to the Movies,* ed. Mark C. Carnes (New York: Henry Holt, 1995), 33.

points out, "population control is one of our security precautions. There's no unauthorized breeding in Jurassic Park... We've engineered [the dinosaurs] that way." The visiting scientists remain skeptical, and inevitably, their doubts are confirmed by a series of disasters that disable the park's security systems and unleash the rampaging clones. Meanwhile, the scientists realize that the dinosaurs have somehow begun breeding, and that their numbers and locations can no longer be accurately predicted. In good Hollywood fashion, then, Spielberg suggests technological excess leads to dangerous excesses of biology as well, ones that jeopardize the very existence of humanity.

At the same time, however, Spielberg—much like Shelley herself—is concerned with more than just the general threat science poses to humanity/. Instead, he uses the larger "technology versus nature" debate to explore how the intersection of production and reproduction in scientific practice more specifically troubles normative understandings of sexual identity and family. For instance, *Jurassic Park's* prehistoric cyborgs, the dinosaurs, function much like Shelley's own cybernetic monster to indicate a very real set of anxieties about the blurring of heretofore distinct sexual identities. The body of Frankenstein's creation literally collapses the distinction between technology and nature and production and reproduction, metaphorically gesturing toward the collapse of discrete sexual identities as well: the monster's genitalia and sexual drives may well mark him as a heterosexual male, but he is simultaneously "feminized" as the object of his creator's own (homoerotic) desire. Spielberg establishes a similar set of confused boundaries with his monsters. At the outset of the film, *Jurassic Park's* dinosaurs are not just feminized, but quite literally female, objects of scientific manipulation. However, soon after the they begin their rampage we learn that, because they lacked the dinosaurs' full genetic sequences, Hammond's scientists decided to fill in the gaps with the "next best thing" —frog DNA. Unfortunately for those trapped on the island, the breed of frogs they used happens to be ambisexual, and their DNA allows the otherwise female clones to become temporarily "male" for the purposes of procreation. On the one hand, the prehistoric cyborgs' ability to breed independently of their creators does indeed suggest the triumph of biological reproduction over scientific production. On the other, the dinosaurs ultimately remain *unnatural* because their reproduction is disengaged from its conventional heterosexual context. Despite the overt differences between them, then —Shelley's monster is essentially a non-reproductive subject, while Spielberg's monsters are excessively reproductive —both narratives clearly highlight the excesses of unnatural reproduction.

Significantly, Spielberg "updates" Shelley by changing the primary sexual identity of his cyborgs. Shelley designates her monster as male to explore the dangers of a scientific practice that threatens to eliminate female subjects from the public sphere of production as well as the private one of reproduction. By marking his dinosaurs as female, Spielberg taps into contemporary anxieties about the transience—and potential disposability —of *male* subjects in the postindustrial era. The only character who seems to be even vaguely aware of the dinosaurs' "true" nature from the outset is Hammond's head gamekeeper, Paul Muldoon. As he points out when he first meets

the scientists, the dinosaurs are more than "clever girls," they are also "extremely intelligent ... problem-solving intelligent. They teach each other and ... they remember." Muldoon advocates destroying the dinosaurs because of their literal threat: they have already managed to break through the electric security fences once before, and show signs of trying to do so again. However, his status as the "great white hunter" —the avatar of traditional masculinity —implies that he also metaphorically voices a certain cultural anxiety about the "unnatural desires" of technologically-enhanced female reproductive subjects who no longer need their male creators. Muldoon's fears prove to be correct when the "clever girls" indeed do break through the security perimeters yet again. Furthermore, the fact that they rather selectively devour men in traditional positions of public power— Hammond's lawyers, scientists, and of course Muldoon himself—suggests that these unnatural females have breached the security of patriarchal authority as well, which is literally swallowed up by the very technologies it creates.

Of course, the dinosaurs do more than disrupt power relations in the public sphere; their own "unusual" (and frighteningly unknowable) family structures point toward a similar disorganization of power relations in the private sphere. The first half of the film is marked by human families that seem to be just as dangerously fragmented and disruptive as the dinosaur ones: scientists Ellie Sattler and Alan Grant fight over whether or not to have children (she wants them, he doesn't), the divorced Malcolm attempts to "steal" Sattler away from Grant, and Hammond brings his grandchildren to the island only to foist them off on his resentful employees as soon as possible. The primary source of this fragmentation is absent or irresponsible fathers, men who are too caught up in their identities as workers and scientists to perform their paternal duties. Hammond is perhaps the most obvious example: although he takes a rather fatherly pride in his dinosaurs, envisioning them as both family and family entertainment, this devotion to his technological clan causes him to sacrifice the safety of his biological kin. When the children are trapped in the presen e, miles away from the main compound, Hammond panics at the thought of harming the *dinosaurs,* frantically assuring everyone that "things will be under control soon." Even when it becomes clear that things will not be under control soon, Hammond clings to his Frankenstein-like belief in the ultimate power of science, arguing that "creation is an act of sheer will —next time it will be flaw less."

While Hammond seems to embody all the problems of traditional science and scientific control, Spielberg's depiction of lan Malcolm suggests that these same problems continue to plague supposedly radical or alternative science as well. Much like Hammond, Malcolm is a "bad dad" precisely because he subsumes himself and his relations with others to the dictates of scientific theory. For instance, chaos theory's assertion that all events occur at random, and that there are "no set patterns" provides Malcolm with (a rather flimsy) justification for his failed familial relations: "oh, hell yeah. I love kids. [But] anything can and does happen. Same with wives, for that matter." Despite the chaotician's scorn for Hammond's naive scientific optimism, the film sug-

gests that Malcolm's own scientific perspective is equally dangerous one, leading to sterility and impotence on the part of the masculine subject. This dangerous impotence is revealed most clearly by Malcolm's one attempt to assert paternal authority — when he attempts to save Hammond's grandchildren from a Tyrannosaurus Rex attack. Although the chaotician does manage to distract the T-Rex long enough for the children to reach temporary safety, he himself is unable to escape without a severe wound (to the thigh, no lessly which relegates him to the sidelines for the rest of the film.

Jurassic Park does not attempt to alleviate the anxiety provoked by its monstrous cyborgs through their reformation or elimination; instead, it endorses the reorganization of *human* relations within the private sphere of the family. Significantly, Ellie Sattler becomes the moral center of the film, chastising Hammond (and ultimately all scientists) because, "you never have control! That's the illusion... I made that mistake too, I didn't have enough respect for that power and it's out now," and concluding with the almost-whispered revelation that, "the only thing that matters now are the people we love." Up to this point, the film has positioned Sattler as a bridge between masculine/ technological production and feminine/ biological reproduction: not only is she the only female scientist in the otherwise all-male group, but she is also the only adult who wants and values children as much as she wants and values scientific work. However, with this speech, Spielberg seems to reject the possibility of a potentially new relationship between production and reproduction, retreating to a more conservative vision of this relationship and reconfiguring Sattler herself soleiy as a traditional domestic subject. Indeed, she becomes the natural maternal alternative to the ravenous dinosaurs, which seem to have little of Sattler's newfound respect for such distinctions.

While Sattler articulates the film's thematic emphasis on the necessary distinction between public and private and production and reproduction, it is ultimately the third male scientist, Alan Grant, who actively reinstates these distinctions by reconstructing conservative, paternally-oriented family relations. At first the paleontologist, like his counterparts, consistently privileges work above family. At the same time, he is also the least invested in it, realizing that the dinosaurs mean "we're out of a job, we're extinct... I guess we'll have to evolve." It is precisely Grant's evolution —from autocratic scientist to concerned and understanding father—that structures the last half of the film. After the park's automated security systems fail, the scientist is trapped in the preserve with Hammond's grandchildren. Hammond assumes the children will be safe because "who better to get them through Jurassic Park than a dinosaur expert?", but the film itself links Grant's success to his paternal rather than scientific abilities. Grant's assumption of this new role is most clearly marked by the scene in which a rampaging Tyrannosaurus traps the younger child, Tim, in a tree. Grant attempts to coax Tim to safety, telling him, "it's just like climbing down from a treehouse. Didn't your dad ever build you a treehouse?" Despite Tim's negative (and understandably hysterical) reply, the scientist patiently climbs the tree himself and leads the boy down. The dinosaurs may be the immediate cause of the child's predicament, but as this exchange suggests,

Tim's lack of a traditional father-son relationship is also equally problematic (leaving him quite literally "up a tree"). In teaching Tim basic survival skills, Grant takes the place of the boy's absent father, providing the paternal authority Tim needs to successfully complete his childhood development and restoring the natural order of familial relations.

Grant also reestablishes natural father-daughter relations with Hammond's oldest grandchild, Alexandra. Much like her brother Tim, Alexandra initially seems to lack both a traditional family structure and, in turn, a specific sexual identity. Indeed, while Tim is still clearly a child in his formative years and rather easily reinserted into appropriate familial relations, Alexandra presents a more difficult problem. As a thirteen year-old on the edge of puberty who is neither child nor adult, she occupies a liminal developmental space, continually threatening to disrupt the film's already-tentative negotiation of sexual difference. In particular, the film suggests she is in "danger" of assuming a sexual identity as monstrous as that of her saurian counterparts. Although she is biologically female, (as a series of T & A shots disguised as "action sequences" makes quite obvious), she presents herself in culturally masculine ways — shortening her name to Alex, wearing boys' clothes, and proudly claiming the (typically male) outlaw status of a computer hacker for herself.

However, Grant *does* reassert generational and sexual hierarchies in y et another "up a tree" scene. After rescuing Tim and spending the night in the preserve, Grant and the children awaken to find themselves surrounded by a herd of sauropods peacefully grazing on the very tree where they have slept. As odd as this scene might seem, (especially after the film has established the danger of the dinosaurs), odder still is Alex's behavior: the previously articulate and fearless girl suddenly is reduced to babbling, simultaneously shrinking away from the "meatosaurs" and yet begging Grant's permission to touch them —only to shriek in (girlish) disgust when one of the dinosaurs sneezes and spews mucous all over her. Although Grant and Tim's laughter implies that this scene is merely a moment of light-hearted comic relief, the comedy itself is an inevitable part of the film's overall logic. Elsewhere the dinosaurs are coded as female, but in this scene the long-necked, small-headed sauropods seem strikingly phallic, which invites us to read Alex's "misadventure" as her introduction to adult sexuality. Furthermore, the pastoral tone of the scene suggests that Alex's humiliation is a natural and necessary part of "becoming a woman," while Grant and Tim's mocking laughter seals their own masculine bond and firmly inscribes the sexual difference between themselves and the newly-feminized Alex. Not surprising, for the rest of the film Alex behaves in a manner more "appropriate" to traditional notions of daughterly and feminine behavior, deferring to the wisdom of her elders (especially Grant), and taking on a protective, almost maternal, role toward Tim.

Soon after this scene, the combined efforts of Grant in the preserve and Sattler at the compound reunite the two groups and fully restore the newly completed family. Not surprisingly, once the family is reorganized and biologically-based narratives of sexual identity are reestablished, technology itself begins to work again. However, at

this point it is clearly an adjunct to, rather than the primary force shaping, familial relations. In fact, technology becomes a tool to preserve these still-fragile connections. When two raptors track the humans to the main control room, Grant and Sattler desperately attempt to hold the door shut with their combined body weight while Alex hacks into the computer mainframe and reboots the electronic locks to literally and metaphorically seal off the barriers between the unnatural dinosaurs and the natural family. (We might well note that the newly-feminized Alex is allowed to retain her masculine computer expertise, as long as it is used for the good of the family.) Furthermore, as the final scenes on the island suggest, it is not technology but the human family's ability to cooperate that is its defining attribute; the one that ultimately distinguishes it from the monstrous families embodied by the dinosaurs. Ellie, Grant and the children survive Jurassic Park because they learn to assume the conventional subject positions of the nuclear family; indeed, their cooperation is guided by these structures. In contrast, the dinosaurs' lack of stable sexual identities parallels the lack of cooperative structures among them. Ultimately, it is precisely this disorganization which allows the humans to escape: a T-Rex appears out of nowhere, breaking the raptors' concentration and provoking a fight among them. Taking advantage of the ensuing uproar, the humans flee the compound and the park itself.

As film theorist Janet Bergstrom notes, Spielberg's popularity derives from more than his ability to tell simple, wish-fulfilling stories; perhaps more than anything else, his films succeed due to dazzling special effects and a slick directorial style.[31] While this is certainly true of *Jurassic Park,* (who went to see anything besides the dinosaurs?), we can complicate Bergstrom's observation by considering the ways in which story and style mutually bolster one another. For instance, Spielberg's thematic insistence on the dangers of a technologically-mediated world reveals itself perhaps most subtly by the simple fact that he chooses to have most of the human characters wear eyeglasses —a visual reminder that their world views are (once again, quite literally) mediated by a technological framework. The further removed a character is from the natural order of things, the more obvious his or her glasses: while the good-intentioned but misguided Hammond sports a rather delicate pair of wire-rimmed frames, the ultimate bad guy—computer programmer-turnecl-corporate thief Dennis Nedry—depends on plastic-rimmed, coke-bottle "geek glasses" to see anything at all. Indeed, Nedry's blindness (in both the literal and metaphorical sense) becomes his undoing. Nedry engineers the park's security system crash so he can escape the island unnoticed with the dinosaur embryos he has stolen for one of Hammond's corporate rivals. Blinded by greed and haste, the programmer fails to compensate for the possible effects of an incoming tropical storm, the force of which washes away his glasses and disables the security systems altogether, leaving him stranded in the park by himself. Since the

[31] Janet Bergstrom. "Androids and Androgyny." In *Close Encounters: Film, Feminism, and Science Fiction,* eds. Constance Penley, Elisabeth Lyon, Lynn Spigel, and Janet Bergstrom (Minneapolis: University of Minnesota Press, 1991), 33.

systems crash is precisely what allows the dinosaurs to escape their holding pens, there is a certain amount of poetic justice in the fact that Nedry becomes their first meal when a pair of Dilophosaurs track him to his car, spit poison into his eyes, (blinding him even further), and promptly devour him.

In contrast, the two characters who most clearly perceive the dangerous nature of the dinosaurs —Paul Muldoon and Ellie Sattler—are two of the only ones who do not wear glasses. However, Spielberg suggests that Muldoon's vision still is not quite 20/20 because he only perceives the *immediate* threat posed by the dinosaurs. In turn, this shortsightedness leads to the gamekeeper's eventual demise when he overlooks a rather obvious trap set for him by two raptors. Meanwhile, Sattler emerges unscathed because she does see "the big picture," recognizing that the only way to survive Jurassic Park is to shift attention from the dinosaurs back to the private realm of human relations. Of course, one other character, Alan Grant, also eventually achieves this same clarity of vision. Early in the film the paleontologist almost always wears glasses, but as the story progresses and Grant sheds his scientific identity in favor of his more natural one as husband and father, he becomes increasingly able to function without them. By suggesting that eyeglasses are just as likely to distort vision as they are to enhance it, Spielberg neatly underscores his film's preoccupation with the territying possibilities lurking behind even the simplest and seeming!y most benign forms of technology.

Spielberg continues to visually supplement *Jurassic Park's* thematic emphasis on the dangerous consequences of a world mediated by technological vision through his direction of the dinosaur sequences. In particular, the ability of the camera to control the dinosaurs —its ability to give us a natural, unobstructed view of them —directly parallels the human characters' ability to control themselves and their relations to others in a natural or appropriate manner. At the beginning of the film all of the male characters subsume their biological identities as sexual subjects to their cultural ones as scientists who believe they can control and reconstruct nature at will. At first, their capacity to do this successfully appears to be reinforced by the fact that they (and we as audience members) see the dinosaurs in a relatively conventional way, through medium- or long-range shots that place the dinosaurs fully within visual range. However, Spielberg immediately troubles this seemingly natural vision through a shotreverse shot structure in which we see the dinosaurs from the scientists' point of view, then immediately shift to an omniscient third-person perspective that shows the scientists looking at the dinosaurs through some sort of man-made barrier. For example, when the scientists arrive on the island and see their first dinosaur herd, we soon realize that they only see the herd through the relative safety of their heavily-armored jeeps. Eikewise, the next marvel they witness — the hatching of baby dinosaurs in Hammond's breeding laboratories —is also mediated and partially obscured from them (and us) by a thick glass safety wall. Significantly, both sequences end with the scientists throwing caution to the wind and bursting through the man-made barriers, revealing the inherent flimsiness of such barriers. As these opening scenes suggest then, the artificial restraints

enabled by advanced technologies inevitably give way to a reckless *lack* of restraint on the part of scientists themselves.

Not surprisingly, the inability of the scientists to maintain this false control over either themselves or the dinosaurs becomes apparent when the dinosaurs begin their rampage. At this point, their visual representation shifts accordingly. Spielberg shoots the rampage sequences with frantically paced shots that fragment our view of the dinosaurs, revealing certain strategic parts but obscuring our view of the whole through a maze of technological apparatuses. For instance, in one scene where a group of construction workers are carefully unloading a new raptor into the park, the raptor is almost completely hidden by its cage and the surrounding trucks and forklifts. When the dinosaur finally does the inevitable, attacking and eating one of the workers, we see little more than an (inhumanely) clam, glowing, reptilian eye. Like any good horror director, Spielberg seems to know that what viewers imagine is far more terrifying than anything he can show. At the same time, the direction of such scenes carefully manages the terror itself: what is truly scary is not so much the destructive nature of the dinosaurs, (after all, we rather expect that), but the fragility of our supposedly invincible human technologies. By filming his dinosaurs so they literally break through the boundaries of their cages and the boundary of the camera frame itself, Spielberg conveys a sense of both their unnatural strength and the unnatural scientific pride that believes it can manipulate the border between technology and nature at will.

Elsewhere, Spielberg uses these fragmented depictions of dinosaur bodies more specifically to indicate the very real danger of fragmented familial relations in this high-tech world. When the humans go into the park for their first extended tour, Hammond's grandchildren are attacked by a T-Rex who pins clown their jeep, while Malcolm and Grant watch helplessly from a different jeep less than a dozen feet away. Since the narrative has already established that Grant and Malcolm initially take the second jeep as a way to avoid direct contract with the children, the message of the scene seems clear: the scientists' earlier decision to refuse parental responsibility, to maintain a sort of emotional distance from the children, inevitably leads to situations in which that emotional distance becomes a physical isolation literally endangering the lives of those same abandoned children. As in the earlier scene with the raptor, here too Spielberg heightens the tension of the scene with incoherent, partially obscured shots of the T-Rex. More specifically, he connects the horror of the T-Rex attack to the horror of the fragmented family by shifting back and forth from various characters' points of view: Alex sees the T-Rex's massive eye peering in through a window, Tim sees its arm come crashing through the car roof, Grant sees its tail smashing against the children's jeep, and Malcolm sees it slowly lowering its head toward him. Despite the fact that we do see more parts of the dinosaur in this scene that we have in other rampage sequences, the parts never add up to a coherent whole —much like the relations among the individual humans themselves.

Not surprisingly, when the various humans —especially Grant—begin to accept their "true" sexual identities and to reorganize themselves into appropriate familial

patterns, the manner in which we see the dinosaurs shifts once again. Although the dinosaurs technically continue to threaten the humans until the very end of *Jurassic Park,* they become less frightening because they are now fully available to the human eye and contained within the space of the camera frame. This shift occurs soon after Grant has established his paternal authority over Tim and Alex, when the still-fragile human family appears to be threatened once again by a stampeding Gallimimus herd. Unlike earlier attack sequences, this one is conveyed primarily through a series of long shots in which we clearly see both the dinosaur herd and the human family unmediated and unobscured by any technological apparati within the scene or by any fragmented shots of the scene itself. Spielberg further indicates the restoration of order within and between the two species by visually separating them from one another with natural barriers such as hills and fallen trees —barriers which shelter and protect the human family from its monstrous counterpart far more effectively than did the previous artificial ones.

Finally, the direction of the film's closing sequences also works to reinforce this newly reaffirmed sense of natural order. In the penultimate scene, a maternal Sattler helps evacuate the wounded Malcolm and the two appropriately subdued children. Meanwhile, a mournful and considerably less vital Hammond stares wistfully at the island. Grant conies up behind him and solicitously puts his arm around the old man, gently helping him to the helicopter. With this simple gesture, the linear accession of generations is firmly sealed, as Grant literally assumes the position of the displaced patriarch. This same sense of linear order is underscored again in the final scene as the camera cuts from Grant watching a bird through the window to a long shot of the bird and helicopter in parallel flight away from the island. Just as Grant is the rightful successor to Hammond, so too, the bird is the rightful descendant of its ow n ancestors, the dinosaurs. Given the film's insistence on the need for conventional relations both within and between species, this last moment ultimately reads not as a retreat from the complexities of the contemporary high-tech world, but instead as the inevitable (and inevitably positive) movement away from a confused and misguided past toward a more orderly future.

IV. More Oedipal Than Oedipus: Troubling Sexual Difference in Blade Runner

Much like *Jurassic Park,* the narrative of Ridley Scott's *Blade Runner* seems to present the technological replication of bodies as a threat to traditional notions of sexual difference.[32] Scott introduces this problem by first introducing the more general

[32] There are at least five different filmed versions of *Blade Runner,* plus several other scripted ones that were never filmed at all. The two versions most often discussed by critics are the 1982 US theatrical release (often called "the original screenplay," although it was actually the second version released) and

problem of distinguishing between organic and technologically-mediated bodies in a high-tech world. *Blade Runner* tells the story of a dystopic corporate-run future in which humans use cyborg slaves called "replicants" for the dangerous physical labor involved in space exploration and off-world colonization. Humans are almost completely dependent on these replicants to ensure the survival of their rapidly expanding society, but at the same time, they are obsessed with maintaining the difference between themselves and their slaves to preseme the status quo. This becomes increasingly difficult when the newest replicants, the Nexus-6 models, are designed to look and act "more human than human." In order to prevent confusion between species, the replicants are banned from the homeworld Earth. If they try to return, they are hunted down and "retired" by blade runners, a special police force trained to recognize the subtle differences between humans and replicants. These differences revolve around issues of production, reproduction, and the forms of identity associated with the two different types of bodily origins. Theoretically, replicants can be identified by their (inhuman) lack of empathy for other living creatures —a lack that occurs because they are created in laboratories rather than raised in normative family environments. To further ensure that they do not acquire such empathy, replicant DNA is designed to stop duplicating itself after four years. Thus, the replicants are subject to a kind of extreme population control: the technological manipulation of their bodies' most basic genetic structures.

However, these seemingly simple distinctions between natural human and unnatural cyborg identity are complicated almost immediately when a group of the Nexus-6 replicants —Roy Batty, Leon, Pris, and Zhora —bond with one another and escape their enslavement on Mars. The cyborgs return to their "birthplace" in Los Angeles to seek out their creator Eldon Tyrell and demand that he give them "more life." As leader Roy Batty argues, the replicants deserve freedom from technological control because "we're not computers, we're physical." In essence, Batty's distinction between the replicants and computers both borrows from, and yet radically subverts, the traditional distinction between humans and their machines. On the one hand, Batty does maintain a border between "human" and "other"; on the other, he simultaneously expands the boundaries of "humanity" itself to include all active, material bodies, regardless of the manner of their creation. As Batty's cyborg logic suggests, origins are irrelevant, and identity cannot be simply or directly linked to either technological production or organic reproduction. The rest of the film is split between the replicants' search for Tyrell and the story of blade runner Rick Deckard. Deckard is forced out of retirement to eliminate the escaped replicants, but finds it increasingly difficult to do so when

---

the most recent one, the 1992 "director's cut." My discussion of *Blade Runner* focuses on the latter. Although there are certain differences between the various versions, (most significantly, the director's cut does not include the hard-boiled voice-over and "happy ending" of the 1982 US theatrical release), I believe the changes in the director's cut only emphasize, rather than significantly alter, the prominent themes of the earlier versions. For further discussion of the differences between the various editions of *Blade Runner,* see Murray Chapman, "Frequently Asked Questions: *Blade Runner,"* 1 September 1994. <http://www.vir.c0rn/Vide0Film/Blade/brfaq_7.html> (21 April 1997).

he becomes sexually attracted to Tyrell's "niece," the replicant Rachel, and begins doubting the seemingly natural differences between humans and replicants.

In its broadest outlines, *Blade Runner* draws on the Frankenstein myth for to present a dystopic future where production and reproduction become frighteningly indistinguishable because the former appears to usurp the latter altogether.[33] Indeed, flic film introduces this problem almost immediately after the opening credits, when the human blade runner Holden attempts to determine the "true" nature of the suspected replicant Leon.[34] Like all blade runners, Holden uses the Voight-Kampff test: a series of questions designed to elicit specific emotional and physiological responses in the test subject. If the subject's responses fall outside certain "appropriate" ranges, he or she is designated as a replicant and mercilessly "retired." Leon appears to fail the test rather spectacularly: when Holden asks him to "tell me about your mother," the android whips out a gun and blows him away. Much like Frankenstein's monster, Leon appears to affirm dominant cultural anxieties about the confusion between production, reproduction, and familial relations. The replicant reacts "unnaturally" to a seemingly innocuous question about biological kinship precisely because, as a laboratory creation, he *has* no mother or family—and once again, the technological mediation of life inevitably seems to result in the death of biological humanity itself.

Along with its general references to the Frankenstein myth, Scott's film more specifically interrogates how cyborg bodies disrupt conventional understandings of sexual difference by drawing upon one of contemporary culture's most resonant stories of sexual development—the Oedipus myth.[35] For instance, the scene in which Batty and

[33] For further discussion of *Blade Runner's* indebtedness to the Frankenstein myth, see Joseph Francavilla, "The Android as Doppelganger." In *Retrofitting* Blade Runner: *Issues in Ridley Scott's* Blade Runner *and Philip K. Dick's* Do Androids Dream of Electric Sheep? ed. Judith Kerman (Bowling Green: Bowling Green State University Popular Press, 1991); David Desser, "The New Eve: The Influences of *Paradise Lost* and *Frankenstein* on *Blade Runner."* In *Retrofitting* Blade Runner: *Issues in Ridley Scott's* Blade Runner *and Philip K. Dick's* Do Androids Dream of Electric Sheep? ed. Judith Kerman (Bowling Green: Bowling Green State University Popular Press, 1991); and Leonard Heldreth, "The Cutting Edges of *Blade Runner."* In *Retrofitting* Blade Runner: *Issues in Ridley Scott's* Blade Runner *and Philip K. Dick's* Do Androids Dream of Electric Sheep? Ed. Judith Kerman (Bowling Green: Bowling Green State University Popular Press, 1991). While Francavilla and Desser focus on the parallels between Scott's film and Shelly's novel, Heldreth explores the similarity between visual motifs in *Blade Runner* and various film adaptations of Shelley's novel.

[34] In fact, the brief pre-credit scenes prime ns for the anxieties introduced in the interrogation scene by providing us with the backstory of the replicants' escape from Mars and juxtaposing it with rather apocalyptic shots of a city in flames. Since these pre-credit scenes suggest that the replicants possess a generally violent nature, it seems rather easy to read the next full scene—the interrogation—as an elaboration on the precise root of that violent nature.

[35] For other examinations of the Oedipal motifs in *Blade Runner,* see Elissa Marder, *"Blade Runner's* Moving Still." *Camera Obscura* 27 (September 1991): 88–107; Kaja Silverman. "Back to the Future." *Camera Obscura ay* (September 1991): 108–33; and Mary Ann Doane, "Technophilia: Technology, Representation, and the Feminine." In *Body/ Politics: Women and the Discourses of Science,* eds. Mary Jacobus, Evelyn Fox Keller, and Sally Shuttleworth (New York: Routledge, 1991). While all three critics agree that Scott interrogates normative accounts of Oedipal subjectivity by displacing the maternal onto

Tyrell finally meet seems to be a relatively straightforward retelling of the positive or heterosexual Oedipal narrative: Tyrell acknowledges the cyborg as his (metaphorical) son but refuses to change his DNA codes. By refusing to relinquish his control over Batty's body, Tyrell essentially refuses to let the replicant resolve the Oedipal crisis and become an independent adult. In retaliation, Batty assumes his independence by force, literally killing off the man who produced him. However, while the plot line suggests that organic narratives of sexual subjectivity can and do persist in a technological era, other aspects of this same scene undermine the supposedly inevitable contours of these same narratives. In particular, the choreography of Batty's physical behavior subverts the dynamics of the father-son relationship: before he kills Tyrell, the replicant gently cradles the scientist's face, removes his glasses, and slowly kisses his lips. The replicant's actions are charged with an intense eroticism, and the sequence itself seems to be more a prelude to sexual seduction than to murder. While Batty's dialogue with Ty rell suggests that their relationship can be understood in terms of the positive Oedipal narrative, his highly-sty lized actions evoke the negative or homosexual account of Oedipal development. Ultimately, then, the scene refuses any stable set of sexual dynamics, instead positioning the two men as *both* rival subjects *and* the objects of one another's desire. In essence, this "failure" to resolve the Oedipal crisis and to solidify specific sexual identities points to the limits of a story that assumes anatomy is (one singular) destiny and thus precludes other very real possibilities for these same identities.

Just as Batty disrupts normative Oedipal accounts of masculine sexual development, his female counterpart Pris similarly disrupts conventional narratives of feminine sexuality. As Teresa de Lauretis argues, film typically reaffirms the hierarchies of sexual difference established by the Oedipa! narrative through a series of "looks" in which the camera, the active male subject, and, by extension, the audience, fixes the passive female as the spectacular, highly sexualized object of their gaze.[36] However, throughout *Blade Runner* Pris consistently refuses this gaze and its implied power relations. During the search for Tyrell, Pris takes up with his assistant, the robotics genius/ toymaker J.F. Sebastian. Sebastian is thrilled to discover that she is actually a replicant whose body he designed, excitedly telling her "there's a part of me in you," then promptly commanding her to "show me something." Significantly, it is precisely Pris' man-made body that allows her to escape the toymaker's gaze. Pris begins her "performance" by dryly commenting that, "I think therefore I am," incorporating the quintessential statement of traditional Western subjectivity into her own technological being and troubling Sebastian's assumptions about her status as a doll-like object. After delivering this line, she plunges her hand into a pot of boiling water, grabs one of the

the technological, they do not acknowledge the tension between storyline and directorial style. Thus, my own reading of *Blade Runner* extends and complicates these previous ones by examining the complex and sometimes contradictory relationship between the film's dual narratives.

[36] Teresa de Lauretis. *Alice Doesn't: Feminism, Semiotics, Cinema* (Bloomington: Indiana University Press, 1984), 123, 138–39.

eggs floating in it, and throws it at Sebastian (who inevitably fumbles and drops it). At the most immediate level, Pris' immunity to the scalding water reminds us of her difference from the human Sebastian; that she is a simulation whose physical abilities exceed those of her organic counterparts. At the same time, the scene suggests that Pris exceeds normative hierarchies of sexual difference as well, revealing them to be constructs as easily manipulated as her own body. By throw ing the egg—a traditional symbol of female fertility —back in Sebastian's face, Pris actively refuses to let his gaze construct her as a toy-like object to be manipulated at will.

Blade Runners cyborgs do more than trouble conventional accounts of sexual relations, instead, they indicate the possibility/ of new, non-Oedipal ones as well. Throughout the first part of the film, the (human) blade runners are thwarted in their search for the escaped replicants because they expect replicants to be emotionally isolated and to act alone. Baffled by the loyalty betw/een the cyborg rebels, the blade runners continually attempt to place them within an understandable patriarchal framework. For instance, since Roy Batty is a "combat model [with] optimum self sufficiency," they automatically assume he is both leader and father of the group. However, the words and actions of the replicants trouble this overly simple assumption. As Pris notes, "[we're] sort of orphans... [We] have *friends'* (emphasis mine). Furthermore, the relationship among these "friends" confounds any stable categorization: the blade runners attempt to understand Batty and Pris as leader and soldier or father and daughter, Pris implies that they are perhaps brother and sister, and at other points the film depicts them as passionate lovers. The replicants are not dangerous simply because they refuse traditional narratives of familial relations. Instead, their ability to occupy multiple and overdetermined subject positions more radically destabilizes such narratives, suggesting that the connections betw/een modes of re/production and forms of familial relations are themselves arbitrary constructions.

It is precisely such excess that confounds *Blade Runner's* nominal protagonist, Rick Deckard, throughout the first half of the film. As a blade runner, Deckard is charged with maintaining the larger social order by identifying and maintaining the hierarchic distinction between organic and replicant humans. Furthermore, the work of a blade runner implicitly establishes sexual difference as well, since to maintain the human-replicant distinction successfully is to do "a *mans* job" (emphasis in original).[37] However, the narrative ultimately reverses this equation, instead suggesting that a blade runner can *only* do his job if he has successfully established himself as a man (vis-à-vis conventional narratives of heterosexual masculinity). For instance, when Deckard tracks the

[37] As Leonard Heldreth points out, this line is delivered in a heavily ironic tone by Gaff, a rather mysterious figure who spends most of the film shadowing Deckard and debunking his attempts to reestablish any sense of natural hierarchical relations among humans and replicants (and, by extension, men and women). For further discussion of Gaffs role as meta-commentator, see Heldreth, Leonard, "The Cutting Edges of *Blade Runner."* In *Retrofitting* Blade Runner: *Issues in Ridley Scott's* Blade Runner *and Philip K. Dick's* Do Androids Dream of Electric Sheep? ed. Judith Kerman (Bowling Green: Bowling Green State University Popular Press, 1991).

replicant Zhora to the nightclub where she works, he is bewildered by the fact that he cannot simply "see" her as either an outlaw replicant or a desirable stripper. Deckard plans to pass himself off as a bashful government worker follow ing up on a sexual harassment complaint. However, his counterfeit shyness rapidly becomes genuine confusion as Zhora smoothly changes herself from glamorous showgirl to tired sex industry worker to desirable fashion model throughout the course of the interrogation. Torn between his desire to look at Zhora's bodily transformations (and the fluid identities they seem to imply) and his desire to look away, Deckard looses control over his own body, stumbling over furniture and entangling himself in racks of costumes. At this point, an amused Zhora asks Deckard, "are vou for real?" (a question that clearly resonates at several different levels) and then takes advantage of his confusion to escape into the night.

Deckard's sense of identity—as both man and human —is challenged most directly by Tyrell's "niece," the replicant Rachel. During an interrogation clearly designed to crack Rachel's icily self-possessed exterior, Deckard ends up losing *his* professional cool when the replicant confronts him with his own prurience, archly asking "is this testing whether I'm a replicant, or a lesbian?" Despite his various attempts to regain the upper hand with Rachel —most notably, by coldly informing her that she is a replicant programmed with false human memories — the blade runner fails to establish much of anything aside from his own cruelty. Indeed, Deckard seems to reach a professional and personal nadir when Rachel hunts down and kills the replicant Leon for him, saving the blade runner from certain death at Leon's hands.

Deckard's inability to act like a "real man" in any capacity is further underscored in the following scene at his apartment; a scene that overtly inverts of the traditional libidinal economy of the gaze. Both Rachel and the camera voycuristically look on while Deckard strips off his battle-torn clothing and gingerly tends his wounds —the blade runner may be bruised and bloody, but the camera (and Rachel's gaze, of course) lingers lovingly over every muscle and sinew. It is precisely at this point when Rachel seems to deliver the final blow, asking if Deckard might not be a replicant with memory implants much like her own. Rather than admit the unspeakable —that he may be no different that the female replicant herself, Deckard conveniently avoids the question by abruptly falling asleep.

The unspeakable anxieties provoked by Rachel appear to be alleviated when Deckard (in an equally abrupt move) wakes up and proceeds to seduce her. At first the replicant rejects Deckard's timid overtures, telling him "I don't know if it's me, or Tyrell's niece." In frustration, the blade runner finally pins her to a wall, ordering her to "say, 'kiss me.'" Once again, Rachel refuses with "I don't know," at which point Deckard cuts her off, repeats himself more gently, and she capitulates. Significantly, Rachel responds when Deckard emphasizes the last part of the command, the "me." The blade runner essentially "reprograms" Rachel to behave like a "real woman"; as the passive eroticized object of his own active desire. The blade runner naturalizes this reprogramming by insisting on the personal pronoun and the authenticity of

the desiring subject (and desired object) in the present moment. This seems to allow Deckard to halt the troubling slippage between various forms of identity'. Earlier, Deckard attempts to maintain the hierarchical difference between subjects by distinguishing between bodies based on their origins —attempts that only serve to erode his own sense of self. However, the blade runner finally is able to reassert these hierarchies when he convinces Rachel (and himself) that bodily origins do not matter; what "real]y" counts is whether or not bodies behave in accordance with traditional narratives of heterosexuality. Not surprisingly, at this point Deckard finally is able to do "a man's job," successfully executing Pris and Roy. As the narrative logic suggests, the escaped replicants must be eliminated not because they are cyborgs *per se,* but because they cannot be assimilated into Deckard's newly-reconstructed vision of sexual difference. Finally, the film ends with Deckard and a properly subdued, feminine Rachel preparing to flee Los Angeles —a final indication that the only way to maintain these still-fragile narratives of conventional sexuality is to literally remove them from the confused web of production and reproduction engendered by the dystopic space of the city itself.

While *Blade Runner* appears to conclude much like *Jurassic Park* in its distinction between modes of re/production and its retreat to conventional narratives of sexual difference, Scott's film departs from —and implicitly exposes the limits of— these distinctions and differences through the director's stylistic and editing choices. Throughout *Blade Runner,* Scott consistently foregrounds various reproductive and recording technologies, reminding us of the film's status as artificial reproduction. In turn, this emphasis ask us to question the seemingly natural cohesion of the film's plot; to consider how its narratives of sexual subjectivity are themselves cyborg artifacts constructed and naturalized by specific discursive structures. For instance, in the film's opening scene Holden uses a Voight-Kampff machine to record and evaluate Leon's physiological responses to the interrogation. Theoretically, this device reads bodies and reveals their "true" nature; more specifically, it provides a way for the (human) user to control the otherwise-inscrutable cyborg body and to maintain the normative distinction between human and replicant. However, Scott allows us to see Holden, rather than Leon, through the lens of the Voight-Kampff machine. The machine is supposed to scrutinize Leon's body and construct the replicant's identity, and yet, as this shot suggests, what counts as "real" or "human" (in this case, Holden) is equally constructed by *its* relation the machine as well.

Indeed, throughout the interrogation scene Scott sets up Leon and Holden as doubles rather than opposites of one another. Leon and Holden are seated directly across from one another and both are framed by chairs prominently displaying the Tyrell corporation logo. As the visual arrangement of the scene suggests then, both the bodies and the identities of the two characters literally are held in place and supported by the same corporate structure. Leon may be a physically constructed being, but Holden is equally dependent on Tyrell's sanction for his understanding of himself as a (human) blade runner—if anything, this understanding is *doubly* constructed by Tyrell, since

without the replicants, Holden would have nothing against which to define himself. Finally, Scott shoots Holden's death in a way that further troubles the normative distinction between types of bodies and identities. Leon's bullet does not actually kill Holden; instead, it pushes him back through a wall that crushes the blade runner almost beyond recognition. Ultimately, then, Scott suggests that it is not so much the cyborgs or the confusion of identity they embody that is dangerous. Rather, the real danger lies in the attempt to erect and maintain (artificial) boundaries between embodied subjects, an attempt that explodes in Holden's face (and quite literally upon his body, too).

Likewise, Scott's visual representation of the cyborg family underscores its excessive, boundary-smashing nature while simultaneously suggesting that these seemingly natural boundaries are themselves constructed artifacts. Early in the film we learn that there are five or six members of the cyborg family.[38] Significantly, Scott never actually films the entire group together, as if to indicate that the new form of relations they embody literally is bey ond containment within the scope of the camera lens. At the same time, he denaturalizes the supposed objectivity of the camera itself through various characters' use of similar devices. For example, when Deckard finds the replicants' "family photos," at first he cannot see any thing in them besides a series of empty rooms. However, with the aid of another camera-like device, the Esper machine, he enlarges sections of one photo and —in a clearly impossible move —turns around the corner of one room to "see" what he decides must be Zhora in a bathtub. The impossibility of Deckard's actions suggests that the blade runner projects his own desires through the machine; that he sees what he wants to see. (Of course, given his anxiety about his own masculinity, it is hardly surprising that what he sees is a naked female replicant.) Scenes such as this specifically ask us to consider the extent to which Deckard's "natural" or "objective" vision is always already constructed for him. In turn, they ask us to reconsider how films in general —and *Blade Runner* in particular—construct and are constructed by our own preconceptions of what we should "naturally" see.

If the scene with the Esper machine troubles our typical understanding of reality versus simulation, the manner in which Scott depicts Zhora's death more specifically challenges the reality of natural versus unnatural subject positions. Theoretically, by eliminating the disruptive cyborg body, Deckard resolves its troubling confusion of technological production, biological reproduction, and overdetermined sexuality. And indeed, when the blade runner shoots Zhora, she drops dead amidst a pile of lavishly dressed mannequins, which seems to equate the replicant's own technologically con-

[38] The chief blade runner claims that there are six escaped replicants, but the narrative itself only accounts for five: one who "got fried" before the narratil e begins, then the four whom Deckard eliminates —Zhora, Leon, Pris, and Roy Bath. Although the sixth replicant could be either Rachel or Deckard himself, I argue that the actual identity of the missing replicant is less important than the narrative confusion he or she causes. Indeed, our inability to determine preciseli how many replicants there are only series to further emphasize the excessive, unrepresentable nature of the cyborg family group itself.

structed body with those of the mannequins. Furthermore, given that the mannequins themselves are idealized visions of desirable femininity, it suggests that Deckard has managed to re-stabilize sexual difference, literally forcing Zhora into her "proper" place. However, even at the moment of her death Zhora continues to smash through the seemingly invincible boundaries of natural differences. Scott's camera emphasizes the stark contrast between the exquisitely perfect dolls and the replicant's bruised and bleeding body, a body that seems very vulnerable and very human. The tension between the contrasting elements of Zhora's death sequence suggests that the replicant exceeds any one single narrative that would unproblematically equate her with either the artificial mannequins or with real humans, implicitly exposing the limits of these overly-simplified narratives instead.

Even when *Blade Runner's* plot appears to fully reestablish conventional narratives of heterosexuality and the distinction between natural and unnatural bodies, Scott's direction continues to trouble their validity. In the scene where Deckard seduces/ reprograms Rachel, the narrative seems to reestablish the authenticity of sexual difference by grounding desire and identity in the immediate moment. However, Scott's direction suggests a very different relation between sexual identity and desire; one mediated by technology itself. Rachel's transformation from bad-girl cyborg to "real woman" begins before the actual seduction when she takes off her masculine jacket to reveal the lacy blouse underneath and softens her previously severe hairstyle and makeup to match the style a of woman she sees in one of Deckard's Victorian photographs. If idealized notions of feminine sexuality are, like the photo, a product of past construction, then what is "desirable" can only be understood in relation to its previous narratives. This disjunction is underscored by the shot-reverse-shot structure used to depict the replicant's transformation: quite simply, Rachel and the photograph are never actually in the same frame. By refusing to show them together, Scott underscores the point that the form of sexual desire is based on an ideal constructed in a past that is distinctly (and here, quite literally) separate from Deckard's insistence on it as something immediately present. In case we miss the point, the entire seduction is set off by a flashing neon RCA recording sign outside Deckard's apartment. The blade runner insists that desire is immediate and thus natural or real, but the framing of this sequence by a literal sign of technological mediation makes us wonder—is it live, or is it Memorex? In essence, then, Deckard indeed is correct to assume that it simply doesn't matter if bodies are organic or not. However, as the film's visual narrative suggests, we must take this insight a step further; to understand that the origin of bodies does not matter precisely because we are always already cyborgs, psychologically (if not physically) constructed by the technologies of social discourse.

While Scott's visual style provides a general counterpoint to the conservative narratives of technological and sexual difference that structure Deckard's story; he undermines these same narratives again in one final, specific way: through the character Gaff, who spends most of *Blade Runner* shadowing Deckard and looking mysterious. At first, Gaff's position in the film seems rather confusing: he is loosely associated with

the blade runners and even may be Deckard's partner, but he spends the majority of the film shadowing Deckard himself rather than the replicants. Our inability to clearly understand Gaff's immediate role is compounded by the fact that he rarely says anything, and when he does, it is typically in an incomprehensible "cityspeak" that the film never translates for us. Implicitly, Gaff's incomprehensibility connects him the replicants as well as the blade runners—after all, much like the excessive cyborgs, he cannot be neatly placed in any one specific role. Although Gaff seems confusing because is both outside and inside the story, both isolated from and yet connected to all the other characters, he eventually does emerge as a kind of mouthpiece for the film's interrogation of difference. Indeed, given the Oedipal motifs informing Scott's film, we might well think of Gaff as performing a function similar to that of the chorus in Sophocles' *Oedipus Rex:* in essence, he stands witness to Deckard's search for origins and identity.

Gaff's function as witness to and commentator upon the story is made clear primarily by Scott's visual emphasis on the origami toxs that Gaff giv es Deckard throughout *Blade Runner.* As man-made simulations of organic creatures, these creations reinforce our suspicion that Deckard's own subjectivity is constructed (discursively, if not literally) by cultural forces outside himself. For instance, when Deckard is first bullied into the task of eliminating the escaped replicants against his better judgement, Gaff presents him with a tiny chicken —our first indication that Deckard is too cowardly to refuse either the power of institutionalized authority or the myths of professional identity that it offers him. Likewise, Gaff's last creation, a silver unicorn, emphasizes the extent to which Deckard has been manipulated by institutionalized myths of sexual identity as well. Gaff's unicorn may be a symbol of idealized heterosexual romance, (associated with both virginal femininity and phallic masculinity), but at the same time it is also an impossible being, a creature of imagination and desire more than any objective reality. Significantly, *Blade Runner* ends with Deckard pocketing the unicorn before he and Rachel leave Los Angeles. As the storyline suggests, Deckard can *try* to leave his high-tech world behind, to repress the frightening knowledge that his identity is a product of this external world rather than his own innate being. However, as Scott ultimately insists through both the figure of Gaff through Deckard's final gesture, this same knowledge is something we (like Deckard) must carry away with us —in however hidden a form.

V. You Can Run but You Can't Hide: The Limits of Social Critique in Jurassic Park and Blade Runner

Although Scott's use of technology as a metaphor for the social construction of sexual difference seems to oppose *Blade Runner* to *Jurassic Park,* there is one final

way that the two films are indeed similar. As Donna Haraway suggests, the cyborg *is* our destiny: postindustrial technologies—such as those in the field of advanced reproductive medicine —both literally and discursively reshape the ways that bodies signify. Clearly, both Scott's and Spielberg's films recognize this. However, the only cyborgs they can imagine are dystopic ones like Haraway's "man in space"; cyborgs which are inevitably created and controlled by forces greater than themselves. While *Jurassic Park* attempts to "solve" the problem of cyborg existence through a romantic retreat to normative narratives of heterosexuality, and *Blade Runner* insists that such narratives are inevitably cyborg constructs themselves, both films leave their viewers at an impasse in their failure to imagine either new subject positions or new forms of agency to replace our old models. Unlike the films' protagonists, we do not have the luxury of retreating from the world we have created; how, then, are we to re-imagine our relations within it? Neither *Jurassic Park* nor *Blade Runner* offers answers to this question, but at the same time we cannot simply dismiss them as mere embodiments of postmodern angst. Instead, we must acknowledge them as genuine efforts to speak the complexity of cybernetic existence; to view them as a starting point from which to read —and perhaps, eventually, reweave —the cultural webs of power.

Conclusion: Cyborg Writing as an Emergent Narrative Genre

The consolidation of cybernetics as a formal scientific discipline around World War II marked the beginning of a major shift in conventional understandings and representations of human-machine relations. Abandoning earlier emphases on the physical characteristics that seemed to distinguish humans from machines, cybernetics theory proposed that all self-organizing systems, both biological and technological, operated according to the same internal rules of information processing. Accordingly, scientists like Norbert Wiener and Alan Turing suggested that even a seemingly ephemeral self-organizing system such as the human mind could be understood as the product of biological processes which, in turn, could be quantitatively described and perhaps even technologically replicated. Meanwhile, medical experts Manfred Clynes and Nathan Kline proposed that the human body might be technologically reorganized to adapt to unnatural or hostile environments such as outer space. For Clynes and Kline, this hypothetical hybrid being—"the cyborg" —marked the beginning of an era in which technological extension would free individuals from the biological constraints that had previously defined (and circumscribed) "humanity" itself. Although initial debates about the possibility —and desirability—of a technologically-mediated subject were often confined to scientific and philosophical circles, the development and wide-scale social application of advanced technologies based on cybernetic principles quickly brought such debates into everyday life. The first several postwar decades saw a rapid expansion of global communications technologies that seemed to replicate and simulate individual experience from without; more recently, developments in biomedicine and genetics have promised to transform the body from within. As the relationship between human and machine becomes increasingly intimate, then, the need for new ways of representing this relationship seems to become increasingly imperative.

In this book, I have argued that the search for new modes of representation appropriate to a technology-intensive era has led to the development of a new narrative genre: "cyborg writing." In her 1985 essay "A Cyborg Manifesto," science historian and socialist-feminist Donna Haraway shifted the Clynes/Kline cyborg from the realm of hostile physical environments to the realm of hostile socioeconomic ones, arguing that this figure provided an ideal way to represent the hybrid political movements that were emerging within the postindustrial moment. Indeed, Haraway suggested that her own critical literary practices were coextensive with the economic and political ones of these hybrid movements. Noting that writing itself is both a technology and a form

of political activity, Haraway also claimed that the cyborg provided an ideal way to represent narratives addressing the phenomena of technological reorganization. At the same time, however, her discussion of an emergent "cyborg canon" —limited primarily to feminist science fiction authors of the 1970s —failed to match the dynamism and complexity she elsewhere ascribed to progressive modes of cyborg activity. My own work provides the foundation for a more nuanced and extensive understanding of what might count as cyborg writing. More specifically, I show how artists working in diverse generic traditions have contributed to debates over the impact of advanced technologies upon various aspects of subjectivity throughout the postwar era by deploying similar narrative strategies to develop new models of storytelling—and new models of subjectivity—adequate to the task of representing life in a high-tech world.

Since early applications of cybernetic theories led to the development of new communications technologies that promised to link individuals together via transnational networks, it is hardly surprising that debates surrounding these technologies centered on their implications for the fate of national identity. While spokespersons for the new culture industries drew upon narratives of benevolent social progress to position new communications technologies like television as the foundations of an "electronic democracy," conservative and radical critics alike expressed concern that these same technologies dangerously elided democracy with consumerism. At the same time, however, media scholars such as Marshall McLuhan proposed a third alternative: the development of what we might call a "technological" or "cybernetic" humanism that drew upon the common experience of technological mediation as the basis for enhanced forms of political awareness and agency . Lor McLuhan, then, the era of the nation was indeed giving way to that of the "global village," but the technological reorganization of individual experience promised to perpetuate and extend democratic values themselves.

Postwar authors Ralph Ellison and Thomas Pynchon participated in these debates by examining how the culture industries might impact the modes of history and identity associated with specifically American narrative forms: the democratic novel and the (semi-hard boiled) detective story. Although these authors insisted that conventional industrial and imaginative narratives alike failed to provide characters with useful understandings of American history and identity, they also indicated that such failures might point the way toward new forms of subjectivity and narrative engagement. In *Invisible Man* Ellison suggests that dominant modes of both political engagement and consumerism obscure the real relations between individuals in a technologically-reorganized world. At the same time, he proposes that subaltern historical models of bodies and technologies —such as those found in African-American history —might provide templates for generating American subject relations more appropriate to the contemporary moment. Thus Ellison can be seen as both contributing to and extending the work of critics such as Marshall McLuhan by illuminating the historical bases for seemingly new visions of technological humanism.

Throughout *The Crying of Lot* 49, Pynchon uses the figure of the failed detective —protagonist Oedipa Maas —to examine the difficulties of determining authentic histories and identities in an American moment marked by simulation, replication, and the endless deferment of desire. In a move that parallels and modifies McLuhan's claims about the technological reorganization of experience, Pynchon —much like Ellison —asks his readers to consider alternative perceptual and narrative models that might provide more comprehensive ways of coping with a brave new high-tech world. However, while Ellison looks to the past for such models, Pynchon focuses on those emerging from the present moment. By structuring his novel to mimic new narrative technologies such as television, Pynchon invites readers to find alternative ways of reading and to create new critical communities based on an understanding of reading itself as an ongoing process that is alw ays dynamic *because* it is always incomplete. In doing so, he gestures toward the possibility of reorganizing larger social relations outside the critical community along similarly tentative but dynamic lines.

If Ellison and Pynchon gesture toward but do not actually depict what these new social relations might look like, it may be because, with the rise of new political movements and the continued expansion of global communications technologies, universally applicable models of identity and agency were increasingly difficult to imagine. Bids for cultural and political authority stemming from the feminist and civil rights movements of the 1960s and 1970s ty pically challenged the notion of a universal subject This challenge seemed to be reinforced by advertising and other image industries, which deployed sophisticated data processing and marketing techniques to produce new social narratives linking specific commodities to specific cultural groups. In doing so, these industries seemed to both advocate multiple forms of identity and to position themselves as the benevolent patrons of—and even sources for—such identities. Feminist and civil rights leaders alike acknowledged the importance of the image industries in shaping public opinion, but they remained skeptical about the motives of these primarily white- and male-owned businesses. Indeed, critics of this period often argued that such businesses invited women and African Americans to position themselves as "commodity activists," or political subjects who understood the history of liberation solely in terms of consumption. However, rather than simply rejecting the image industries altogether, such critics called for better understandings of how these subjects might engage with and intervene into these industries to make them signify differently.

Feminist and African-American writers often chose to explore such issues through the genre of science fiction (SF). Geared toward speculating about possible futures based on current social, economic, and technological trends, SF seemed to provide an ideal narrative space within which to explore the impact of advanced technologies upon various subjects. In addition, SF provided an array of stock tropes —most notably, time travel and "the encounter with the alien other" —that authors could use to concretely depict the historical, psychological, and physical processes of technological reorganization. However, because the general contours of SF writing up to this point in time had been determined primarily by authors invested in the universal humanism

that feminists and African Americans criticized elsewhere, the genre in and of itself seemed limited in its ability to describe specifically gendered and raced encounters with advanced technology. Thus it is hardly surprising that authors such as Joanna Russ and Octavia Butler typically combined specific SF narrative strategies with other writing traditions such as the feminist utopia/dystopia and the American slave narrative to convey their concerns more accurately. For instance, in *The Female Man,* Russ uses "the four J's" —genetically similar women from wildly different worlds —to explore the range of ways women might engage with advanced technology. While the two J's from worlds analogous to our own embody the feminist nightmare of technological mediation as commodity activism, the two J's from seemingly opposed utopic and dystopic futures suggest other relationships to advanced technologies. More specifically, Russ uses the figure of the cyborg Jael —the ghoulish assassin from a high-tech world torn by gender wars —to show how might engage with the patriarchal technologies that have marked them to re-mark upon their anger and rage. Indeed, Russ suggests that progressive and even utopic high-tech futures can *only* develop through this messy or "impure" engagement with technology in the present moment.

While Russ looks to the future for her new, lubrici models of female identity and agency, Octavia Butler looks to the past in her exploration of African-American subjectivity. *Kindred's* multiracial protagonists Dana and Kevin travel back and forth from their home in present-day California to the antebellum plantation where Dana's ancestors were enslaved. As they do so, they quickly learn that the commercialized narratives of black history and identity pervading their world fail to convey the complex and painful reality of the American past— a past that literally wounds and marks them whenever they try to act in accordance with such narratives. At the same time, however, Butler suggests that her characters cannot simply abandon the literal and discursive technologies marking them. Instead, they must acknowledge the intimate and inevitable relationship between technology, bodies, and identities and use this knowledge to create new subject positions at the interface of seemingly opposed concepts such as white and black, master and slave, and biology and technology. Il is precisely this kind of "criminal" activity that allow s Butler's hybrid characters —much like Russ's cyborg assassin —to carve out new narrative spaces between commercial and subaltern narratives of history and to articulate new stories about technology and subjectivity.

Russ and Butler can be seen as transitional figures within the development of cyborg writing as coherent genre: like Ellison and Pynchon before them, they are primarily concerned with the ways that abstract communications technologies impact subjectivity. At the same time, their writing suggests a shift toward understanding —and representing—technologically-mediated subjectivity in more concrete and material terms; more specifically, they use literally hybrid or cyborg characters to examine how technological reorganization of the individual might produce a range of distinctly posthumanist subject positions. This emphasis on the subject as literal cyborg became increasingly common throughout the 1980s and 1990s as new information technologies

began to transform our relationships to ourselves and our worlds in increasingly intimate ways (and, of course, as they continue to do today). The development of personal computers for homes, schools, and other communal spaces such as the public library provided many Americans with their first hands-on experiences with new information technologies —a seemingly benevolent development that, as early as 1982, led *Time* magazine to name the computer "Man of the Year." At the same time, rapid automation and computerization in the new postindustrial workplace produced more complex and more troubling intimacies between humans and machines. On the one hand, advocates of the new workplace argued that, in general, such changes heralded a new era of work in which individuals could forego the burden of mindless manual labor for intellectual and creative play. Critics, how ever, pointed to specific trends such as the rise of white-collar "pay-for-performance" jobs with little or no security, massive layoffs in traditional blue-collar fields, and the emergence of a minimally-skilled and minimally-paid U.S. third-world workforce to suggest that this new era of work might not be all play for all people.

It seems appropriate, then, that just two years after *Time* magazine ran it paean to the computer, William Gibson's *Neuromancer* received the Hugo award (the most prestigious fan-based award in SF) for its critical assessment the new economic and technological networks associated with the computer. Fellow SF author Bruce Sterling christened *Nenromancer* as the leading example of "cyberpunk," a hybrid writing style that combined various elements of SF, postmodernism, and social criticism, while scholars outside the field of SF lauded this new narrative form as *the* literature of late capitalism. With coolly-hip, technologically-cluttered, post-apocalyptic landscapes populated by everything from technologically reconstructed punk rock soldiers to soulful, artistically-inclined machines, cyberpunk seemed to capture the feel of the contemporary moment and, in doing so, to depart radically from previous stories about humans and their machines. Nonetheless, as I argue in Chapter Three, cyberpunk authors can be understood best as the descendants of earlier cyborg writers, ones who by both borrow from and expand upon the narrative strategies used by their predecessors.

For instance, much like Ellison and Pynchon, cyberpunk authors invoke older industrial and imaginative narratives alike to show how both fail to depict changing social, economic, and technological relations in adequate ways. This is particularly evident in Gibson's *Neuromancer* trilogy and Neal Stephenson's *Snow Crash,* where protagonists who attempt to live out the dream of transcendence through technology are thwarted by the fact that their work makes them visible to —and thus subject to manipulation by—the very economic and social systems they wish to escape. Readers who approach these texts with the notion that SF novels are essentially tools for transcendence or escapism find themselves similarly thwarted by Gibson and Stephenson's manipulation of the readerly subject. Both authors begin their novels along the lines of the traditional romance or quest, only to bring them to a screeching halt and to leave their readers with the unsettling suspicion that—as one Gibson character puts it— "nothing's changed. Things are just things." In essence then, characters and readers alike are

forced to recognize the limits of dominant stories about technology and subjectivity, but then left perpetually hovering on the verge of revelation without any real sense of what new stories might take their place.

At the same time —and much like earlier authors Russ and Butler—cyberpunk writers do explore how such new stories might emerge from ones that already exist outside or on the edge of official recognition. Gibson uses secondary characters such as his space-faring Rastafarians and gray market voodooists to examine histories of technology, work, and identity that attempt to mitigate the reality of economic exploitation by valorizing negotiation, compromise, and communal effort over mastery, competition, and individualism. By juxtaposing the failed labor of his console cowboy protagonists with the more successful work of these secondary characters, Gibson gestures toward a mode of cyborg existence that might allow individuals to engage contemporary economic and technological networks without being fully absorbed into them. More radically, the women of Pat Cadigan's *Synners*—especially the teenaged hacker Sam and the tattoo artist Gator—rewrite the historic exploitation of female bodies by creating new personal technologies that are quite literally driven by such bodies. In turn, Cadigan suggests, the hybrid bodies and identities that emerge from such labor are themselves tools for larger forms of social reorganization. Thus Gibson and Gadigan alike show how a diverse range of relationships to technology may co-exist within any given moment.

Finally, lest my examination of cyberpunk suggest a kind of triumphantly linear development within the genre of cyborg writing, I have concluded this book with an examination of how cyborg artists continue both to embrace *and* resist technologically-mediated subjectivities. Along with the widespread expansion of information technologies, the last two decades have been marked by rapid —and sometimes unsettling— developments in biotechnical fields such as reproductive medicine. New techniques such as in vitro fertilization and fetal surgery seem to shift reproduction from the realm of biology to that of technology; in doing so they seem to undermine dominant, biologically-based justifications for conventional heterosexual subjectivities. Much like their counterparts in the information industries, medical spokespersons tend to smooth over and minimize the potential changes wrought by their new technologies through recourse to narratives suggesting that these technologies are tools to enhance biology rather than displace it, that they are aids for men and women otherwise unable to have "normal" families rather than resources for those who might want to create alternative family structures. Nonetheless, critics point out that the typical ways these technologies are deployed do change sexual subjectivities in significant ways, such as by transforming the fetus into a subject with more rights that the pregnant woman herself (who is often discursively, and sometimes even literally, reduced to the status of "maternal vehicle"). Meanwhile, practices such as sperm donation and manipulation position the heretofore relatively autonomous (and even extraneous) male subject as an object of medical scrutiny and surveillance as well. Whether these technologies and

practices enhance or destabilize normative understandings of sexual subjectivity, then, emerges as a complicated and highly charged question.

I would suggest that this question is of particular interest to filmmakers because film itself is a kind of reproductive technology intimately bound up with issues of sexual identity. Indeed, as film critics often point out, film often quite literally reproduces dominant understandings of "natural" (and naturally sexed) subject positions through its discreet manipulation of the audience's gaze. At the same time, however, the fact that this gaze is structured by specific techniques provides a constant, subtle reminder of film's constructed nature—and thus the suggestion that sexualized subject positions implicitly endorsed by any given film might be unnatural constructions as well. Thus it is hardly surprising that stories about technology and sexuality such as those presented by Steven Spielberg and Ridley Scott unfold at the interface of plot and structure. For instance, in *Jurassic Park,* Spielberg carefully deploys both narrative patterns and film techniques that evoke and resolve the anxieties surrounding technological intervention into biological processes. Within the story, Spielberg's human protagonists must deny their investments in science and technology and embrace conventional heterosexual subjectivities as their true destinies in order to escape the danger posed by the uncontrollably rampaging (and unaccountably reproductive) herd of same-sex dinosaurs they have created. The narrative movement from disruptive and disastrously unnatural technologically-mediated subject relations to coherent and triumphant biological ones is accompanied by a similar shift in the presentation of this story. Early scenes underscore the dangerous and disastrous nature of a technologically-mediated world through abrupt scene shifts, jarring camera angles, and visual emphasis on characters who are literally separated from one another by imposing technological apparatuses. As the plot unfolds and biology takes its rightful place ov er technology, Spielberg carefully minimizes any reminder of the camera's presence through conventional midrange shots that seem to make entire scenes fully and naturally available to the viewer's gaze. Here then, the reproductive technology of the camera —much like the reproductive technology of cloning within the film itself—is reduced to a helpful, unobtrusive tool than enhances control and order rather than exacerbating disruption and disorder.

While Spielberg's film evokes one potential cyborg future only to retreat to a nostalgic vision of the past that maintains conventional distinctions between male and female, human and machine, and biology and technology, Scott's *Blade Runner* questions the viability of this vision within a high-tech era. Plotwise, *Blade Runner* seems remarkably similar to *Jurassic Park,* depicting a dystopic near future where a group of uncontrollable human clones or replicants disrupts the public realm of economic relations in ways that parallel a similar disruption within the private realm of sexual relations. Indeed, the blade runner Deckard can only fulfill his task of eliminating the replicants and reentrenching the boundaries between biologically- and technologically-produced subjects by asserting a distinctly masculine (and distinctly traditional) sexual authority over his love interest, the replicant Rachel. At the same time, however, Scott consistently denaturalizes both the love story and his audience's relationship to this

story through a series of camera shots that destabilize the seemingly inevitable progression of the film. In doing so, he reminds viewers that all stories—w hether they are stories about humans and machines, men and women, or filmmakers and audiences —are necessarily constructed artifacts rather than natural phenomena. Taken together, then, texts such as *Jurassic Park* and *Blade Runner* make important contributions to our understanding of what might constitute a cyborg canon by reminding us that conventional, "commonsense" narratives of technology and subjectivity might be increasingly difficult to maintain in the contemporary moment, but it is not always desirable —and it is certainly never easy—to simply replace them altogether.

Bibliography

Adorno, TAV. "On Popular Music." *Studies in Philosophy and Social Science* 9 (1941): 17-48-

———. "Television and the Patterns of Mass Culture." 1954. In *Mass Culture: The Popular Arts in America,* eds. Bernard Rosenberg and David Manning White. New York: Free Press, 1957.

Anders, Gunther. "The Phantom World of TV." 1956. In *Mass Culture: The Popular Arts in America,* eds. Bernard Rosenberg and David Manning White. New York: Free Press, 1957.

Angus, Ian H. "Circumscribing Postmodern Culture." In *Cultural Politics in Contemporary America,* eds. Ian H. Angus and Sut Jhally. New York: Routledge, 1989.

Armitt, Lucie. "Space, Time, and Female Genealogies: A Kristevan Reading of Feminist Science Fiction." In *Image and Power: Women in Fiction in the Twentieth Century,* ed. Sarah Sceats and Gail Cunningham. London: Longman, 1996.

Atwan, Robert, Donald McQuade, and John W. Wright, *Edsels, Luckies, and Frigidaires: Advertising the American Way.* New York: Dell, 1979.

Baker, Houston A., Jr. "To Move without Moving: An Analysis of Creativity and Commerce in Ralph Ellison's Trueblood Episode." *PMLA* 98.5 (October 1983): 828–45.

———. *Blues, Ideology, and Afro-American Literature.* Chicago: Chicago University Press, 1984.

Balsamo, Anne. "Feminism for the Incurably Informed." *South Atlantic Quarterly* 92.4 (fall 1993): 681–711.

Barratt, Barnaby B., and Barrie Ruth Straus. "Toward Postmodern Masculinities." *American Imago* 51.1 (spring 1994): 37–67.

Bartos, Rena. *The Moving Target: What Every Marketer Should Know About Women.* New York: Free Press, 1982.

Baudrillard, Jean. *Simulations,* trans. Paul Foss, Paul Patton, and Philip Beitchman. New York: Semiotext(e), 1983.

Baughman, James L. *The Republic of Mass Culture: Journalism, Filmmaking, and Broadcasting in America since* 1941. Baltimore: Johns Hopkins University Press, 1992.

Baum, R.F. *Doctors of Modernity: Darwin, Marx, and Freud.* Peru, Illinois: Sherwood Sugden,1988.

Bayer, Ronald. "Politics, science, and the problem of psychiatric nomenclature: a case study of the American Psychiatric Association referendum on homosexuality." In *Scientific Controversies: Case Studies in the Resolution and Closure of Disputes in Science and Technology,* eds. H. Tristram Englehardt Jr. and Arthur L. Caplan. London: Cambridge University Press, 1987.

Beaulieu, Elizabeth Ann. *Black Women Writers and the American Neo-Slave Narrative: Femininity Unfettered.* Westport, CN: Greenwood Press, 1999.

Beer, Gillian. *Darwin's Plots: Evolutionary Narrative in Darwin, George Eliot, and Nineteenth-Century Fiction.* London: Routledge, 1983.

Bell, Daniel. *The Coming of Post-Industrial Society: A Venture in Social Forecasting.* New York, Basic Books, 1973.

Ben-Tov, Sharona. *The Artificial Paradise: Science Fiction and American Reality.* Ann Arbor: University of Michigan Press, 1995.

Berger, John. *Ways of Seeing.* 1972. Reprint, New York: Penguin Books, 1977.

Bergstrom, Janet. "Androids and Androgyny." In *Close Encounters: Film, Feminism, and Science Fiction,* eds. Constance Penley, Elisabeth Lyon, Lynn Spigel, and Janet Bergstrom. Minneapolis: University of Minnesota Press, 1991.

Blade Runner: The Director's Cut. Dir. Ridley Scott. Warner Brothers, 1992.

Bones, Jah. "Language and Rastafari." In *The Language of Black Experience,* ed. David Sutcliffe and Ansel Wong. New York: Basil Blackwell, 1986.

Braude, David. "The Business of Cyberpunk: Symbolic Economy and Ideology in William Gibson." In *Virtual Realities and Their Discontents,* ed. Robert Markley. Baltimore: Johns Hopkins University Press, 1996.

Brennan, Teresa. *The Interpretation of the Flesh: Freud and Femininitv.* New York: Routledge, 1992.

Broderick, Damien. *Reading By Starlight: Postmodern Science Fiction.* New York: Routledge, 1995.

Budgeon, Shelley. "Fashion Magazine Advertising: Constructing Femininity in the Post-feminist Era." In *Gender and Utopia in Advertising:* A *Critical Reader,* eds. Luigi and Alessandra Manca. Lisle, IL: Procopian, 1994.

Bukatman, Scott. *Terminal Identity: The Virtual Subject in Postmodern Science Fiction.* Durham: Duke University Press, 1993.

Butler, Judith. *Gender Trouble: Feminism and the Subversion of Identity.* New York: Routledge, 1990.

Butler, Octavia. *Kindred.* 1979. Reprint, Boston: Beacon, 1988.

Cadigan, Pat. *Synners.* London: Grafton, 1991.

Cadora, Karen. "Feminist Cyberpunk." *Science Fiction Studies* 22.3 (November 1995): 357–372.

Callahan, John F. "'Riffing' and Paradigm-Building: The Anomaly of Tradition and Innovation in *Invisible Man* and *The Structure of Scientific Revolutions." Callaloo* 10.1 (winter 1987): 91–102.

———. "Frequencies of Eloquence: The Performance and Composition of *Invisible Man."* In *New Essays on* Invisible Man, ed. Robert G. O'Meally. Cambridge: Cambridge University Press, 1988.

Chapman, Murray. "Frequently Asked Questions: *Blade Runner,"* 1 September 1994. <http://www.vir.eomA/ideoFilm/Blade/brfaq_7.html> (21 April 1997).

Clark, Adele. "Modernity, Postmodernity-, and Reproductive Processes, ca. 1890–1990, or 'Mommy, Where Do Cyborgs Come From Anyway?'" In *The Cyborg Handbook,* ed. Chris Hables Gray. New York: Routledge, 1995.

Clynes, Manfred E. and Nathan S. Kline. "Cyborgs and Space." 1960. Reprint, in *The Cyborg Handbook,* ed. Chris Hables Gray. New York: Routledge, 1995.

"The Computer Moves In." *Time* (3 January 1982): 12–24.

Corea, Gena. "How the New Reproductive Technologies Will Affect All Women." In *Reconstructing Babylon: Essays on Women and Technology,* ed. H. Patricia Hynes. Bloomington: Indiana University Press, 1991.

———. "Who May Have Children and Who May Not." In *Reconstructing Babylon: Essays on Women and Technology,* ed. H. Patricia Hynes. Bloomington: Indiana University Press, 1991.

Crossley, Robert. "Introduction." In *Kindred.* Boston: Beacon, 1988.

Csicery-Ronay, Istvan. "Cyberpunk and Neuromanticism." In *Storming the Reality Studio:* A *Casebook of Cyberpunk and Postmodern Fiction,* ed. Larry McCaffery. Durham: Duke University Press, 1991.

———. "The SF of Theory: Baudrillard and Haraway." *Science Fiction Studies* 18.3 (November 1991): 387–404.

Dates, Janette L. "Advertising." In *Split Image: African Americans in the Mass Media,* ed. Janette L. Dates and William Barlow. Washington, D.C.: Howard University Press, 1993.

———. "Commercial Television." In *Split Image: African Americans in the Mass Media.* Ed. Janette L. Dates and William Barlow. Washington, D.C.: Howard University Press, 1993.

Dates, Janette L., and William Barlow. "Introduction." In *Split Image: African Americans in the Mass Media,* ed. Janette L. Dates and William Barlow. Washington, D.C.: Howard University Press, 1993.

Davis, Donald D. "Form, Function, and Strategy in Boundaryless Organizations." In *The Changing Nature of Work,* ed. Ann Howard. San Francisco: Jossey-Bass, 1995.

de Lauretis, Teresa. *Alice Doesn't: Feminism, Semiotics, Cinema.* Bloomington: Indiana University Press, 1984.

Dechert, Charles R. "The Development of Cybernetics." In *The Social Impact of Cybernetics.* Ed. Charles R. Dechert. Notre Dame: University of Notre Dame Press, 1966.

Deleuze, Gilles, and Felix Guattari. *Anti-Oedipus: Capitalism and Schizophrenia.* Minneapolis: University of Minnesota Press, 1983.

Dery, Mark. "Black to the Future: Interviews with Samuel R. Delany, Greg Tate, and Tricia Rose." *South Atlantic Quarterly* 92.4 (fall 1993): 735–78.

Desser, David. "The New Eve: The Influences of *Paradise Lost* and *Frankenstein* on *Blade Runner."* In *Retrofitting* Blade Runner; *Issues in Ridley Scott's* Blade Runner *and Philip K. Dick's* Do Androids Dream of Electric Sheep? ed. Judith Kerman. Bowling Green: Bowling Green State University Popular Press, 1991.

de Tocqueville, Alexis. *Democracy in America.* 1832. New York: Mentor, 1984.

Doane, Mary Ann. "Technophilia: Technology, Representation, and the Feminine." In *Body/ Politics: Women and the Discourses of Science,* eds. Mary Jacobus, Evelyn Fox Keller, and Sally Shuttleworth. New York: Routledge, 1991.

Doray, Bernard. *From Taylorism to Fordism:* A *Rational Madness..* London: Free Association, 1988.

Dreyfus, Hubert L. *Alchemy and Artificial Intelligence.* New York: The RAND Corporation, 1965.

———. *What Computers Can't Do: The Limits of Artificial Intelligence.* New York: Harper Colphon, 1972.

Duyfhuizen, Bernard. '"Hushing Sick Transmissions': Disrupting Story in *The Crying of Lot* 49." In New *Essays on* The Crying of Lot 49, ed. Patrick O'Donnell. New York: Cambridge University Press, 1991.

Eglash, Ron. ".African Influences on Cybernetics." In *The Cyborg Handbook,* ed. Chris Hables Gray. New York: Routledge, 1995.

Elliott, Anthony. *Social Theory and Psychoanalysis in Transition: Self and Society from Freud to Kristeva.* Oxford: Basil Blackwell, 1992.

Ellison, Ralph. "Beating That Boy." 1945. Reprint, in *Shadow and Act.* New York: Quality Paperback Book Club, 1994.

———. "The Shadow and the Act." 1949. Reprint, in *Shadow and Act.* New York: Quality Paperback Book Club, 1994.

———. "Introduction." In *invisible Man.* 1952. Reprint, New York: Vintage Books, 1989.

———. *Invisible Man.* 1952. Reprint, New York: Vintage, 1989.

———. "Change the Joke and Slip the Yoke." 1958. Reprint, in *Shadow and Act.* New York: Quality Paperback Book Club, 1994.

———. "Some Questions and Some Answers." 1958. Reprint, in *Shadow and Act.* New York: Quality Paperback Book Club, 1994.

Erikson, Kai. "On Work and Alienation." In *The Nature of Work,* eds. Kai Erikson and Steven Peter Valias. New Haven: Yale University Press, 1990.

Etzoni, Amitai, and Paul A. Jargowsky. "The False Choice Between High Technology and Basic Industry." In *The Nature of Work,* eds. Kai Erikson and Steven Peter Valias. New Haven: Yale University Press, 1990.

Ewen, Stuart, and Elizabeth Ewen. *Channels of Desire: Mass Images and the Shaping of American Consciousness.* New York: McGraw-Hill, 1982.

Ferguson, Marjorie. "Images of Power and the Feminist Fallacy." *Critical Studies in Mass Communication* 8 (1991): 215–30.

Ferguson, Paul. "Tracking the Unabomber: More Luck Than Computer Analysis," 1997. <http://cnn.com/SPECIALS/1997/unabomb/invcstigation/puzzle/> (20 June 1998).

Ferman. Louis A. "Participation in the Irregular Economy." *The Nature of Work,* eds. Kai Erikson and Steven Peter Valias. New Haven: Yale University Press, 1990.

Folkerts, Jean, and Dwight L. Teeter, Jr. *Voices of a Nation: A History' of Mass Media in the United States.* 2nd ed. New York: Macmillan, 1994.

Foster, Thomas. "Incurably Informed: The Pleasures and Dangers of Cyberpunk." *Genders* 18 (1993): 1–10.

———. "Meat Puppets or Robopaths?: Cyberpunk and the Question of Embodiment." *Genders* 18 (1993.): 11–31.

Foucault, Michel. "Body/ Power." In *Power/ Knowledge: Selected Interviews and Other Writings* 1972–1977, ed. Colin Gordon. New York: Pantheon, 1980.

Francavilla, Joseph. "The Android as Doppelganger." In *Retrofitting* Blade Runner: *Issues in Ridley Scott's* Blade Runner *and Philip K. Dick's* Do Androids Dream of Electric Sheep? ed. Judith Kerman. Bowling Green: Bowling Green State University Popular Press, 1991.

Freidson, Eliot. "Labors of Loi e in Theory and Practice." In *The Nature of Work,* eds. Kai Erikson and Steven Peter Valias. New Haven: Yale University Press, 1990.

Friend, Beverly. "Time Travel as a Feminist Didactic in Works by Phyllis Eisenstein, Marlys Millhiser, and Octavia Butler." *Extrapolation* 23.1 (Spring 1982): 50–55.

Fromm, Erich. *The Crisis of Psychoanalysis.* New York: Holt, Rinehart, and Winston, 1970.

Fuchs, Cynthia Epstein. "The Cultural Perspective and the Study of Work." In *The Nature of Work,* eds. Kai Erikson and Steven Peter Valias. New Haven: Yale University Press 1990.

Fuchs, Cynthia J. "Death is Irrelevant: Cvborgs, Reproduction, and the Future of Male Hysteria." In *The Cyborg Handbook,* ed. Chris Hables Gray. New York: Routledge, 1995.

Gans, Herbert J. "The Creator-Audience Relationship in the Mass Media: An Analysis of Movie-Making." 1956. Reprint, in *Mass Culture: The Popular Arts in America,* eds. Bernard Rosenberg and David Manning White. New York: Free Press, 1957.

Gates, Henry Louis, Jr. "The Trope of a New Negro and the Reconstruction of the Image of the Black." In *The New American Studies,* ed. Philip Fisher. Berkeley: University of California Press, 1991.

George, F.H. *Automation, Cybernetics, and Society'.* London: Leonard Hill Ltd., 1960.

Gibson, William. *Neuromancer.* New York: Ace, 1984.

———. *Count Zero.* New York: Ace, 1986.

———. *Mona Lisa Overdrive.* New York: Bantam, 1988.

Gilbert, Sandra M., and Susan Gubar. *The Madwoman in the Attic: The Woman Writer and The Nineteenth-Century Imagination.* New Haven: Yale University Press, 1979-

Goldberg, Jonathon. "Recalling Totalities: The Mirrored Stages of Arnold Scwarzenegger." In *The Cyborg Handbook,* ed. Chris Hables Gray. New York: Routledge, 1995.

Goldman, Robert, Deborah Heath, and Sharon L. Smith. "Commodity Feminism." *Critical Studies in Mass Communication* 8 (1991): 333-51-

Goodnight, G. Thomas. "The Firm, The Themepark, and The University: Fear and Trembling on the Postmodern Trail," *The Quarterly Journal of Speech* 81.3 (August 199 5): 267–90.

Gould, Stephen Jav. "Jurassic Park." In *Past Imperfect: History' According to the Movies,* ed. Mark C. Carnes. New York: Henry Holt, 1995.

Govan, Sandra Y. "Homage to Tradition: Octavia Butler Renovates the Historical Novel." *MELUS* 13.1–2 (spring-summer 1986): 79–96.

Grant, J. Kerry. "Not Quite So Crazy After All These Years: Pynchon's Creative Engineer." *Pynchon Notes* 28–29 (spring-fall 1991): 43–53.

Gray, Chris Hables, ed. *The Cyborg Handbook.* New York: Routledge, 1995.

———. "An Interview with Manfred E. Clynes." In *The Cyborg Handbook,* ed. Chris Hables Gray. New York: Routledge, 1995.

Gray, Chris Hables, and Steven Mentor. "The Cyborg Body Politic." In *The Cyborg Handbook,* ed. Chris Hables Gray. New York: Routledge, 1995.

Gray, Herman. *Watching Race: Television and the Struggle for "Blackness."* Minneapolis: University of Minnesota Press, 1995.

Haberstam, Judith, and Ira Livingston, eds. *Posthuman Bodies.* Bloomington: Indiana University Press, 1995.

Hage, Jerald. "Post-Industrial Lives: New Demands, New Prescriptions." In *The Changing Nature of Work,* ed. Ann Howard. San Francisco: Jossey-Bass, 1995.

Hale, Nathan G., Jr. *The Rise and Crisis of Psychoanalysis in the United States: Freud and The Americans, 1917–1985.* Oxford: Oxford University Press, 1995.

Haraway, Donna. "The Biological Enterprise: Sex, Mind, and Profit from Human Engineering to Sociobiology." In *Simians, Cyborgs, and Women: The Reinvention of Nature.* New York: Routledge, 1991.

———. "Introduction." In *Simians, Cyborgs, and Women: The Reinvention of Nature.* New York: Routledge, 1991.

———. "A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century." In *Simians, Cyborgs, and Women: The Reinvention of Nature.* New York: Routledge, 1991..

Harper, Mary Catherine. "Incurably Alien Other: A Case for Feminist Cyborg Writers." *Science Fiction Studies* 22.3 (November 1995): 399–420.

Hayles, N. Katherine. '"A Metaphor of God Knew How Many Parts': The Engine that Drives *The Crying of Lot 49."* In *New Essays on* The Crying of Lot 49, ed. Patrick O'Donnell. New York: Cambridge University Press, 1991.

———. "The Life Cycles of Cyborgs: Writing the Posthuman." In *The Cyborg Handbook,* ed. Chris Hables Gray. New York: Routledge, 1995.

Heldrelh, Leonard. "The Gutting Edges of *Blade Runner."* In *Retrofitting* Blade Runner: *Issues in Ridley Scott's* Blade Runner *and Philip K. Dick's* Do Androids Dream of Electric Sheep? ed. Judith Kerman. Bowling (keen: Bowling Green State University Popular Press, 1991.

Helming, Steven. "T.S. Eliot and Ralph Ellison: Insiders, Outsiders, and Cultural Authority." *Southern Review* 25.4 (1989): 841–58.

Hirsch, Eric. "New Reproductive Technologies and the 'Modern Condition' in Southeast England." In *The Gender-Technology Relation,* eds. Keith Grint and Rosalind Gill. London: Taylor and Francis, 1995.

Holden, Rebecca. "Shifting Worlds." Ph.D. diss. University of Wisconsin-Madison, 1998.

hooks, bell. "White Supremacy." *Zeta* 1 (1988): 24–27.

———. *Black Looks: Race and Representation.* Boston: South End Press, 1992.

Howard, Ann. "A Framework for Change." In *The Changing Nature of Work,* ed. Ann Howard. San Francisco: Jossey-Bass, 1995.

Hynes, H. Patricia. "Biotechnology in Agriculture and Reproduction: The Parallels in Public Policy." In *Reconstructing Babylon: Essays on Women and Technology,* ed. H. Patricia Hynes. Bloomington: Indiana University Press, 1991.

Jameson, Frederic. *Postmodernism, Or, the Cultural Logic of Late Capitalism.* Durham: Duke University Press, 1991.

Jones, Gerard. Honey *I'm Home! Sitcoms: Selling the American Dream.* New York: St. Martin's, 1992.

———. Interview by author, January 20, 1998.

Jurassic Park. Dir. Steven Spielberg. Universal City Studios, Inc./Amblin Entertainment, '99?

Kaczynski, Theodore. *The Unabomber Manifesto,* 23 September 1995, <http://well.sf.ca.us> (18 August 1996).

Kammen, Michael. *Mystic Chords of Memory': The Transformation of Tradition in Popular Culture.* New York: Vintage, 1993.

Kanter, Rosabeth Moss. "The New Workforce Meets the Changing Workplace." In *The Nature of Work,* eds. Kai Erikson and Steven Peter Valias. New Haven: Yale University Press, 1990.

Katz, Elihu. "The Two-Step Flow of Communication." In *Mass Communications,* ed. Wilbur Schramm. Urbana: University of Illinois Press, 1960.

Keller, Evelyn Fox. *Secrets of Life, Secrets of Death: Essays on Language, Gender and Science.* New York: Routledge, 1992.

Kelso, Sylvia. "And Who Shall Inherit the Earth?" *Sirius* 4 (February 1994): 8–11.

Kern-Foxworth, Marilyn. *Aunt Jemima, Uncle Ben, and Rastus: Blacks in Advertising, Yesterday, Today, and Tomorrow.* Westport, CT: Greenwood Press, 1994.

Kurzweil, Edith. *Freudians and Feminists.* Boulder: Westview, 1995.

Landy, Frank J., Laura Shankster-Cawley, and Stacy Kohler Moran. "Advancing Personnel Selection and Placement Methods." In *The Changing Nature of Work,* ed. Ann Howard. San Francisco: Jossey-Bass, 1995.

Leiss, William, Stephen Kline, and Sut Jhally, eds. *Social Communication in Advertising: Persons, Products, and Images of Well-Being.* New York: Methuen, 1986.

Lowenthal, Leo. "Historical Perspectives of Popular Culture." 1950. Reprint, in *Mass Culture: The Popular Arts in America,* eds. Bernard Rosenberg and David Manning White. New York: Free Press, 1957.

Lynes, Russell. "Highbrow, Lowbrow, Middlebrow." In *The Tastemakers.* New York: Grosset & Dunlap, 1954.

MacDonald, Dwight. "A Theory of Mass Culture." 1953. Reprint, in *Mass Culture: The Popular Arts in America,* eds. Bernard Rosenberg and David Manning White. New York: Free Press, 1957.

———. "Inside *The Outsider."* 1956. Reprint, *in Against the American Grain.* New York: Random House, 1962.

Mahoney, Eileen. "American Empire and Global Communication." In *Cultural Politics in Contemporary America,* eds. Ian H. Angus and Sut Jhally. New York: Routledge, 1989.

Manca, Luigi, and Alessandra Manca. "Introduction." In *Gender and Utopia in Advertising: A Critical Reader,* eds. Luigi and Alessandra Manca. Lisle, IL: Procopian, 1994.

Mannes, Marva. *But Will It Sell?* 2nd ed. Philadelphia: J.B. Lippencott, 1955.

Marder, Elissa. *"Blade Runners* Moving Still." *Camera Obscura* 27 (September 1991): 88–107.

Marcuse, Herbert. *One-Dimensional Man: Studies in the Ideology of Advanced Industrial Society.* 1964. Reprint, Boston: Beacon, 1969.

Martin, Emily. *The Woman in the Body: A Cultural Analysis of Reproduction.* Boston: Beacon, 1987.

Marvin, Carolyn. "Information and History." In *The Ideology of the Infonnation Age,* eds. Jennifer Daryl Slack and Fred Fejes. New Jersey: Norwood, 1987.

Marx, Leo. "American Literary Culture and the Fatalistic View of Technology." In *The Pilot and the Passenger: Essays on Literature, Technology, and Culture in the United States.* New York, Oxford University Press, 1988.

———. "The Machine in the Garden." In *The Pilot and the Passenger: Essays on Literature, Technology, and Culture in the United States.* New York, Oxford University Press, 1988.

McCaffery, Larry. "An Interview with Joanna Russ." In Across *the Wounded Galaxies: Interviews with Contemporary American Science Fiction Authors.* Urbana: University of Chicago Press, 1990.

———. "Introduction: Desert of the Real." In *Storming the Reality Studio:* A *Casebook of Cyberpunk and Postmodern Fiction,* ed Larry McCaffery. Durham: Duke University Press, 1991.

McHale, Brian. *Constructing Postmodernism.* New York: Routledge, 1992.
McLuhan, Marshall. "American Advertising." 1950. Reprint, in *Mass Culture: The Popular Arts in America,* eds. Bernard Rosenberg and David Manning White. New York: Free Press, 1957.
———. *The Mechanical Bride: Folklore of Industrial Man.* New York, Vanguard Press, 1951.
———. *Understanding Media.* New York: McGraw-Hill, 1964.
McLuhan, Marshall, and Quentin Fiore. *The Medium is the Massage: An Inventory' of Effects.* New York: Bantam, 1967.
McKible, Adam. "'These Are the Facts of the Darky's History': Thinking History and Reading Names in Four African American Texts." *African-American-Review* 28.2 (summer 1994): 223-35-
Mellor, Anne K. *Mary Shelley: Her Life, Her Fiction, Her Monsters.* New York: Methuen, 1988.
Mendelsohn, Harold. *Mass Entertainment.* New Haven, CT: College & University Press, 1966.
Meyersohn, Rolf B. "Social Research in Television." In *Mass Culture: The Popular Arts in America,* eds. Bernard Rosenberg and David Manning White. New York: The Free Press, 1957.
Mills, C. Wright. *The Power Elite.* 1956. Reprint, New York: Oxford University Press, '965.
Mulvey, Laura. "Visual Pleasure and Narrative Cinema." 1975. Reprint, in *Visual and Other Pleasures.* Bloomington: Indiana University Press, 1989.
Neisser, Ulric. "Computers as Tools and as Metaphors." In *The Social Impact of Cybernetics,* ed. Charles R. Dechert. Notre Dame: University of Notre Dame Press, 1966.
Nixon, Nicola. "Cyberpunk: Preparing the Ground for Revolution or Keeping the Boys Satisfied?" *Science Fiction Studies* 19.2 (July 1992): 219–35.
O'Donnell, Patrick. "Introduction." In *New Essays on* The Crying of Lot 49, ed. Patrick O'Donnell. New York: Cambridge University Press, 1991.
Packard, Vance. *The Hidden Persuaders.* New York: Pocket Books, 1958.
———. *The Status Seekers: An Exploration of Class Behavior in America and the Hidden Barriers That Affect You, Your Community, Your Future.* New York: D. McKay, 1959.
Penley, Constance. "Time Travel, Primal Scene, and the Critical Dystopia." In *Close Encounters: Film, Feminism, and Science Fiction,* eds. Constance Penley, Elisabeth Lyon, Lynn Spigel, and Janet Bergstrom. Minneapolis: University of Minnesota Press, 1991.
Petillon, Pierre-Yves. "A Re-cognition of Her Errand into the Wilderness." In *New Essays on* The Crying of Lot 49, ed. Patrick O'Donnell. New York: Cambridge University Press, 1991.

Porush, David. "Hacking the Brainstem: Postmodern Metaphysics and Stephenson's *Snow Crash."* In *Virtual Realities and Their Discontents,* ed. Robert Markley. Baltimore: Johns Hopkins University Press, 1996.

———. *The Soft Machine.* New York: Methuen, 1985.

Powdermaker, Hortense. "Hollywood and the U.S.A." 1950. Reprint, in *Mass Culture: The Popular Arts in America,* eds. Bernard Rosenberg and David Manning White. New York: Free Press, 1957.

Pynchon, Thomas. *The Crying of Lot 49.* 1967. London: Picador, 1979.

Rabinbach, Anson. *The Human Motor: Energy, Fatigue, and the Origins of Modernity.* United States: Basic Books, 1990.

Raymond, Janice G. "Of Eggs, Embryos, and Altruism." In *Reconstructing Babylon: Essays on Women and Technology,* ed. H. Patricia Hynes. Bloomington: Indiana University Press, 1991.

Reed, Brian K. "The Iron and the Flesh: History as Machine in Ellison's *Invisible Man." College Language Association Journal* 37.3 (March 1994): 261–73.

Rickover, Hyman G. "A Humanistic Technology." In *The Social Impact of Cybernetics,* ed. Charles R. Dechert. Notre Dame: University of Notre Dame Press, 1966.

Riesman, David. "Listening to Popular Music." 1951. Reprint, in *Mass Culture: The Popular Arts in America,* eds. Bernard Rosenberg and David Manning White. New York: Free Press, 1957.

Rosenberg, Bernard. "Mass Culture in America." In *Mass Culture: The Popular Arts in America,* eds. Bernard Rosenberg and David Manning White. New York: Free Press, 1957.

Ross, Andrew. *Strange Weather: Culture, Science, and Technology in the Age of Limits.* New York: Verso, 1991.

Rubin, Suzanne. "A Sperm Donor Baby Grows Up." In *The Technological Woman: Interfacing with Tomorrow,* ed. Jan Zimmerman. New York: Praeger, 1983.

Rushdy, Ashraf. *Neo-slave Narratives.* Oxford: Oxford University Press, 1999.

Russ, Joanna. "What Can a Heroine Do? or Why Women Can't Write." In *Images of Women in Fiction: Feminist Perspectives,* ed. Susan K. Cornillon. Bowling Green, Ohio: Bowling Green University Popular Press, 1972.

———. *The Female Man.* 1975. Reprint, Boston: Beacon, 1986.

Rutherford, Paul. *The New Icons?* Toronto: University of Toronto Press, 1994.

Sandoval, Chela. "New Sciences: Cyborg Feminism and the Methodology of the Oppressed." In *The Cyborg Handbook,* ed. Chris Hables Gray. New York: Routledge, 1995.

Sargent, Pamela. "Introduction: Women and Science Fiction." In *Women of Wonder: Science Fiction Stories by Women about Women.* New York: Vintage Books, 1975-

———. "Introduction." In *Women of Wonder: The Contemporary Years.* San Diego: Harcourt Brace, 1995.

Saunders, Charles R. "Why Blacks Don't Read Science Fiction." In *Brave New Universe: Testing the Values of Science in Society,* ed. Tom Henighan. Ottawa: Tecumseh Press, 1980.

Schachterle, Lance. "Pynchon and the Civil Wars of Technology." In *Literature and Technology,* eds. Mark L. Greenberg and Lance Schachterle. Cranbury, NJ: Associated University Presses, 1992.

Schaub, Thomas. *Pynchon: The Voice of Ambiguity.* Urbana: University of Illinois Press, 1981.

———. "Ellison's Masks and the Novel of Reality." In New *Essays on* Invisible Man, ed. Robert G. O'Meally. Cambridge: Cambridge University Press, 1988.

———. *American Fiction in the Cold War.* Madison: University of Wisconsin Press, 1991.

Schramm, Wilbur. "Forward." In *Mass Communications,* ed. Wilbur Schramm. Urbana: University of Illinois Press, 1960.

Seldes, Gilbert. "The People and the Arts." 1951. Reprint, in *Mass Culture: The Popular Arts in America,* eds. Bernard Rosenberg and David Manning White. New York: Free Press, 1957.

Shannon, Claude E. "A Chess-Plaving Machine." In *World of Mathematics,* ed. James R. Newman. New York: Simon and Schuster, 1956.

Shannon, Claude E., and Warren Weaver. *The Mathematical Theory of Communication.* Urbana: University of Illinois Press, 1962.

Shelley, Mary Wollstonecraft. *Frankenstein, Or, The Modern Prometheus.* 1818, 1831. Reprint, Chicago: University of Chicago Press, 1982.

Sherard, Tracey. "The Birth of the Female Subject in *The Crying of Lot 49." Pynchon Notes* 32–33 (spring-fall 1993): 60–74.

Silbergleid, Robin. "Women, Utopia, and Narrative: Toward a Postmodern Feminist Citizenship." *Hypatia* 12.4 (fall 1997): 156–77.

Silverman, Kaja. "Back to the Future." *Camera Obscura* 27 (September 1991): 108–33.

Simmons, Philip. *Deep Surfaces: Mass Culture and History in Postmodern American Fiction.* Athens: University of Georgia Press, 1997.

Sobchack, Vivian. "Child/Alien/Father: Patriarchal Crisis and Generic Exchange." In *Close Encounters: Film, Feminism, and Science Fiction,* eds. Constance Penley, Elisabeth Lyon, Lynn Spigel, and Janet Bergstrom. Minneapolis: University of Minnesota Press, 1991.

Squier, Susan Merrill. *Babies in Bottles: Twentieth Century Visions of Reproductive Technology.* New Brunswick: Rutgers University Press, 1994.

Stephenson, Neal. *Snow Crash.* New York: Bantam, 1992.

Sterling, Bruce. "Preface." In *Mirrorshades: The Cyberpunk Anthology,* ed. Bruce Sterling. New York: Ace, 1988.

Stockton, Sharon. '"The Self Regained': Cyberpunk's Retreat to the Imperium." *Contemporary Literature* 36.4 (winter 1995): 588–612.

Suvin, Darko. "On Gibson and Cyberpunk SF." *Foundation* 46 (autumn 1989): 40–51.

Sypher, Wylie. *Literature and Technology: The Alien Vision.* New York: Random, 1968.
Tabbi, Joseph. *Postmodern Sublime: Technology and American Writing from Mailer to Cyberpunk.* Ithaca: Cornell University Press, 1995.
Tatsumi, Takayuki. "The Japanese Reflection of Mirrorshades." In *Storming the Reality Studio: A Casebook of Cyberpunk and Postmodern Fiction,* ed. Larry McCaffery. Durham: Duke University Press, 1991.
Taube, Mortimer. *Computers and Common Sense: The Myth of Thinking Machines.* New York: Columbia University Press, 1960.
Turing, Alan M. "Computing Machinery and Intelligence." *Mind: A Quarterly Review* 59.236 (1950): 433–60.
Van der Spiegel, Jan. "New Information Technologies and Changes in Work." In *The Changing Nature of Work,* ed. Ann Howard. San Francisco: Jossey-Bass, 1995.
Wahl, Wendy. "Bodies and Technologies: *Dora, Neuromancer,* and Strategies of Resistance." *Postmodern Culture* 3.2 (January 1993): 35 pars. Online. Internet. (10 October 1996).
Ward, Dean. "Information and the Immanent Heat Death of Oedipa Maas." *University of Hartford Studies in Literature: A Journal of Interdisciplinary Criticism* 20:3 (1988): 24–37.
Weindling, Paul. "Darwinism and the Origin of Psychoanalysis." *British Journal for the History of Science* 17 (1984): 64–67.
Whalen, Terence. "The Future of a Commodity: Notes Toward a Critique of Cyberpunk and the Information Age." *Science Fiction Studies* 19.1 (March 1992): 75–88.
Whitman, Walt. "Democratic Vistas." 1870. Reprint, in *The Portable Walt Whitman,* ed. Mark Van Doren. New York: Penguin, 1977.
Wiener, Norbert. *Cybernetics: Or Control and Communication in the Animal and the Machine.* New York: John Wiley, 1948.
———. *The Human Use of Human Beings: Cybernetics and Society.* 1950. Reprint, New York: De Capo Press, 1954.
William, Sarah. "Perhaps Images at One with the World are Already Lost Forever": Visions of Cyborg Anthropology in Post-Cultural Worlds." In *The Cyborg Handbook,* ed. Chris Hables Gray. New Yorks Routledge, 1995.
Williamson, Judith. *Decoding Advertisements: Ideology and Meaning in Advertisements.* 1978. New York: Kampmann & Co., 1984.
Willis, Susan. A *Primer for Daily Life.* New York: Routledge, 1991.

Index

Lisa Yaszek
The Self Wired
Technology and Subjectivity in Contemporary Narrative
2002

<www.routledge.com>
ISBN 041593964X, 9780415939645

Routledge (New York)