INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

ProQuest Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

UMI®

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

University of Alberta

Problematic Selves and Unexpected Others: Technology, Subjectivity, Science Fiction

by

Sherryl Vint

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

Department of English

Edmonton, Alberta

Spring, 2000

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

National Library of Canada
Bibliothèque nationale du Canada

Acquisitions and Bibliographic Services
Acquisitions et services bibliographiques

395 Wellington Street
Ottawa ON K1A 0N4
Canada

395, rue Wellington
Ottawa ON K1A 0N4
Canada

Your file Votre référence

Our file Notre référence

The author has granted a non-exclusive licence allowing the National Library of Canada to reproduce, loan, distribute or sell copies of this thesis in microform, paper or electronic formats.

L'auteur a accordé une licence non exclusive permettant à la Bibliothèque nationale du Canada de reproduire, prêter, distribuer ou vendre des copies de cette thèse sous la forme de microfiche/film, de reproduction sur papier ou sur format électronique.

The author retains ownership of the copyright in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author's permission.

L'auteur conserve la propriété du droit d'auteur qui protège cette thèse. Ni la thèse ni des extraits substantiels de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation.

0-612-60035-1

Canada

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

University of Alberta

Library Release Form

Name of Author: Sherryl Vint

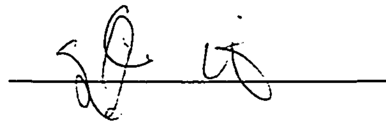
Title of Thesis: *Problematic Selves and Unexpected Others: Technology, Subjectivity, Science Fiction*

Degree: Doctor of Philosophy

Year this Degree Granted: 2000

Permission is hereby granted to the University of Alberta Library to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purposes only.

The author reserves all other publication and other rights in association with the copyright in the thesis, and except as herein before provided, neither the thesis nor any substantial portion thereof may be printed or otherwise reproduced in any material form whatever without the author's prior written permission.



3823 - 36 Street
Edmonton, AB
T6L 6N7

Date: June 6, 2000

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Much work needs to be done in the cultural space hinted by the intersections of science fiction, speculative futures, feminist and antiracist theory, and fictions of science.

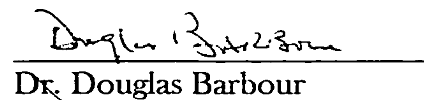
- Donna Haraway

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

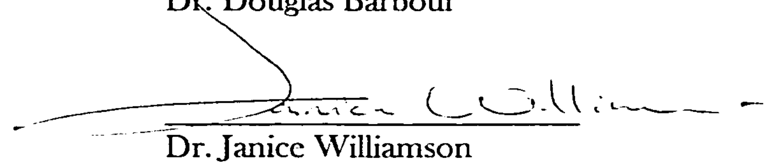
University of Alberta

Faculty of Graduate Studies and Research

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled *Problematic Selves and Unexpected Others: Technology, Subjectivity, Science Fiction* submitted by Sherryl Vint in partial fulfillment of the requirements for the Doctor of Philosophy.

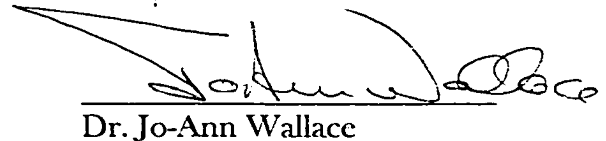


Dr. Douglas Barbour



Dr. Janice Williamson

Dr. Heather Zwicker



Dr. Jo-Ann Wallace

Dr. Sourayan Mookerjea

Dr. Veronica Hollinger

Date 31 March 2000

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

ABSTRACT

This project is an exploration of the related production of bodies and subjects through a reading of selected contemporary science fiction texts. The readings both examine the representation of subjects and bodies in these texts, and consider the implications of these representations in the context of current debates about appropriate uses of technology. My central argument is that such popular texts articulate current cultural preoccupations and assumptions, and that a critical reading of such texts provides insight into popularly accepted ideological constructions.

Chapter 1 reads Gwyneth Jones' *Aleutian* trilogy, examining the ideas of subject formation through discourse and body/subject materialization through practice found in these texts. Chapter 2 compares two representations of a world of posthuman bodies: Octavia Butler's *Xenogenesis* trilogy and Iain Banks *Culture* trilogy. Chapter 3 examines the repressed body of cyberpunk narratives through a reading of William Gibson's *Neuromancer*, Pat Cadigan's *Synners*, and Raphael Carter's *The Fortunate Fall.* This reading focuses on the ways in which representations of the repressed body return to complicate our understanding of the novels and the relation of body to self. Chapter 4 more explicitly turns to the question of the mutual production of discourses and bodies, and discourses and subjects, through reading Neal Stephenson's *The Diamond Age* and Jack Womack's *Random Acts of Senseless Violence.*

The conclusion develops an argument for a new concept of the posthuman subject, one that remains focused on a subjectivity embedded in material reality, and one that seeks to be responsible for the social consequences of the worlds it creates. I argue for a

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

posthuman strategy of becoming monstrous by embracing our problematic selves without grounding these identities on the repudiation of unexpected others, a critical posthumanism that includes a ground for ethics.

This project explores the possibilities for changing maps of the social, for creating a new collectivity that includes the monsters. It is about looking for the chance to resist the ways in which the category of the 'natural' has been used in exclusive and repressive ways, and a chance to form new understandings of subjectivity which explore the liberatory potential of new technologies of the body and the self.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

ACKNOWLEDGEMENTS

My thanks are due to many people in my life who have supported me in ways both academic and personal throughout time that I have been working project. These debts are too numerous and all-encompassing to thank each individual here. Therefore, the following list is a sincere but by no means complete catalogue of people who have helped me achieve this goal.

I would like to thank my supervisor, Doug Barbour, for his guidance and support throughout the production of this thesis, and for being willing to take me as a student at a time when I needed someone to have faith in me. Janice Williamson has my gratitude for her advice and encouragement as I worked on this project and as I continue to plan my academic future. I owe a huge debt of gratitude to Heather Zwicker for her careful and insightful readings of my work, her willingness to help me work through ideas and roadblocks, and her 'institutional savvy'. Thank you all for helping me see this project to completion.

I would also like to thank Lisa Laframboise for the time and care she took to read my work and discuss it with me, and both Lisa and Ann Howey for the coffees and phone calls that sustained me through the difficult times.

Finally, I would like to thank Karys Van de Pitte for her careful editing, the stimulating conversations we have had, and for being a true friend. She is someone I know I can count on and I value her friendship deeply.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Table of Contents

Introduction: Problematic Selves and Unexpected Others	1
Chapter 1: The World of the Body and the Body of the World	40
Chapter 2: Posthuman Bodies in the Genetic Age	81
Chapter 3: Return of the Repressed Body	141
Chapter 4: Material Girls in a Material World	200
Conclusion: Towards a Critical Posthumanism	252
Bibliography	301

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Introduction: Problematic Selves and Unexpected Others

Both the body and the subject have become the focus of extensive critical attention in recent years, much of it focused on the 'end' of these two entities. The 'death' of the autonomous, self-determining and centred subject of modernity has been discussed as one of the markers of our age of postmodernity.[1] This subject is dead, we are told, because the thing now occupying its space no longer corresponds to our notions of what the subject should be: it is permeated with unconscious desires, it is invaded by cultural representations and ideological injunctions, and it does not remain consistent from day to day. A subject that is not a stable thing in the world, a thing to which language can straightforwardly refer, is thus no subject at all; it is dead. Similarly, the body – once conceived unproblematically as a given, biological entity – has been found by Foucault and others to be instead a contested site of cultural struggle, something made not born. No longer a transparent house for the now absent subject, the body, too, has become a site of instability and discord. Our notion that sex and gender follow naturally from the biological body has been challenged; [2] the cultural meanings and readings given to bodies have been interrogated and revised;[3] and Foucault's insights have launched continued investigations into the ways in which the body is a product of culture, not an object given by nature.

This project seeks to explore the related production of bodies and subjects through texts and in texts. I will pursue this investigation through a reading of selected contemporary science fiction texts to examine the representation of subjects and bodies in these texts and to consider the implications of these representations. My central argument

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

is that such popular texts articulate current cultural preoccupations and assumptions, and that a critical reading of such texts provides insight into popularly accepted ideological constructions. It seems to me that it is necessary to examine representations of the body and the subject at this present moment when we are faced with ethical implications and decisions relating to technologies of body control and alteration. Debates about the uses of information gained from the Human Genome Mapping Project; decisions about AIDS testing, research and public education; and legislation determining relative rights and responsibilities in custody (or ownership) battles over surrogate and other IVF procedures are crucially informed by our assumptions about the body and its 'nature'. Anne Balsamo writes, "by the end of the 1980s the idea of merger of the biological with the technological has infiltrated the imagination of Western culture, where the 'technological human' has become a familiar figuration of the subject of postmodernity" (*Technologies of the Gendered Body*, 5). How we see the body – as natural given or cultural product, as integral whole or assemblage of parts that can be changed and reconfigured, as part of the self or as its house – will influence the choices we make in negotiating the interaction of our bodies and the technologies that shape and measure them into the 21st century.

While popular fiction is clearly not the only place in which such ideas and debates are taking place, I believe that it is an important rather than a peripheral location. As universities are encouraged to become vocational training institutions and economic pressures are forcing both students and administrations to sacrifice courses that cannot be linked to a marketable skill, popular culture becomes one of the few remaining spaces for debates and learning that previously took place elsewhere. Internet fan discussions and

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

movie reviews[4] suggest that people are 'discovering' the horrors of war by watching *Saving Private Ryan* and are learning the power of myth from George Lucas rather than from Joseph Campbell. In this environment, English departments are often privileged to survive because they can offer the skill of writing - to any audience in any context. It seems to me that the study of popular fiction gives English departments a tremendous opportunity to appeal to the already existing interests of students whose university careers have become a means to an income rather than an opportunity for 'learning for learning's sake'. As well, in terms of challenging hegemonic ideology, popular fiction has a long history of not being taken seriously, which may provide it with the opportunity to play with ideas and arguments that would be censored in a more formal context.[5]

My argument relies on a number of premises that I will discuss in more detail below: that all texts participate in the ideological construction of what 'counts' as reality; that popular fiction is more than a vehicle for the dissemination of hegemonic ideology; that the discursive and material body are mutually and interactively constructed; and that discursive representations that challenge dominant ideologies can participate in changing such ideologies and hence the material 'reality' that flows from them. In general, my project is to explore the various intersections of body, text, self and the social. Some of these variations include: how the body is marked by culture and how this marking contributes to the formation of the subject; how the self chooses to mark the body as a sign of its autonomy; how the texts we read provide us with imaginative identifications that are internalized and contribute to the formation of the subject; and how the texts we write may participate in changing the map of subject positions available for identification and

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

internalization, in Butler's terms, changing the map of the 'culturally intelligible'. In order to make these arguments, I will now turn to a more detailed description of my understanding of the process of subject formation, the status of the body, and the discourse of science fiction.

Subject Formation:

> *Ideology has the function (which defines it) of 'constituting' concrete individuals as subjects.*
>
> *Louis Althusser*

How is it that subjectivity is conferred by ideology? Is not my subjectivity, my self, just 'the way things are' or 'how I turned out'? The cultural practices I wish to interrogate in this section are exactly those that structure 'the way things turned out' or rather, why it is that they turned out that way. The process of subject formation is rooted in the heritage of psychoanalysis from Freud to Lacan, and the history of Marxist criticism, as these ideas have been taken up by Althusser and others. Freud tells us that the psyche is formed of three parts: the ego, the id and the super-ego. The ego or ego-ideal is that conscious portion which we associate with our public and reflective self. This ego-ideal is formed through the identifications with people or representations in the external world; as Judith Butler writes, "the ego is a sedimented history of imaginary relations" (*Bodies that Matter*, 74). In this way, the subject is formed from the outside in: we are what we identify with. This notion of subject formation explains the centrality of texts and representations in many arguments, including my own, focused on changing the social. If we can change the representations that are available for identification, we can change the subjects who are so produced.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

The subject is formed by what it is not as much as by what it is: those identifications which it refuses become important to determining the subject.[6] This role of repudiation in subject formation is critical to understanding the anxiety that emerges when boundaries of self and other are challenged. This other may be an 'other' of gender, race, or sexual orientation. It is critical for the subject to disavow any continuity between itself and its constructed others, as a threat to this boundary is a threat to the subject's very conception of itself.[7] This role of repudiation in subject formation contributes to an explanation of the vehemence which underlies discourses of sexism, racism and homophobia. The threatening truth that the other may or could be us menaces our sense of security in our own identity. It is therefore important to foster identifications which resist these disavowals; these repudiations inform discourses that socially divide people. It is through changing the identifications and disavowals that people make that we will be able to change these discourses.

Once 'formed' the subject is not a stable entity that then hardens into an immutable form like the clay of the golem. Rather, the subject remains malleable clay, able to change as new identifications become available to it. Nor should the subject be considered a stable and unitary entity. The subject is permeated with multiple and sometimes contradictory identifications and desires. Althusser theorized the various identifications that the subject is able to make as "subject positions" that are offered by the culture. Althusser's contribution to our understanding of subject formation is his theory of the role that ideology plays in this process. While the Lacanian model suggests that any and all identifications or repudiations are possible, the Althusserian supplement explains

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

why certain identifications seem to be consistently re-enacted. Althusser explains the process of subject formation or interpellation as 'answering' the call of ideology. Ideology is an array of sense-making practices that constitute what counts as reality or 'the way things are' in any historical moment.[8] Ideology works by presenting a particular political interpretation of social reality as the only way in which social reality can be understood. It relies on concepts such as what is 'natural' or 'common sense' to insist that its representations are true and inevitable; as Althusser puts it, ideology "imposes (without appearing to do so since these are 'obviousnesses') obviousnesses as obviousnesses, which we cannot *fail to recognize*" ("Ideology and Ideological State Apparatuses," 46).

Althusser argues that ideology hails or interpellates subjects into concrete (that is, predefined, already existing within the ideologically dominant social formation) subject positions. The subject is interpellated by 'answering' the call, as Althusser puts it, by recognizing "that the hail was 'really' addressed to him, and that it was *really him* who was hailed (and not someone else)" ("Ideology and Ideological State Apparatuses," 48). It is important to understand the identification that the subject enacts as an unconscious or fantasy process, not as a conscious choice. Thus, we don't perceive the self that ideology tells us is our 'natural' or 'true' self as an outside imposition; rather, we see it as the expression of our interior essence. As Kaja Silverman argues, we believe this is so because ideology is at work in our very fantasies: the symbolic order determines which representations are available for identification and thus determines the 'raw material' that can become the basis of our ego-ideal. As these identifications are made at an unconscious level, we believe them to emerge from our interiority, our 'true' self. As Michèle Barrett

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

argues, "ideology works by making the subject recognize itself in a certain specific way, and simultaneously to construe that specificity as the obvious or natural one for itself" (*The Politics of Truth*, 100-101).

Thus, we can understand ideological representations as a normalizing strategy and, further, as a normalizing strategy that is in the interests of the dominant class.[9] By fostering normative identifications, the hegemonic ideology works to produce subjects who are suited to this ideology. However, much like the subject is formed by competing and sometimes contradictory identifications, ideology is formed from competing and sometimes contradictory practices and discourses. As Rosemary Hennessy argues, these competing strands are sutured into dominant articulations that vary historically and spatially. In Lacanian terminology, the equivalent of this hegemonic structuring of discourses is called the symbolic order. The symbolic order determines the limits of cultural intelligibility, and the boundaries of cultural intelligibility determine which identifications are valid (that is, produce a subject who can occupy a culturally intelligible subject position), and which are not (that is, produce subjectivities which exceed the limits of the hegemonic articulation and hence threaten social stability). Many practices and discourses - including the discourse of popular fiction - make up the field of ideology. Kaja Silverman has argued that "a given symbolic order will stay in place so long as it has subjects" (*Male Subjectivity at the Margins*, 40); similarly, creating representations that challenge normative identifications provides an opening to challenge the symbolic order and the various power inequities which it sustains. Text and context are thus mutually constitutive: the context determines how the ideological signs in the text will be read, but

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

the text may challenge the dominant articulation of ideology and open up new positions. All texts, whether they challenge the hegemonic articulation or not, form the field of available identifications for the ego and hence determine the range of subjects that can materialize.

The subject is thus an other-determined and ever-changing entity. Ideology intrudes into the subject's very formation, fostering normative identifications while encouraging the subject to see these identifications as expressions of an interior essence. The subject continues to be shaped by what it has repudiated, and thus it must continually perform or enforce its identifications and repudiations in order to perceive itself as whole and stable. Ideology may hail the subject in multiple ways (for example, as white, as woman, as middle-class, as Canadian) and the subject must negotiate these competing calls through its ego identifications. The fictions we carry with us – about what is correct or natural behaviour for each of the competing calls, about which calls take precedence over others – overdetermine our subjectivity. The subject misrecognizes itself as permanent, natural, and self-determined.

In contrast to this subject is what I will call the self. The self is the ideal the subject believes itself to be; we live as if our subjectivity were a stable, knowable and consistent entity. This concept we have of who we 'are' is what I call the self. Lacan links the origin of the self to the subject's misrecognition of himself as a unified whole based on his perception of his unified body in the mirror. For Lacan, the self is always an illusion, a false hope that the subject clings to. I would like to offer a more positive reading of the self, one in which we realize that the self is not the 'whole story' of the subject. This

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

concept allows for an understanding of the political efficacy of consciously made identifications and consciously offered self-representations, while avoiding the illusion that this self is the source of all choices made by the subject. That is to say that while I am in agreement with the argument that our subjectivity is formed from the outside in through normative identifications and ideological hails that ask us to see a culturally intelligible subject position as our 'true' self, I don't believe that this operation of ideology eliminates the space for agency. I believe that it is possible to recognize an ideological call as a call to one's self (for example, the call to 'be' a woman) but at the same time to renegotiate the cultural meaning of this subject position through the act of choosing how to occupy it (for example, as feminist woman), a style of 'occupation' that reworks the dominant understanding of what it means to 'be' this subject position. However, it is important to remember that these conscious affirmations of identity (the self) are not expressive of the full range of desires and identifications that form our subjectivity; unconscious and contradictory desires and identifications can undermine our conscious efforts to articulate a self.[10]

In my view, it is important to retain this idea of self because such a position enables the formation of politics around categories of identity – such as the category of 'woman' or 'lesbian' or 'black' – while at the same time recognizing that these categories are constructed rather than found. The tension between self and subject allows space to theorize a politics of identification without disavowing the unconscious identifications and desires which may be working to undermine our conscious political intentions. Retaining the concept of the self allows the reintroduction of the idea of agency and political choice

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

in to our understanding of personhood. While it is true that we are formed by the dominant ideology, it is also true that we can theorize about this formative process and that we can actively resist it by offering other representations (through our lives or through our writing) that actively resist the hegemonic articulation. Teresa de Lauretis puts the idea in this way:

> For each person, therefore, subjectivity is an ongoing construction, not a fixed point of departure or arrival from which one then interacts with the world. On the contrary, it is the effect of that interaction which I call experience, and thus it is produced not by external ideas, values or material causes, but by one's personal, subjective engagement in the practices, discourses and institutions that lend signification (value, meaning, affect) to the events of the world. (*Alice Doesn't*, 159)

De Lauretis's notion of subjectivity – which I call the self – reintroduces the influence that a personal history may have on the social construction of the subject. This notion of subject formation – which is rooted in cultural representations but which leaves a space for resistance via the agency expressed in the micropolitics of how one individually responds to, answers, resists, or rewrites the calls of ideology – is central to my understanding of why it is important to read cultural texts of all kinds, including science fiction novels.

<u>The Body:</u>

> *Our ideas and attitudes seep into the functioning of the body itself, making up the realm of its possibilities or impossibilities.*
>
> *Elizabeth Grosz*

The body has become a central critical object in feminist and other discourse in recent years. These discourses seek to understand the relationship between human beings and the social world we live in. The body is a boundary point for many of the binaries that have structured Western logic. Is the body cultural or natural? Is it (part of) the self or

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

simply a vehicle for movement? How do we distinguish the limits that assure the division of bodies into different sexes, races and sexual orientations? Even more than the subject, the body is caught at the intersection of what is cultural and what is natural. The body is easily coded as natural, biological and given, but such representations obscure the ways in which culture writes on and produces the body. As with the subject, the material and the discursive body are mutually productive: the material body is read by discourses, and the conclusions produced by these readings structure practices which influence the ways bodies can materialize.

In some instances, the role that ideology plays in producing the body is quite evident, as for example in the discourse of physiognomy which 'proves' the inferiority of non-white people or the discourse of hysteria which 'proves' the inferiority of women. However, the relationship is often more subtle and can more easily slip into being read as natural, such as the connection between discourses of female inferiority and the institutional practice of giving priority to men when distributing food, thereby producing smaller female bodies (which are therefore weaker, inferior, and need less food). Mind/body dualism continues to reassert itself in discourses, both those that challenge it – such as recent cognitive science which suggests that our use of metaphor in thought is radically structured by our bodies[11] – and those that support it – such as legal principles which hold that an individual is less or not culpable for actions if his or her brain chemistry is somehow abnormal. How we feel about what is natural and what is not, whether the body is self or not self, can have important consequences for social policy and personal political commitments in ways that are not easy to anticipate or predict. For

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

example, in response to the recent search for a 'gay gene', many gays and lesbians are hopeful that scientific proof that homosexuality is 'natural' will reduce prejudice and persecution, while others fear that such a gene would be coded as diseased and eliminated through practices such as selective abortion.[12]

In discussing the critical importance of the body, I wish to assess the interplay between nature and culture in its production, and to assess the extent to which the body is considered to be self or not-self. At first, the solution to the first dilemma may seem obvious: clearly the body is 'natural', something that we are born with, that 'comes' with certain abilities and features. However, this ideological obviousness soon breaks down under critical examination. In her essay "Throwing Like a Girl," Iris Young has demonstrated the ways in which socialization actively changes how a body is used and inhabited by an individual. As it turns out, girls do throw differently, but this difference is demonstrably a learned rather than a natural one. Similarly, Janet Stoppard has found that the symptoms of menopause are culturally specific and vary between North America and Japan.[13] Elizabeth Grosz provides evidence that sufferers of multiple personality disorder may exhibit different bodily attributes from personality to personality, including such 'clearly organic' bodily functions as vision. What each of these examples points to is the problematized relationship between body and mind that is suggested by the epigraph. The ideas that we have about what is natural or proper for our bodies influence what our bodies can and cannot do, and preconceived ideologies will determine what science will or will not find when it looks at them.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

As with subject formation, ideology is the source of these various discourses that inform our ideas about our bodies and hence inform our experience of the lived body. Whether or not the body is considered to be self or not-self is historically linked to this division of body from mind and the misogyny which forms the foundation of this discourse. Freud and Lacan each present theories of subject formation in which the body is crucial to how we first come to develop a sense of a self – by libidinal investments in the body itself and by taking the image of the body's wholeness as evidence of a stable and fixed self. Despite this, the body is often treated as other to the self. The tradition of repressing or rejecting the body has its roots in both classical philosophy (Plato and Aristotle) and Christianity (Augustine). By now, we are all familiar with the outlines of the discourse of mind/body dualism: woman is flesh/body/animal/material while man is spirit/intellect/god/culture. What is clear from the tradition of rejecting the body is the anxiety that certain men have felt about marking a separation between man and the animal world; they have attempted to ground this separation through a radical distinction between the inconsequence of what is similar between humans and animals (the body) and the importance of that which distinguishes humans from animals (respectively, in the discourses of philosophy and religion, intellect and soul).

One of the clear consequences of this ideology in which humans have more worth than animals because they possess this mysterious 'other' to the brute materiality of the body is that such discourse can be used to justify the human exploitation of the natural world which is other to 'us' and inferior to 'us'. Without any radical leaps of logic, then, it becomes apparent that such a doctrine can easily be extended toward distinctions within

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

human culture and thus used to justify other exploitations such as sexism and racism. By associating gender or racial others with animals and the physical body, these discourses justify an inferior social status for these others and may be used to support their exploitation. The body thus has a long and unpleasant history of being used to prove the natural inferiority of women – who are closer to the flesh given their role in reproduction – and of dark-skinned races – who as recently as 1994 have been accused of having 'different' brains which 'prove' their inferior intellect.[14] The body has often been pejoratively represented as the fleshy, weak, prison-of-the-soul, that which ties man down to the mundane and prevents him from achieving his intellectual promise. Descartes, commonly credited as the originator of mind/body dualism, is better credited with the equation of the mind with the self. The body is the limiting container in which the self is trapped.

Given this heritage, women have a rather ambivalent history with the body. As a consequence of Descartes' linkage of the mind with intellect and the body as other to intellect, the equation of women with the body has been used to limit women from career and educational opportunities. A woman's body has often been read as revealing the 'truth' about her, even if this truth was in conflict with the woman's self-representations. Lacqueur tells us that until the late 18th century, it was believed that pregnancy could not occur without female arousal, so women's impregnated bodies could be read as revealing their complicity, their pleasure, in rape; Bordo warns that women's bodies continue to be read as provoking sexual assault. It may be surprising, therefore, that so much recent feminist and critical work has been focused on the body. However, this recent concentration on examining the body is doing three separate yet related types of critical

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

work, all of which are fundamental to the projects of feminism. First, it seeks to understand how assumptions about the body and about its function as a marker of differences between people have been deployed politically. Second, such work interrogates the relationship of the lived body to the discursively constructed body, tracing the ways in which discourses of the body have shaped personal experiences of the body. Finally, such critical work can be used to reveal and restructure biases about the body that are used to sustain inequitable social relations.

The body is both a product and a process. In *Discipline and Punish* and in *The History of Sexuality, Volume 1*, Foucault outlines his theory of biopower regarding the ways in which social control of the body can be used to produce a specific type of subjectivity within that body. Foucault's analysis of biopower was developed, in part, through a study of prisons and an examination of the way that control of the body's actions and freedoms can produce a docile subject. Foucault argued that power was thus productive: the exercise of power produces the subjects it acts upon through their responses to its actions, and it produces discourses and institutions ("knowledges") whose ideology reinforces the hegemonic dominant of which this power is an expression. Biopower accomplishes this productive role by making humans, via their bodies, objects of study. Biopower is a normalizing power, one which measures, compares, evaluates, and corrects the bodies it 'finds'. Plastic surgery, as it has been analyzed by Anne Balsamo and Kathryn Pauly Morgan, is a supreme example of biopower: the discourses of plastic surgery describe a 'normal' or 'attractive' physiognomy while the practices of the surgeon proceed to write this shape onto the material body.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Given that plastic surgery is a choice – frequently an expensive one – that people make, how are we to see it as an imposition of ideology from the outside? Foucault explained this aspect of biopower (essential to the production of docile body/subjects) in terms of the image of the panopticon. The panopticon is a prison design that places the observing eye of authority at the centre, surrounded by a series of back-lit cells. The key to this structure is that the prisoner cannot see the person in the position of power; the prisoner never knows if s/he is being observed or not but the prisoner's living space is visible at all times. The result of this structure is that the prisoner takes on the work of the observing and disciplining authority: the prisoner monitors and changes his/her own behaviour all the time to accommodate the demands of the observing authority. Foucault and others have argued that this image of the prison's disciplinary power can be extended to other forms of biopower that measure and evaluate human behaviour. We internalize and observe the demands of biopower to 'be' the type of body defined as normal or appropriate, and we may endure consequences – ranging from social shunning of the overweight to refusal to grant child custody to gays or lesbians – if we do not discipline ourselves accordingly. This disciplinary power is so much a part of our social milieu that we often do not perceive its injunctions as standards imposed from the outside; the ideology that informs the discourses of biopower is the same ideology that determines the range of identifications we can make to form an ego-ideal. We answer the call of ideology with both our bodies and our minds.[15]

What we learn from Foucault is that the body is integrally linked to the discourses that make it intelligible. Biopower, with its classifications of normal or abnormal, valid or

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

invalid, produces a field of hegemonic culturally intelligible bodies and produces bodies that fall outside of this field and hence cannot be 'seen'. This is not to argue that such unintelligible bodies do not have a *material* existence, but instead to argue that such bodies can have no role in shaping the hegemonic ideology as they do not have a discursive existence. An example of this would be hermaphrodite births.[16] We have an ideology in which we conceive of the human race as divided into two separate and distinct sexes. When infants are born displaying the genital morphology of both sexes, the medical institution picks the sex that is dominant (that is, most 'true' to the nature of the infant) and surgically alters the 'deformity'. Hence, hermaphrodites are bodies that do not matter. An alternative set of discursive and institutional practices might conceive of sex as a continuum, and leave hermaphrodite bodies as they are born.

I am not trying to argue that either 'correcting' or accepting hermaphrodite morphology is a more 'natural', or appropriate response (for example, an ideological order which 'accepts' hermaphrodite bodies could conceivably develop a very granular and discriminatory classification system for such bodies along the lines of race classification systems that distinguish between various percentages of 'coloured' blood). Instead, I am trying to suggest that the distinction between the material and the discursive body is a false one. As Judith Butler explains, to suggest that the body is discursive is not to suggest that the body does not have a material presence, but rather to recognize that "there is no reference to a pure body which is not at the same time a further formation of that body" (*Bodies that Matter*, 10). Thus biopower is both the site of ideology's acting upon the body/subject and a potential site for resistance. Just as cultural representations that

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

challenge the hegemonic articulation can work to change the available subject positions, so, too, can bodies which resist disciplining themselves to cultural norms challenge the field of the culturally intelligible.

The meaning of any attribute of the body or any body practice is subject to the historically contingent structuring of ideology. One example of this is the practice of body piercing. Once seen as distinctively counter-culture, a resistance of dominant ideology by its practitioners,[17] the practice has now been re-coded as harmless fashion. However, this reading of body piercing as fashion is not sustained for all piercings or all piercing practitioners: the body and its practices must always be read in the context of various discourses which structure and classify them. In 1990 Alan Oversby was successfully prosecuted for providing piercing as part of an SM sub-culture.[18] In this case, the court determined that the motives for seeking a piercing were (1) able to be ascertained by an outside party, the state, and (2) germane to whether or not this practice was acceptable or criminal. The normalizing power of the discourse of mental health determined that it was appropriate to inflict the momentary pain of piercing in the interests of aesthetics, but that it was criminal to inflict the momentary pain of piercing in the interests of sexual arousal. Hence, the meaning of body piercing – or any practice of the body – is not stable. Such meanings are overdetermined and must be examined within the contexts of other discourses that construct the body, discourses which vary by sex, sexual orientation, race, class and – in this case – so-called sexual deviance.

One of the key systems that determines the ways in which bodies can materialize is the sex/gender system which requires that bodies 'be' one of two recognized sexes, and that

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

these bodies display a set of social behaviours (gender) appropriate to the sex of that body. The constructs of sex and gender are not bodily givens, but are cultural norms that govern the materialization of bodies. The assumption of a bodily norm can be thought of as analogous to answering the call of ideology. Thus, the action of power on the body is part of what forms the subject; the power of fantasy to normalize some identifications and foreclose others extends to the choices made by our bodies, to our very desires. Judith Butler convincingly argues that the 'natural' presentation of the male and female body is a performance. Butler's work shows that, in order for the subject to enter a culturally intelligible subject position in the current hegemonic articulation, this subject must assume one of the two sexes: male or female. Because this assumption of a sex/gender role happens at the unconscious level, as in any answer to the call of ideology, the subject perceives the gendered body to be an expression of an interior essence rather than the social regulation of the body through disciplinary power. The testimony of one male-to-female transsexual after her operation suggests how discursive constructions of the body and its capabilities constrain the lived experience of the body: "for there was to the presence of the penis something positive, thrusting and muscular. My body then was made to push and initiate, and it is made now to yield and accept, and the outside change has had its inner consequences."[19] This subject's self-representation and experience of the lived body is clearly mediated by discursive constructions of what is 'natural' to male and female bodies respectively; the subject presents her changed interiority as a consequence of how her body is made.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

However, as Butler argues, the sex/gender system is precarious: one must constantly 'prove' that one is one's gender by performing it. This need to reiterate one's gender identification by performance explains the logic underlying notions about being a 'real man' or 'real woman'. The reality is in the reiteration of the norms that materialize the gendered body in the first place; challenges to these norms threaten not only the status of the body who challenges them, but also threaten to reveal the man behind the curtain operating the levers. That is, challenges to the norms of the sex/gender system point to the fact that the system itself is an arbitrary construction constantly needing reinforcement rather than a 'natural' expression of the interior essence of subjects. If gender is a natural attribute that follows from sex, how can someone possessing a penis become 'not real' as a man through behaviour such as experiencing sexual desire for other men? In his essay "Gender Treachery: Homophobia, Masculinity and Threatened Identities," Patrick Hopkins explores this complex intersection of identity, gender and sexuality:

> Because personal identity (and all its concomitant social, political, religious, psychological, biological and economic relations) is so heavily gendered, any threat to sex/gender categories is derivatively (though primarily non-consciously) interpreted as a threat to personal identity - a threat to what it means to *be* and especially what it means to *be me*. (171)

Hopkins argues that this intersection lies at the heart of the violence that so often accompanies homophobia. This, then, is why it remains crucial to interrogate the intersections of body, self, and the social: discourses regarding the body shape the bodies that can materialize, the subjects that are produced through this materialization and ongoing discipline of bodies, and how we treat others based on their bodies.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

There is a tendency in some postmodern theory to speak of the body as an obsolete relic, no longer necessary in a world of virtual communication and technological augmentation. For example, Arthur and Marilouise Kroker ask, "If, today, there can be such an intense fascination with the fate of the body, might this not be because the body no longer exists?" ("Theses on the Disappearing Body," 20). They go on to argue that "In technological society, the body has achieved a purely *rhetorical* existence" (21). Given the material they focus on (body augmentation, cyborg bodies, integration of the mind into a network or virtual reality), what the Krokers seem to mean when they argue that the body no longer exists is that our belief in the natural body no longer exists. The natural body is now (recognized as being) written upon by culture in such a way that it becomes impossible to distinguish an original body from a body shaped by culture and ideology. As Anne Balsamo points out, anxiety about the disappearance of the body might have more to do with the disappearance of a certain type of body – the white, male, economically-privileged body which can no longer be coded as the universal body – rather than with the true disappearance of the relevance of the material body. Balsamo writes, "the 'disappearing body' is a gendered response to cultural anxieties about body invasion. Masculinist dreams of body transcendence and, relatedly, masculinist attempts at body repression, signal a desire to return to the 'neutrality' of the body, to be rid of the culturally marked body" ("Forms of Technological Embodiment," 233).

I am in agreement with Balsamo's assessment. In contrast to the representations of the disappearing body, I would assert the continuing, perhaps expanding importance of our bodies and of developing a critical understanding of their place at the nexus of culture

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

and nature. I would argue that the ability to construct the body as passé is a position available only to those privileged by wealth and influence; those who do not feel the need to specify their materiality usually think of it as the norm. For those who still need to rely on the work of their body to produce the means of survival, for those who lack access to technologies that can erase the effects of illness, and for those whose lives continue to be structured by racist, sexist, or homophobic readings of the body, this is anything but a post-embodied age. Vivian Sobchack warns against the "dangerous liberatory poetry" of cultural theorists who would erase or disavow the "the moral material and significance of the lived-body" ("Beating the Meat," 210). The body remains relevant to critical work and 'real' life, both because 'real' people continue to suffer or prosper in their material bodies, and because the discourses that structure these material bodies continue to construct and constrain our possible selves. The material action of ideology on the body is not something that technology has erased; in fact, technology can be and has been used to enhance this action.[20]

What seems clear to me through all these various readings and interpretations of the body and its meanings is that the amount of critical attention that has recently been directed toward the body is well warranted. The body occupies the liminal space between self and not-self, between nature and culture, between the inner 'authentic' person and social persona. In examining the representations of bodies and the meanings they carry in science fiction texts for this project, I want to retain a concept of the body that pays adequate attention to all the threads that form its cloth. Both Elspeth Probyn and

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Elizabeth Grosz have offered useful representations of the body as object of study that will inform my reading of it. Grosz argues for:

> A framework which acknowledges both the psychical or interior dimension of subjectivity and the surface corporeal exposures of the subject to social inscription and training; a model which resists, as much as possible, both dualism and monism; a model which insists on (at least) two surfaces which cannot be collapsed into one and which do not always harmoniously blend with and support each other; a model where the join, the interaction of the two surfaces, is always a question of power; a model that *may* be represented by the geometrical form of the Möbius strip's two-dimensional torsion in three-dimensional space. (*Volatile Bodies*, 188-189)

The strength of the Möbius strip model is that it offers a way to conceive of the two aspects of the body (interiority and surface) as always interacting yet not reducible to the same thing. This model allows for analysis of cultural inscription on the body and the subject, but yet also looks for ways that the subject can resist such cultural marking and offer alternate possibilities. Elspeth Probyn adds to this configuration, speaking of the body as the intersection of ontology (the lived body, the interior) and epistemology (the socially constructed body, the exterior). She argues that the feminist project is to look for connections between these two, to reflect upon the insights of personal experience with the context of social discourse to politicize the sources and meanings of such experience. She argues that "Both of these levels – the experiential self and the politicization of experience – are necessary as the conditions of possibility for alternative speaking positions within cultural theory" (*Sexing the Self*, 16).

The human body, like the human subject, is a product of both culture and nature. Both must maintain a sense of natural and stable boundaries by continually marking out the distance between what is self and what is not. The natural body is maintained through

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

a number of boundary lines: that between male and female bodies, that between my body and the rest of the world, that between the natural body and artificial supplements to this body. These boundaries have always been unstable and the recent abilities of technology to modify the body in radical ways make anxiety about these boundaries all the more apparent. Is someone who has had a sex-change operation a 'real' man or woman? Is an artificial limb part of my body or not? How much of my body can be removed or replaced while I still remain essentially 'me'? Does incorporation of a donated organ mean that someone else's body is in my body?

One of the common ways in which cultural representations have figured anxieties about the boundaries of bodily integrity and the dangers of violating these limits is through the figure of the monster. At least as far back as *Frankenstein*, the evidently non-natural body has been an object of fear and sometimes disgust. However, as we have seen above, the natural (and correct) body has often been deployed in a repressive way, to limit the rights and opportunities of bodies deemed as substandard. Is it not possible to see something positive in the image of the monstrous body? Margrit Shildrick argues that "Monsters signify, then, not the oppositional other safely fenced off within its own boundaries but the otherness of possible worlds, or possible version of ourselves, not yet realized" ("Posthumanism and Monstrous Body," 8). My project concerns the monstrous bodies in SF and what they can tell us about our prejudices, anxieties, and discursive constructions of bodies and selves; ultimately, it is focused on the potential that 'other possible versions of ourselves' may provoke us to resist the repression of the natural.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Science Fiction:

There is simply no overstating the importance of science fiction to the present cultural moment, a moment that sees itself as *science fiction.*

Scott Bukatman

As we enter the new millennium, Scott Bukatman's observation continues to capture the cultural mood. Nowhere is this more apparent than in representations of the body and the ways in which science might change, erase or surpass it. We live in a world in which the opportunity to clone your pet for several thousand dollars[21] coexists with continual discussion of the need to end the welfare state because the nation is no longer rich enough to support the burden of the poor and non-productive. The commonplace opposition between what is 'science' and what is 'science fiction', used to debunk ideas that are too 'wild' or 'unrealistic', is breaking down. From the point of view of science fiction fans and writers, this border between science and science fiction is yet another unstable marker. In the past, science fiction giants such as John Campbell have argued that science fiction should play a role in predicting new technological innovations. More recently, science fiction seems to find it difficult to stay ahead of the innovation.

There are many reasons why I believe that it is useful to look to science fictional representations as a way to explore various discourses about the body and technology that are pertinent to the current cultural moment. My reasons for interest in the genre have less to do with exploring its heritage of scientific prediction, and more to do with Ursula K. Le Guin's definition of science fiction as a thought-experiment. Le Guin writes, "the purpose of a thought-experiment, as the term was used by Schrödinger and other physicists, is not to predict the future, ... but to describe reality, the present world" (Introduction to

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

The Left Hand of Darkness). Like Le Guin, I am interested in exploring the description of our present reality, our present ideas about the body and its location in what Zone Books has described as the DMZ between nature and culture. The tropes of science fiction texts allow the writer and reader to explore possible implications of the technological modification of the body through extending the possibilities beyond the present moment. Such an extension may be figured in terms of extending the capacity of the technology itself – such as Iain Banks' trilogy which represents the science of organ transplantation as so advanced that one's entire body can be replaced – or it may explore possible social uses of the technology which have not (yet) been adopted – such as Philip Kerr's *A Philosophical Investigation* which portrays a culture that monitors potential criminals based on a biological marker of violent potential.[22]

Popular culture in general has had a history of being dismissed as a cultural opiate for the masses by literary critics. Marxist critics in particular have seen in popular culture simply a tool for the dissemination of dominant cultural values. However, the field of cultural studies – as described by such critics as Stuart Hall, Dick Hebdige, and Lawrence Grossberg – promotes a different view of the social and cultural function of any cultural representation. Pointing to the ways in which the distinction between high and low culture has been used to consolidate class privilege, cultural studies scholars reject this distinction and take 'seriously' all cultural representations. Such literary practice rejects the heritage of Mathew Arnold and the notion that culture should instill the 'best' values of a society; instead, it focuses on questioning which values supporting whose interests are at work in various cultural articulations. Following upon the work of Raymond Williams, the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

task of the cultural studies critic is to interrogate the cultural representation within its contextual field of social and political discourses. This work takes as one of its premises that text and context mutually construct one another, and examines the ways in which texts enter into the debate to construct cultural meaning and common sense. Instead of viewing culture and politics as separate realms, cultural studies queries the political work performed by all cultural texts, including popular ones.

Pierre Bourdieu has analyzed the way in which aesthetic judgements are often politics by other means:

> Specifically aesthetic conflicts about the legitimate vision of the world – in the last resort, about what deserves to be represented and the right way to represent it – are political conflicts (appearing in their most euphemized form) for the power to impose the dominant definition of reality and social reality in particular. ("The Production of Belief," 102)

That is to say, the history of constructing a hierarchy between popular culture and high culture has not been a history of objective aesthetic judgements, but has been a history of ideological struggle between classes. Marxist critiques of popular culture can be seen, similarly, as efforts to control the dominant definition of social reality. Rather than see popular culture as a monolithic whole which functions to circulate the hegemonic articulation of ideology and divert the attention of the masses from real social problems, Jim Collins argues that popular culture is heterogeneous. He argues that popular culture – viewed as a whole – forms an unsutured field of competing discourses. The competition these discourses are engaged in is for the power to construct the cultural common sense. These various discourses interpellate the subject in contradictory ways. Which discourse seems 'true' or 'right' to the consumer will depend upon the particular 'common sense'

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

that discourse upholds and how that common sense intersects with other ways in which this subject is interpellated. The subject retains agency in the need to choose among competing discourses and the various dominants that each offer. Collins is critical of Althusser's view of the subject as always- already interpellated, seeing a limitation in Althusser's failure to theorize how the subject negotiates between competing calls.

This notion of popular culture as a non-totalized field is similar to Rosemary Hennessy's description of ideology as discourse. Hennessy argues that we can intervene in the discursive construction of reality by challenging its hegemonic articulation and offering competing structures. The field of science fiction provides an ideal space for challenging hegemonic articulations regarding the body and technology. A popular genre on some level represents a 'choice' on the part of its public; it is a discourse whose economic survival relies on it having an audience and so it may, to some extent, be read as an expression of public ideas. Science fiction, in particular, is a genre that is characterized by a close relationship between writers and fans, both of whom play an active role in shaping the contours of the genre.[23] I believe that fiction represents a method of coming to understand concepts and to explore and articulate ideas. A critical reading of science fiction texts can perform an intervention into the dominant constructions of body and self that inform many decisions about the social uses of technology.

Feminists have early seen the possibilities provided by science fiction to critique the current social formation and offer alternatives to it. In her recent book of essays on socialist feminism, Joanna Russ cites science fiction as one of the sources that inspired her to think "*things can be really different*" (*What Are We Fighting For?*, xv), and to work to reduce

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

the distance between an ideal difference and the present reality. Sarah Lefanu's *In the Chinks of the World Machine* explores the fascination that many women writers have had with science fiction and the opportunities it allows for creating a new social order. She quotes Suzy McKee Charnas' observation that:

> Instead of having to twist 'reality' in order to create 'realistic' free female characters in today's unfree society, the SF writers can create the societies that would produce those characters, not as exceptions of limited meaning and impact, but as the healthy, solid norm. ... SF lets women write their dreams as well as their nightmares. (158)

Charnas' comments point to a recognition of the role that culture and ideology play in subject formation as her description depicts the characters in texts as products of their social environment. Charnas recognizes that the strength of science fiction as an oppositional discourse is that it allows the writer to create both new subjects and new societies in which these 'dream' subjects are the norm. By creating a new society, science fiction allows for the construction of new possible selves in our present society through reader identification with the SF character. For Charnas, science fiction is a genre that allows the creation of societies that 'produce' free female subjects, 'naturally'.

The characteristics of the science fiction genre itself make it a useful tool for exploring the intersection and interchange between self and world. Brian McHale has argued that the postmodern era is characterized by a literature of ontology and that science fiction is the distinctive genre of this era. He makes this classification based on the way in which the conventions of science fiction require explanation of context as well as of character. The task of the science fiction author is to create an alternate world as well as to create characters and situations that make up the narrative. This alternate world may be an

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

imagined future of this world or it may be a totally 'different' world, such as another planet. In either case, however, the reader must draw upon the known in order to understand and imagine the fictional world. Even a novel set on a different planet (such as Le Guin's *The Left Hand of Darkness*) is really about imagining how our world might have been different (for example, if child-bearing was not something that only one sex could perform). Samuel R. Delany has argued in *The Jewel-Hinged Jaw* that science fiction can be thought of as a reading practice, as a particular way of decoding words into meaning: for example, 'she turned on her right side' can mean the conventional, 'she rolled over' or the science fictional 'she switched on the power to the right side of her body'. Nothing can be taken for granted while reading a science fiction text: the reader must discard the ideological 'common sense' that functions for this world, which opens up a space for the articulation of alternate ideological constructions of social reality.

What this type of reading practice means in terms of my argument is that the reader's attention is drawn to the ways in which discourse constructs reality while reading a science fiction text. Science fiction 'pulls the rug out from under' our assumptions of the given or the natural. Very often, science fiction texts foreground the connections between economic, political and ideological factors. This is particularly true in 'near future' science fiction texts where the author must explain both how the world is 'now' and how it got to be that way. As well, in developing characters and explaining the situation in which the characters find themselves,[24] a science fiction text will often highlight connections between subject formation and social context. Again, science fiction readers will use analogy to 'our world' to understand the world of the novel and its characters. Science fiction is a genre

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

that continually asks its readers to compare what 'is' to what might have been, or, perhaps, could be. Through a critical reading of a science fiction text that focuses on contrasting which aspects of the fictional world bear explanation, and which 'go without saying', we are able to develop an understanding of the particular intervention each text is trying to make in the social construction of 'reality'.

As I have described above, this project is rooted in an understanding of discourse as that which forms the way in which we 'see' the reality of our world and our selves. Discursive representations compete with one another to police the boundaries of what may be represented and what may not. Such representations are vital to determining the range of social actors who can inhabit this space given the role of identification and interpellation in subject formation. Part of the work for social change, therefore, is the work to change the representations that circulate within the currently dominant construction of the social. I believe that the distinction that would separate discursive from non-discursive reality is a false one in the following sense. While I am not trying to argue that nothing happens outside of discourse, our ability to understand, communicate, and form social action around such 'happenings' must occur within discourse. In order for a non-discursive experience to be anything other than an isolated moment, pertinent only to the affected individual, it is necessary to represent this event in discourse. Such representations are never neutral but are always also an interpretation of the event. While science fiction texts are not representations of 'real' events, they are interpretations of cultural meaning, and they can work to change the range of intelligible representations that circulate.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Teresa de Lauretis also argues that science fiction can expand the social imaginary:

> I think SF has a way of using signs that is potentially creative of new forms of social imagination; creative in the sense of mapping out areas where cultural change *could* take place, of envisioning a different order of relationships between people and between people and things, a different conceptualization of social existence, inclusive of physical and material existence. ("Signs of Wo/ander," 161)

Cultural fantasies about the body and its intersection with technology are neither inherently oppressive nor inherently liberating. This project seeks to interrogate various thought-experiments that posit the future of the 'posthuman' subject without forgetting about the body, to seek to understand their potential both for mapping a new cultural intelligible and for providing new modes for disciplinary power to act upon the body. The 'choice' depends on social and cultural conditions for the use of technology, a choice we are in the process of making at the current cultural moment. It is clear that social change will take place in the 21st century as we struggle to come to terms with the implications of AIDS, the Human Genome Mapping Project, and new reproductive technologies. The goal of this project is to look at the ways that certain science fiction texts have mapped out where change could take place, for better or for worse, through an examination of how they represent the relationship between the body, the self, and the social.

<u>This Project:</u>

> *Science fiction is generically concerned with the interpenetration of boundaries between problematic selves and unexpected others and with the exploration of possible worlds in a context structured by transnational technoscience.*
>
> *Donna Haraway*

Haraway's statement maps the trajectory of this project: to trace the subjects and bodies that emerge when the boundaries between the monstrous and the natural, the self

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

and the other, are challenged, transgressed, and erased. Through examining the problematic selves and unexpected others represented in selected science fiction texts, I hope to explore the ideological construction of the self, the body, and the social at this particular cultural moment. I will be reading these texts both as an expression of current cultural preoccupations and anxieties, and as interventions in the ideological construction of social reality. The new subject positions these texts offer can map a place where cultural change could take place. Iain Chambers writes, "ideology provides the daily plasma in which we cohere, recognize our 'selves', and move and act as unified subjects. To contest it and demonstrate that there can be other views, other choices and possibilities, also means that we have to contest our inherited 'selves'" (*Popular Cultures*, 211). I would expand his comments to argue that by contesting our inherited 'selves', by embracing instead problematic selves and unexpected others, we can contribute to changing the ideology that constructs these selves and the social world we live in.

How we think about the body is important to decisions we make about the rights of various subjects and the moral implications of various practices that are part of our current cultural moment. Many new technologies are integrally linked to our concepts of our bodies and our selves: cloning; the search for the 'gene' that can explain everything from homelessness[25] to homosexuality; reproductive options that could allow for the selective manufacture of the fetus as product and which complicate our notions of parents and parental rights. As well, the healthcare threat of AIDS and the discursive representation of it as public enemy number one focus attention on the intersection of bodies, practices, and public policy decisions which are rooted in moral notions.[26] The body is deeply

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

implicated in subject formation (Foucault's disciplined and docile body) and in public discourses about which bodies (and subjects) matter, in the doubled sense of this word as it is used by Judith Butler: which bodies 'count' and which are able to become part of the domain of culturally intelligible representations.

In this project, I will be reading a selection of science fiction texts to interrogate the representations of bodies presented by these texts and to link these representations back to the notions about bodies that I have been discussing in this introduction. Are these bodies presented as self or not-self? Are these bodies presented as natural or culturally constructed? Do these texts allow us to interrogate the practices that form bodies and subjects within the text and, by extension, within our world? My purpose is to look at the ways in which these texts participate in the battle over what is 'common sense' about bodies and selves, that is, in the battle to form the hegemonic articulation of ideology. This project is not intended to be a survey of science fiction using common representative tropes, nor is it intended to be a study of science fiction written from within a particular tradition. My selection of authors includes writes from Britain (Jones and Banks), the United States (Butler, Cadigan, Carter, Womack, Stephenson) and Canada (Gibson – although he is originally from the United States). I have chosen the particular texts I am reading on the basis of their representations of technologies that I am interested in engaging with; other texts could also have been chosen. The larger point is not specifically the interventions that these particular texts make in the construction of ideological 'common sense' about subjects, selves, technology and bodies. Rather, I am interested in arguing that popular texts *do* make such an intervention and offering *some* examples of such

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

intervention. Similarly, I have chosen to limit my focus to texts in the interest of space, but other media such as films, television, and comic books also do such ideological work. Clearly, other examples of intervention are available and these other texts will offer perspectives other than the ones discussed here; popular culture is not a monolithic whole.

In the first chapter, I will read Gwyneth Jones' *Aleutian* trilogy, focusing on how the notions that have been discussed in this introduction – subject formation through discourse and body/subject materialization through practice – are taken up within these texts. Chapter 2 compares two representations of a world of posthuman bodies: Octavia Butler's *Xenogenesis* trilogy and Iain Banks *Culture* trilogy. In the first case, interbreeding with an alien race supercedes the 'natural' human body; in the second example, this 'natural' body is made obsolete by technology as the body's parts are easily exchanged and changed. My third chapter will examine the repressed body of cyberpunk narratives through a reading of William Gibson's *Neuromancer*, Pat Cadigan's *Synners*, and Raphael Carter's *The Fortunate Fall*. In this reading, I will focus on the ways in which representations of this repressed body return to complicate our understanding of the novels and the relation of body to self. My final chapter will more explicitly turn to the question of the mutual production of discourses and bodies, and discourses and subjects, through reading Neal Stephenson's *The Diamond Age* and Jack Womack's *Random Acts of Senseless Violence*. Together, these two novels explore the poles of text writing self and self writing text. Finally, my conclusion will return to the issue raised in the introduction regarding the relationship between textual representations and social choices, that is, why is it important to examine how we represent bodies?

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

In my readings, I am concerned with examining both the ways in which these science fiction texts are expressions of current cultural anxieties regarding the instability of the previously taken-for-granted natural body and natural self, and in examining how these texts contribute to the ideological construction of reality. I will be looking for ways in which these texts offer what Donna Haraway has called 'The Promises of Monsters'. The promise of monstrous subjectivities, as Haraway sees it, is that they are an example of what Trinh T. Minh-ha has called inappropriate/d others:

> The term refers to the historical positioning of those who cannot adopt the mask of either 'self' or 'other' offered by previously dominant Western narratives of identity and politics. To be 'inappropriate/d' does not mean 'not to be in relation with' – that is, to be outside appropriation by being in a special reservation, with the status of the authentic, the untouched, in the allochronic and allotopic condition of innocence. Rather, to be an 'inappropriate/d other' means to be in critical, deconstructive relationality – as the means of making potent connection that exceeds domination. To be inappropriate/d is not to fit in the *taxon*, to be dislocated from the available maps specifying kinds of actors, not to be originally fixed by difference. ("The Actors are Cyborg," 23)

The promises of monsters, then, are that their subjectivity is not grounded on repudiation: they provide the promise of a subjectivity of difference without hierarchy, difference without domination. The promises of monsters are that they are not 'natural' and thus they "can call us to account for our imagined humanity" ("The Actors are Cyborg," 25). Monsters, like inappropriate/d others, exceed the maps of the culturally intelligible, and through their being offer a space where things could be different, where different actors, different bodies could matter. Haraway reminds us that 'monster' has the same root as 'to demonstrate,' that is, monsters signify ("The Promises of Monsters," 333).

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

This project, then, is looking to explore the possibilities for changing maps of the social, for creating a new collectivity that includes the monsters. It is about looking for the chance to resist the ways in which the category of the 'natural' has been used in exclusive and repressive ways, and a chance to form new understandings of subjectivity which explore the liberatory potential of new technologies of the body and the self. Like Haraway, I hold out hope for the monsters as promising a way to understand our world in terms of "new collectives of human and unhuman allies" ("The Promises of Monsters," 322). However, I am aware of the need to be cautious. Technology is neither emancipatory nor repressive in and of itself; the monsters can be used to signify new forms of exclusion as well as new spaces of freedom. The creation of new posthuman bodies with technology involves social and moral as well as technical choices. It is my hope that this reading of these science fictional texts provides both opportunities for exploration, and warnings for routes not to be taken, as we continue to struggle with the implications of new technologies of the body in this current cultural moment.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

NOTES

---

[1] See, for example, Fredric Jameson, Hans Berten, Patricia Waugh, and Brian McHale.
[2] See Judith Butler.
[3] See, for example, Emily Martin, Elizabeth Grosz, Elspeth Probyn, and Susan Bordo.
[4] And, in my case, personal discussions with a number of people which, while informative, do not form a statistically valid sample.
[5] See Gary Kelly, *Women, Writing and Revolution*, who makes a similar claim about women's use of fiction in the 18th century.
[6] In this work, my focus in on the construction of subjects through cultural texts and material structures: that is, I wish to focus on the role of determining social structures in the creation of subjectivities. However, other critical approaches which emphasize the psychological dimension of subject formation are also valid to the considerations outlined in this section. In particular, Julia Kristeva's work on abjection could usefully be incorporated into the kind of readings undertaken in this project.
[7] See Patrick Hopkins on the notion of gender treachery.
[8] Rosemary Hennessy, *Materialist Feminism and the Politics of Discourse*, p. 14.
[9] See Marx and Engels, *The German Ideology*: "the class which is the ruling material force of society is at the same time its ruling intellectual force. The class which has the means of material production at its disposal has control at the same time over the means of mental production" (31).
[10] Kathy Davis investigates what I take to be an interesting example of this tension between subject and self in her *Reshaping the Female Body* in which she investigates women's reasons for obtaining plastic surgery. Her investigation was provoked by her desire to reconcile the problem she perceived when a feminist friend who was critical of the beauty system nevertheless chose plastic surgery as a way to 'solve' her problem with her body. In her conclusion, Davis argues for a move away from what she calls "politically correct feminism" as such a stance does not allow an opportunity to engage with the complex web of resistance and complicity that characterizes the relationship of real women to their bodies and to the discourse of plastic surgery (see p. 180). This complex web of complicity and resistance in which one can be critical of the beauty system and yet still desire to embody its ideals is an example of what I would call the tension between subject and self.
[11] See Lakoff and Johnson, *Philosophy in the Flesh*.
[12] See Jennifer Terry, "The Seductive Power of Science in the Making of Deviant Subjectivity" in *Posthuman Bodies*.
[13] Recent biological studies have suggested that there is a relationship between consumption of soy products and estrogen levels in the blood stream (see Susan Aldridge, *The Thread of Life*) suggesting a productive line of inquiry between cultural practices of eating and the material body. As Japanese cuisine traditionally contains more soy beans than Western cuisine, this may be a (partial) explanation of the difference.
[14] See Herrnstein and Murray, *The Bell Curve*.
[15] The case of many instances of biopower, such as plastic surgery, exercising and dieting, is complicated in terms of whether or not it should be viewed as the subject's rational assessment of the various gains that may be had through conformity or whether the subject has internalized the normative standard and therefore perceives the desire to conform as an 'inner' desire that expresses the subject's own belief that a thinner, harder body is better. Each strand will operate to varying degrees in each individual case. As Teresa de Lauretis argues, ideology works on the subject in ways that are contingent on both a social and a *personal* history.
[16] It is estimated that hermaphrodite births account for 4% of all live births (*The DNA Mystique*, 125).
[17] See Vale and Juno, *Modern Primitives*.
[18] See Gary Watson Taylor, "The discursive construction and regulation of dissident sexualities" in *Body Talk*.
[19] Quoted in "Spare Parts" by Marjorie Garber, *Gay and Lesbian Studies Reader*, p. 325.
[20] See Donna Haraway, *ModestWitness@SecondMillenium* p. 205+, among others, for examples such as varying nutritional advice given to white and non-white pregnant women, varying infant mortality rates between whites and non-whites, sterilization as a birth control practice recommended to poor and non-white women, etc.
[21] See *The Edmonton Journal*, July 3, 1999.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

[22] This novel comes close to 'not being science fiction' if we accept a distinction between representations of science as it actually is or is used (call this realism) and representations of science that project it into imagined future capacities or uses (call this science fiction). In 1992, Fredrick Goodwin, the then director of the National Institutes for Mental Health, proposed the US Violence Initiative, a program to identify inner-city children whose alleged biochemical defects may make them prone to violence in later life. While purportedly rooted in an understanding of violence as produced solely by the body, this program reveals its complicity with racist cultural discourses in its focus on the inner-city as the site of biological defects tending toward violence. This program reveals, again, how easily biology can slip into racism (or in the case of Kerr's novel, sexism) and it participates in what I consider a dangerous tendency to assume that social problems can be reduced to the body and easy biological fixes. Such an approach to the 'problem' of inner-city violence erases the factors of social and economic discrimination that contribute to the construction of the violent inner-city youth.

[23] See Broderick, Delany, and James.

[24] In the next section, I will develop this double sense of 'find themselves' which resonates as both 'the objective situation they are in' and 'the social discourses in which they are formed as subjects', that is, in which they 'discover' their selves by answering a call of ideology.

[25] See Haraway, *ModestWitness@SecondMillennium* p. 160. In fact, the search is for the gene for 'mental illness'. However the remark was presented in a context in which the speaker – an editor for *Science* – was speculating that genetics could 'cure' the social problem of homelessness as most homeless people are known to be mentally ill. Such comments show the ease with which scientific fact slips into polemical argument, and the dangers of reducing all social ills to biological 'problems'. Even if mental illness plays a role in producing the subject position 'homeless person', this 'fact' does not explain the whole of the various social, economic and personal discourses and practices that combine to create the phenomenon of homelessness. However, the scientific 'truth' status of medical or genetic descriptions seduce many into believing that social problems can be solved by fixing the individual rather than the system.

[26] See Angela Wall, "Conflicts in AIDS Discourse: Foucault, Surgeon Generals, and the (Gay Men's) Healthcare Crisis" in *Bodily Discursions* for a discussion of Jocelyn Elders' dismissal as surgeon general. Wall argues that Elders was dismissed because she chose to publicly discuss healthcare issues regarding AIDS and safe sex based on her understanding of 'real' bodies and practices rather than based on the moral choices upheld by conservatives (for example, making condoms available in schools because teenagers will have sex rather than prohibiting them because teenagers should not be having sex).

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Chapter 1: The World of the Body and the Body of the World

> *The awakened and knowing say: body am I entirely, and nothing else; and soul is only a word for something about the body.*
>
> *Friedrich Nietzsche*

Gwyneth Jones' *Aleutian* trilogy provides an exemplary set of texts for an exploration of the various intersections of the subject, the body, the text and the social. The trilogy – *White Queen*, *North Wind*, and *Phoenix Café* – describes a 300 year period that spans from the first contact with an alien culture (the Aleutians[1]), who arrive on earth in 2038, until their departure from our planet. *White Queen* narrates the period of first contact and deals primarily with the misconceptions and misunderstandings that occur because both the humans and the Aleutians insist upon reading the other through the standards of their own culture. The humans assume that the Aleutians are a superior race who have arrived by faster-than-light (FTL) travel, a misperception that is fueled by the Aleutian idea of reincarnation. The humans believe that the Aleutian individuals are the same *physical* individuals who departed from their distant planet, while the Aleutians at first assume that the humans share their understanding that reincarnated subjectivities are the same *personality* across the generations. The Aleutians view the humans as potential trading partners and see their relationship in terms of opportunity for profit rather than in terms of the human perception of interplanetary intrigue and domination. The main human characters in this novel – Braemar Wilson and Johnny Guglioni – work to uncover what the aliens are 'really' up to, while the central Aleutian character – Clavel – believes that he falls in love with Johnny. The cultural misunderstandings culminate in the 'rape' of Johnny by Clavel.[2]

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

North Wind is set approximately 100 years after first contact. This novel recounts the race between a number of parties – Aleutian and human – to recover the technology of FTL travel that was discovered and hidden by a human character – Peenemunde Buonarotti – in the first novel. Peenemunde had hidden her discovery as she believed that only Aleutians would be able to use it[3] and she did not want to give the aliens another advantage over humanity. The central character of this novel is Bella, an Aleutian who has some confusion about her identity. It is ultimately revealed that Bella is an Aleutian person who has been created through genetic engineering from Johnny's human tissue. The Aleutian character Clavel – returned in another incarnation during this time – had hoped that the misunderstanding of the rape could be healed in another generation through this creation of a new Johnny.

The final novel, *Phoenix Café*, is set another 200 years into the future. Over this time period, relations between the Aleutians and the humans have become increasingly strained. Although it was not their original intent, the Aleutians find themselves in the position of colonizer, having usurped many of earth's political powers given their superior technology. This novel narrates some of the long term consequences created by the initial misunderstandings upon which the relationship between humans and Aleutians was based. There are three main narrative threads in this novel: the attempt of the humans to use Aleutian organic weapons technology in their gender war; the discovery of FTL travel that humans may use by a human character, Helen; and a final attempt to overcome the damage of the rape incident through the character of Catherine. Catherine is the reincarnation of Clavel in a human body.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Identity is a central theme of these three novels. Some of the definitions of the word identity provided by *Collins Concise Dictionary* are: the state of having unique identifying characteristics; the individual characteristics by which a person or thing is recognized; and the state of being the same as a person or thing described or known. Each of these denotations is explored by the trilogy. The characters struggle to negotiate their sense of self, that is, those unique characteristics which make 'me' who I 'am'. The humans struggle with the need to reaffirm the boundaries of what is human, those characteristics by which a human can be recognized, as the existence of the presumably superior aliens challenges their sense of their place in the universe. Finally, Jones uses her trilogy to demonstrate the damage that results from the need to construct identity on the ground of repudiated other, and ultimately suggests that – after all – there is identity in the sense of sameness, between human and Aleutian, and between people and the rest of the world.

One of the reasons that this set of novels is so useful for exploring the ways in which identity is connected to culture is that Jones has chosen to narrate her novels from the points of view of both the humans and the aliens.[4] Thus, the first book in the trilogy, *White Queen*, provides us with only a provisional insight into the nature of the alien race and their culture. The reader, with the human characters, searches for clues that will decode the 'meaning' behind their acts and statements. At the same time, portions of the narrative that present the aliens' point of view perform the same interpretative work to decode human behaviour. One of the things that this style of narrative makes apparent is the difference in strategies used by the aliens and the humans to attempt to 'read' the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

other. Reading, as Rosemary Hennessy has shown, is an ideological practice that pertains to both written texts and the 'texts' of discourses, institutions and practices that make material social reality. Reading is a sense-making practice that constructs meanings out of cultural assumptions. The humans read the Aleutians through an assumption of difference while the Aleutians read the humans with an assumption of similarity. Throughout the novels, many misunderstandings follow from this initial distinction: the humans assume that the Aleutians are superbeings with powers of telepathy and FTL travel, while the Aleutians assume that they are involved in trade negotiations with "the locals," simply business as usual. The Aleutians gradually come to realize that the humans are operating with a different understanding of the situation than their own. Their confusion is revealed in the following exchange between two Aleutian characters:

> <What I can't understand .... Is how they came to be expecting us.>
> <It wasn't us they were expecting. It was some other, important people.>[5]
> (*White Queen*, 93)

This aspect of cultural misunderstanding reveals the degree to which we perceive the other through our own cultural preconceptions. This crucial distinction – the humans expect difference while the Aleutians expect identity – structures the relationship between the two species.

One of the key motifs running through the novels is the human attempt to gather data on the Aleutians in order to understand their difference. In *White Queen*, this desire for information is based on a perceived need to understand whether the Aleutians pose a threat to humanity. The third novel in the trilogy, *Phoenix Café*, roots this desire in a perceived need to re-assert what is fundamentally different and unique about being human.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

As I mentioned above, the humans enter the relationship based on the assumption that the aliens are superior: "It was a truism that the aliens who landed, whoever they were, *had to be superior*. Or else we'd be visiting them" (*White Queen*, 71). The humans observe that the aliens seem to be able to communicate without verbalizing and interpret this as a sign of alien telepathy. Gradually, the novels reveal this ability as something called the Common Tongue, which is a combination of body language, cultural conditioning, and biochemical feedback. Common Tongue is the most important distinction between the humans and the aliens and is central to the theme of identity in the trilogy.

An understanding of the Common Tongue is essential to understanding how Aleutian culture works and to understanding the differences that exist between humans and Aleutians. Jones forces the reader to struggle for this understanding, allowing evidence to emerge only gradually throughout the trilogy. Initially, those characters who reject the notion of the Common Tongue as telepathy believe that it is a sophisticated type of body language. Braemar describes the phenomenon in this way: "Babies don't learn to speak in order to communicate. They get on perfectly happily without words as long as they're with people who know them ... Gesture, body language: when you know someone well, an educated guess. That's what the Aleutians have" (*White Queen*, 179). Through studying the alien body, the humans learn that the aliens' DNA performs differently from human DNA. In humans, most DNA is 'junk'[6] and DNA fingerprinting can be used to establish the unique identity of an individual. For Aleutians, each nucleus includes the potential for expressing three-to-five million unique individuals. The investigating scientist explains this difference in terms of the Aleutians' parthenogenetic reproduction: "since they have no

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

power to become new by recombination, they dare not shut down anything that might one day be useful. It is crowded in there. But don't worry for Mr. Alien. The snake pit is doped. I would say there is a chemical event – analogous to our 'moment of conception' – forever deciding which of the strings is expressed" (*White Queen*, 168).

Rather than relying on biology to determine unique identity, aliens turn instead to culture. This is the process of 'learning to be oneself' that forms the final component of the Common Tongue. As Braemar's comments above indicate, the ability to communicate without language exists for infants provided that they are among people they know well and who know them well. In Aleutian society, we discover, everyone knows one another well, through intense study of the 'character records' of their own and other people's lives. Aleutians do not believe in 'permanent death' and believe that the unique genetic expression for each individual will return in the next generation. The reincarnated person will learn to become his self[7] through studying the records of his previous lives, awaiting the 'chemical event' of recognition that allows the individual to know which of the people represented in the records that he 'is'. Once this moment of recognition occurs, the individual models his life on the example provided by the records, and makes his own records for the edification of future reincarnations of his 'self'. Thus, the Common Tongue is positioned at the intersection of nature and culture. It is a reading of the body, both its gestures and its biochemical composition (through the Aleutian practice of ingesting one another's semi-sentient mobile cells called wanderers); but it is a reading of the body that can only be made by someone who is formed by the ideology of the culture. Aleutian identity encompasses both sides of the Möbius strip: they experience the moment

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

of recognizing themselves during the cultural study of character records in which they 'know' the observed person to their 'self', yet the description of alien DNA implies a biochemical as well as a cultural aspect to this moment. Aleutian identity is thus formed by both culture (the record study) and nature (the 'chemical event' that triggers recognition of the self in the records).

The Aleutian process of learning to be oneself can be thought of as a technologized representation of the process of interpellation. As I outlined in my introduction, Althusser argues that the subject is formed through ideology by answering its call, and the answer takes the form of recognizing that the call 'was really' for me. In her depiction of the Aleutians, Jones provides a representation of this process as their culture's religious practices, and has given it biological grounding in the description of Aleutian DNA. The Aleutian culture challenges the human separation of mind from body, showing that the self is clearly a product of both a biochemical (or genetic) identity and cultural conditioning (learning to be one's biochemical self). For Aleutians, both their bodies and their minds answer the call of ideology: their minds through the moment of recognition and their bodies through the 'chemical event' that accompanies this moment. Once this moment of recognition has occurred, the Aleutian becomes a disciplined body, working to model his self on the records of this 'self' that have been left by previous incarnations. However, like Althusser's subject who recognizes that it 'was really me' who was called, the Aleutians do not perceive this practice of learning to be one's self as an imposition of outside ideology; rather, it is the fulfillment of their inner, true identity.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

This Aleutian practice occupies a space of tension in the novels between the notion of identity as that which uniquely characterizes and the notion of identity as sameness. For many human characters, the Common Tongue in both its biological and social components is that which distinguishes humans from Aleutians: they are serially immortal, we die once; they contain the whole brood's DNA, we have a unique fingerprint; they share biochemical unity with their brood, we are separate individuals. However, throughout the novels, humans and Aleutians are able to communicate through the Common Tongue, albeit a somewhat muted form as it lacks the biochemical exchange. In fact, Common Tongue is portrayed as a 'natural' part of human communication that humans are simply not trained to read. By the time period of the third novel, *Phoenix Café*, many humans have learned to repress their speech in Common Tongue in order to maintain their sense of privacy, and Aleutians have learned to 'tune out' many humans statements in the Common Tongue given their rudeness. As well, some humans respond to the arrival of the aliens by imitating them and adopting Aleutian practices such as looking for and learning to be oneself in visual records. These characters also modify their bodies to imitate the Aleutian hermaphroditic morphology, and refuse to identify themselves as either male or female.

Humans who imitate Aleutian culture are called halfcastes. These halfcastes, the name invoking both racist and classist discourses, are a cultural rather than biological miscegenation. As they embody aspects of both human and alien – the monsters at the boundary of self and other – they are often the targets of hatred and violence. As I discussed in my introduction, if human identity figured in terms of that which makes us

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

uniquely ourselves is constructed out of both identifications and repudiations, then anyone or anything which occupies the margin of self and other threatens the (constructed) existence of the self. The very existence of halfcastes suggests that humans and Aleutians are not as different and separate as we might first imagine. The grounds of identity – the cultural differences which label aliens as those who speak the Common Tongue through record study and biochemical exchange, and humans as those who do not – are shifted into the grounds of identity – that which provides the basis for understanding similarities between human and alien.

This similarity between humans and aliens allows us to understand Jones' depiction of the process of learning to be oneself as a representation of the process of acquiring a culturally intelligible identity. The records that Aleutians study are made by state figures called priests within the Aleutian culture. These records are the Aleutian map of the culturally intelligible, filtered through the state to allow only what is acceptable to form the future self: "What went on your record was your life as they saw it: your experience filtered through the state religion" (*North Wind*, 33). That Jones wants us to see connections between the Aleutian practice and our own culture is suggested by the limit she provides to the material that halfcastes may use to 'find' themselves:

> The halfcastes were stuck with the twentieth century as the source of past selves. Further back, there weren't any moving images. Further forward, you ran into a modern 'deadworld' tech, which the Aleutians spurned. The time trap meant that the gender-heretics were stuck with the sex roles of the past. (*North Wind*, 85)

This construction, that halfcastes must use 20th century representations to find themselves, confronts the 20th century readers of Jones' fiction with our own investments in fictional

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

characters or cultural ideals that we emulate and model ourselves upon.[8] It is possible to stop the analysis here and consider such investments in cultural representations as a mark of the difference between halfcastes and us: we choose the images to consciously identify with, while they are chosen by the image that 'is' their identity. However, as my reading of the text thus far has shown, one of the motifs of the trilogy is to reveal how apparent difference often masks hidden identity. Jones puts an almost direct representation of the Common Tongue as the inscription of ideology on one's consciousness in the voice of Catherine:

> My mind turns it into words. I hear voices. Most Signifiers do – and not only when the supposed speakers are present. But so do you, or one voice, at least. I think the interior life of an Aleutian Signifier is like the interior monologue of human consciousness, the voice that you hear in your head constantly and you can scarcely stifle if you try. With us that voice is modulated. All the possible selves of Aleutia talk to us, and we talk back to them. It's our way of experiencing social pressure, personal complexity, cultural assumptions, and so on. (*Phoenix Café*, 84)

This "voice that you hear in your head" is the call of ideology, in Althusserian terms, or the prohibition of the superego in Freudian ones. It is the limit culture places on the expression of the self, and the evidence that culture constitutes its subjects. By bringing an understanding of Althusser and Freud to the text, we can extend our reading from the differences between our culture and the alien culture in the text. We are also able to see the similarities – how the text provides a representation of ideology working to form our selves – by acknowledging the continuity between the halfcaste practices and our own interpellation by ideology.

Jane Ussher's article, "Framing the Sexual Other," suggests that humans may share this process of learning to be oneself through the study of records on a more conscious

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

level as well. Ussher reports on the results of a series of interviews she conducted with lesbians about the process of becoming or discovering oneself to be a lesbian. The interviewees reported experiences that are analogous to the Aleutian cultural practice. Most interviewees felt that their lesbian identity was something that was always a part of them, an expression of a pre-existing interior essence rather than a conscious or unconscious sexual choice that was added to a previously non-gendered identity. However, the interviewees commonly reported that this interior essence was experienced as a vague, enigmatic desire, a sense that they were 'different' which lacked a concrete notion of precisely what this difference meant. This mystery was resolved for the interviewees through their experience of consuming cultural representations of lesbianism from a variety of sources: popular productions, medical literature, discourse circulating within their social milieu. As with the Aleutians, these individuals experienced a moment of recognition that helped them connect their interior desire with a model of how, concretely, to live that desire as a culturally intelligible identity.

Ussher's article provides a concrete example of how ideology works to shape our identities and how it works to select, in Judith Butler's terms, which bodies and selves can mat(t)er(ialize). For the interviewed subjects, 'being a lesbian' encompasses more than simply being in a female body and feeling sexual desire for other female bodies. It also means being a social subject who inhabits a recognizable space in the cultural spectrum. The 'finding' of oneself through cultural representations has both negative and positive effects. On the one hand, it provides the reassuring sense that one is not alone; there are other people who feel the same desires. On the other hand, it means coming to terms with

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

the various assumptions and presumptions about what a lesbian identity means to this culture. This can mean negotiating a sense of guilt that may be internalized from representations of lesbianism as 'unnatural' or 'sinful'; it can mean feeling like an inadequate subject because one does not recognize oneself in all the aspects of the lesbian identity that circulates in culture; and it can mean attempting to restructure and refigure the cultural representations of lesbianism that are available.

This third possibility is what Teresa de Lauretis has referred to as a reverse discourse, which she defines as "the process by which a representation in the external world is subjectively assumed, reworked through fantasy, in the internal world and then returned to the external world resignified, rearticulated discursively and/or performatively in the subject's self-representation – in speech, gesture, costume, body, stance and so forth" (*The Practice of Love*, 308). In the preceding discussion, I have focused on representations of lesbianism and how they are subjectively assumed to form the lesbian's sense of identity as discussed by Ussher in her article. However, this practice is also at work in the formation of any cultural identity. The moment of recognition experienced is perhaps more obvious to a lesbian, or to anyone whose identity is constructed as marginal or abnormal, precisely because representations of this identity are uncommon. However, we constantly recognize and repeat representations of ourselves as heterosexual, as men or as women. Jones' novels suggest that we also need to recognize and repeat a culturally constructed identity of what it means to be human. In each of these cases, assuming one identity means repudiating another: one becomes a man by repressing femininity; one becomes heterosexual by rejecting homosexual desire; one becomes human by refusing to

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

acknowledge the continuity between humans and others. De Lauretis' notion of reverse discourse as resignification and rearticulation can also be extended from the subject's self-representations to its textual productions. The Aleutian trilogy may be read as a resignification of what it means to be human: the Aleutians are a representation of how humans could potentially be different.

Phoenix Café most clearly articulates the central theme of the trilogy that the search for a unique human identity is really obscuring an underlying unity between aliens and humans. In attempting to explain differences between human and alien culture, the Aleutian character Catherine emphasizes that they are rooted in different degrees of awareness rather than in different circumstances:

> "Any society is a self-organizing pattern," she said. "Each individual is a nexus of relationships in that pattern: a particular knot in the web that returns like a ripple in the stream, though the water is not the same water. *We* are very much aware of this phenomenon, more so than you. The Catherine construct, that motif in the text of our community, will recur. And will be trained to remember my memories, because that's the way our society works. And will truly be me, because my personality is really nothing but a specially coded bundle of chemicals with its own particular history. But the 'I' speaking to you now, the sense of self that 'I' have in this moment, only exists here and now. I am certain of that. So am 'I' more immortal than you are? You say 'the place X is temporarily occupied by Catherine.' We say 'the place X is a person called Catherine': that's all. There are human societies where reincarnation has always been the accepted gestalt, except that few people are expected to remember themselves routinely, if I have that right? Humans told me that permanent death is a more useful concept. People work harder, they have more energy if they think they have only one chance. To me that sounds like an admission that either explanation will do. Aleutian physiology is different from human physiology, Aleutian reproduction different from human reproduction. But our subjectivity is the same: it's the same sense of self."
> (*Phoenix Café*, 225)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

This quotation points to one of the other motifs that runs throughout the trilogy, which is the separation of self and other. Aleutians do not recognize a separation between self and not-self (world) in the way that humans do.

Jones' expresses this motif of the unity of self and world in two ways in the novels: through the description of the biochemical aspect of the Common Tongue and through the search for a FTL travel device. The biochemical communicative aspect of the Common Tongue is accomplished through ingestion of wanderers, the semi-sentient cells that are passed between Aleutians. The wanderers are not only a method of communication between the Aleutians, but are also an embodiment, literally, of the Aleutian ideas about self and world. For an Aleutian, everyone who is part of the same brood is part of the same biochemical life. Again, we see the slippage between identity as unique characteristic and identity as sameness. All Aleutians are aspects of the same WorldSelf: all of their technology is a biological secretion of their selves, also identical. Yet, in Aleutia, "your identity was never in doubt, it filled the air around you. Only important people had personal names, descriptive tags that might change from life to life or mood to mood. But on earth everyone had to have a fixed title, local style" (*North Wind*, 9). For Aleutians, their wanderers are both a communication of their unique identity, the self that they 'are', and also an expression of identity, sameness, with the rest of the world, as these wanderers can be exchanged. All Aleutian technology is also a part of this same WorldSelf, a biochemical excretion of self that becomes tool.

This is the most threatening and most alien aspect of the Aleutians from the human point of view. The Aleutian biotechnology is superior to and easily surpasses the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

'dead' human technology of electrons. Humans are characterized by their need to separate themselves from the world while the Aleutians see themselves as 'no different flesh' than the world around them.

> Like almost every animal on earth – except for humans – they lived in a broth of shed cells, tastes, and smells that kept them always in contact with each other: but in the aliens' case the traffic was conscious. It was this living, intelligent flux, thick and complex as commerce on the lifeless human information networks, that had destroyed human supremacy. It was the basis of the aliens' effortless biotechnology. (*Phoenix Café*, 18)

The Aleutians, then, are the image of an ideal often represented in anti-sexist and anti-racist writing: a culture that is not rooted in hierarchies of male over female, white over black, man over nature. Instead, they are a utopian culture of harmony, offering the promises of monsters: difference without domination. Like Donna Haraway's cyborg, they eschew the boundaries of man/animal or man/machine: both their technology and their domestic animals are made from their own biochemical secretion.[9] Because human identity is so rooted in the need to distinguish self from other and to maintain boundaries between the human and not-human, the human characters in the novels are very threatened by the aliens and their technology. After the aliens arrive, humanity abandons a type of technology called blue clay, which is an organic protein technology that "could rebuild itself in situ if strange impulses came along that needed different pathways" (*White Queen*, 73) because they fear the aliens' ability to control this technology. The humans fear and loathe the breakdown of boundaries: "Everything was alive: rock, metal, food, tools. Everything was crawling with the infection of Aleutia: a world of flesh infested with the life of its people" (*White Queen*, 249).

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Perhaps most threatening to the humans is the Aleutians' fluid sense of the boundary between self and other. Part of the function of the wanderers is to convey the feelings and reactions of Aleutians to one another. They do not understand privacy as a need to hide aspects of themselves from others of their brood. The Aleutians continually exchange wanderers, consuming the cells of the other and thereby incorporating the other in to self: "When an Aleutian takes a wanderer from his skin, and feeds it to a friend, he's saying *this is me now, this is the state of my being*" (*Phoenix Café*, 134). This exchange is increased in volume during their sexual encounters, the complete sharing of oneself with the other, and the incorporation of the other into oneself. The human response to this practice is to feel repelled and invaded. In an aborted sexual encounter between the Aleutian, Clavel, and the human, Johnny (on which more later), Johnny responds with visceral disgust: "The truth was too vile. Things crawled, alive inside him. It was the filthiest nightmare, and it was real. He thought he would never again be free of this awareness of squirming life: on every surface, inner, outer, everything he touched" (*White Queen*, 218).[10]

As with the ability to use the Common Tongue, the conception of self as separate from the world or as part of the world seems to function as a marker of identity, a division between human and alien. However, Jones again subverts this marker and changes it into an argument for sameness, a suggestion that humans, too, are capable, as Donna Haraway argues, of seeing animals and machines as collective actors in the social construction of our reality rather than as objects to be acted upon by our subjective will.[11] Jones does this through the debate on FTL travel that extends through the trilogy. A human,

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Peenemunde Buonarotti, invents a type of FTL travel in the first novel. The basis for this travel is not finding a way to move matter at a speed that is faster than light, but instead to transfer only information over the distance. Arguing that consciousness is simply an arrangement of information, she develops a technology that can transfer one's consciousness to another location, providing that one can imagine the location. At the terminal point, a new body – identical to your original body – is constructed from the materials at hand. When you wish to return, an act of will can return the information – your consciousness – back to the originary point and your original body will be reassembled.

At the conclusion of *White Queen*, Buonarotti hides her invention because she believes that humans cannot use the technology. Rather than give the technology to the Aleutians, she prefers to cover up her invention. The plot of *North Wind* is largely devoted to a search by both a group of humans and a group of aliens to recover this lost technology. When the device is finally found, they also discover a recording Buonarotti has left, part of which explains why she feels only Aleutians are capable of exploiting the invention:

> For human beings, the experience is too much like a dream. Your mind/brain will enact meaning on what happens, as it does on the images that pass through your consciousness in sleep. *It is impossible for a human being to take action in the visited world without falling into a psychotic episode.* The dream becomes a nightmare, in which the traveler is trapped. I have found no way out of this impasse, and because of the way we construe our consciousness – the mind in the machine – I am not hopeful that a way can be found. We humans may travel only as ghosts, shadows, spectators ... If you are an Aleutian, as I believe you are, the case is different. It is the pattern of consciousness that 'travels.' For you, the pattern of consciousness is diffused through your air, your tools, your whole world. You, I believe, may find a way. (*North Wind*, 275)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

It is the human need to separate the self from the world that restricts humans from FTL travel. Notice, however, that Buonarotti doesn't argue that it is the *nature* of human consciousness that creates this barrier; rather, it is "the way we construe our consciousness." Buonarotti had earlier[12] argued that "*as far as I look into what it means to be conscious, I find an act of separation ... Consciousness is that displacement. To be unreal. To be separate from reality!*" (*Phoenix Café*, 29). The heritage of Cartesian mind/body dualism is evident in this conception of consciousness: the separation of mind from body is the act of displacement which then allows us to construe our consciousness as the distance between ourselves and the material world. Such an understanding of consciousness does not require humans to take responsibility for the worlds we make and the ways in which we treat others in these worlds.

In the final novel of the trilogy, *Phoenix Café*, the Aleutians are at work developing Buonarotti's technology so that it can be used to transport the entire Aleutian ship home. It is commonly accepted by humans and Aleutians that humans are incapable of using the technology as Aleutians do, although the humans hope to modify it for their own use after the Aleutians leave. At the end of the novel, a group of young humans who are part of the Renaissance movement – the revival of human culture and craft – reveal that they have perfected the technology for human use. The trick is adapting technology that had been used to create virtual reality games:

> It's a field of potential out of which springs a world made of minds, a bit like a vacuum fluctuation. It's been known for centuries that habitual gamers have different neuronal mapping. More of it, basically, layers of other worlds complete but existing nowhere in normal time and space: that was the clue. ... She used what she learned to model a version of what Bright calls the pump: being into nothingness and back again. But she

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

> modeled in virtuality, which is where *human* consciousness resides.
> (*Phoenix Café*, 336, emphasis in the original)

The key to a virtual world is that it is a world constructed by human consciousness and perception. The technology of virtual reality combines the agency of human will (the programmers) and the constitutive aspect of human perception (the world is what your senses tell you is 'there' for the gamers). In the virtual reality games depicted in Jones' novels, the subject and the world shape one another: both change how they materialize based on their mutual manipulations.

In Jones' FTL technology, the ability to perceive the world as a construct of human consciousness is what allows humans access to other 'real' worlds. This slippage between real and virtual worlds encourages the reader to consider the ways in which the 'real' social world is a construction, a product of human consciousness and perception, and also how human consciousness and perception are products of this social world. Consciousness does not have to be an 'act of separation', Descartes' famous separation of mind and body, making the body an object in the world and the mind somehow separate from it. Even if consciousness is information, it is information that requires a material embodiment: the consciousness transported by FTL travel must materialize a body out of the world it moves into upon arrival. Outside of material embodiment, being is nothingness. Once again, the apparent distinction between humans and aliens is reduced to identity. As Catherine argued in discussing the concept of immortality, "our subjectivity is the same: it's the same sense of self." Although we do not have the ability to manufacture biotechnology from our bodies, Jones is suggesting that this need not be an impediment to seeing ourselves as part of the world rather than as subjects who own or control it.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

In our current cultural context, our fear of fluid boundaries between self and other is most strongly expressed in what Corrine Squire has called "AIDS Panic." Because AIDS is transferred through the exchange of bodily fluids, and because AIDS is fatal, it is perhaps not surprising that the image of the body as a closed system is appealing. However, as Squire has pointed out, our fears about AIDS are not simply a rational response to a communicable disease. Instead, they tie into pre-existing fears and hatreds of other-sexed or other-raced bodies.[13] This notion that humanity is naturally divided up into pure bodies and polluted bodies distorts discursive representations of AIDS. Squire sees this intersection at the root of social responses to AIDS which focus on identifying and monitoring at-risk activities and at-risk groups rather than representing AIDS as a general public health crisis. She argues, "AIDS science is itself heavily infected by the patriarchal, heterosexist, racist assumptions of the language that writes it, assumptions that lead to partialities or omissions, apocalyptic warnings, melodramatic over- or under-statements" ("AIDS Panic," 52). Such distortions, she warns, impede accurate public education and direct research resources to ideologically sanctioned investigation only.

Squire's analysis suggests one of the consequences of the human (from Jones' point of view) conception of life as a series of separate and discrete organisms rather than seeing all things as continuous with the self. The human perception stigmatizes and isolates individuals, and refuses the perspective that there is a connection among all humans, as well as between humans and the rest of the world. Resources committed to curing AIDS or alleviating AIDS suffering are not resources wasted on an infected 'them' at the expense of an innocent 'us'. In the world of the novels, the viral threat is something called QV,

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

which is a computer virus passed to humans through blue clay protein technology. Like AIDS, QV is a disease that threatens the sense of separation of self and other. QV is not a problem beyond the first novel, because humans abandon the use of blue clay technology: "Coralin, whose trademark is to be compatible with anything. The polymorphously perverse blue clay, the processing medium that the human race abandoned in horror when the aliens arrived and they were faced with the reality of compatibility *sans frontières*" (*North Wind*, 260). Jones' word choice to describe blue clay, "polymorphously perverse," suggests that the roots of this human fear of fluid boundaries between self and other may lie in our notions of sexual identity. Our current culture finds it very important to construct sexual identities along heterosexual lines. The polymorphous perversity of desire must be channeled toward appropriate objects, or the notion that sexuality and gender follow naturally from the body will be threatened.

Johnny, a main character in *White Queen*, is infected with the QV virus. As such, he occupies a social position rather like that of an untouchable: he is exiled from his native United States, he is forbidden to touch the blue clay technology which was once the source of his livelihood, and he cannot have unprotected sex with others. Johnny's isolated status and his belief that the aliens, as superbeings, can cure him of his infection leads to the most serious cultural misunderstanding between the Aleutians and the humans, an incident whose symbolism resonates throughout the novels. This incident is the rape of Johnny by Clavel, one of the Aleutians. The rape is a result of a misunderstanding that has its roots, in part, in the human belief that we are separate from others and the world around us, and the Aleutian belief that all things are part of the same WorldSelf. Clavel

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

believes that Johnny is his true parent, an Aleutian ideal of the perfect love partner, by which he means that Johnny is the same genetic self as Clavel, born to an earlier generation. Clavel's perspective suggests the continuity that the Aleutians perceive between themselves and the humans. When Clavel makes sexual advances toward Johnny, Johnny believes that Clavel is offering to cure him of the QV infection. In the Common Tongue, Clavel says "<I'm the one who can give you what you most desire in the world>" (*White Queen*, 195) which Johnny believes means a cure to QV. For the Aleutians, sexual intercourse is an act of communication, an intensified flow of their exchange of semi-sentient cells. Clavel later explains, "I thought if I lay down with Johnny, it would solve everything. I would flood him with Aleutia, and he would pour Earth into me. The information we exchanged would pass from us into both communities; there'd be no more deception" (*Phoenix Café*, 202). Given the human need to establish the self through its separation from the world, Johnny feels violated and overwhelmed by the experience. His reaction is focused primarily on his sense of being invaded rather than his sense of being sexually exploited.

So long as human subjects continue to construct their social identities based on repudiations, any representations that challenge the boundary of self and other will be perceived as threats. To return to the notion of AIDS panic, one of the ways in which our fear of permeable boundaries is expressed in AIDS discourse is through a desire to construct AIDS victims as a distinct group. By creating a 'them' who are susceptible to AIDS through the fault of their sexual or social practices, we can also construct as safe the 'us' who do not engage in these stigmatized activities. One of the ways in which this

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

discourse circulates is in representations of AIDS as punishment for 'sinful' behaviour such as homosexuality or drug use. The Aleutian trilogy critiques this notion of viruses as ideologically discriminatory through its representation of the Aleutian technology of weapons. All Aleutian technology, including weapons, is biological. The distinction between weapons and other products is that weapons are created from inert, non-sentient material while other products – called commensals – are created from living tissue. Information about weapons technology emerges gradually in the novels, one example of Jones' style of forcing the reader to learn about the alien culture through partial information and provisional hypothesis, just as the human characters must. In *White Queen*, we learn only that the Aleutians feel incredibly threatened by the human attempt to steal a blood sample for analysis, and that this sense of threat is related to the production of weapons. It is only in *North Wind* that we are provided with an explanation of weapons technology. Weapons are "grown from inert enemy tissue. ... From dead flesh, you can grow things that will seek their own kind and destroy. That will proliferate and destroy, on every scale, forever" (*North Wind*, 146).

The destructive capacity of weapons is integrally linked to the Aleutian sense that all members of a brood are composed of the same flesh, the same self. Weapons are organic, constructed from enemies' flesh and dedicated to destroying everything they encounter that is of that flesh:

> Proliferating weapons attack and consume anything that shares biochemical self with the enemy. People, living machines, buildings, food plants, the microscopic traffic in the air. Superheat will stop them in the first generation, but once they've started to divide, they're almost impossible to destroy. You can't poison them, they can eat anything. In response to attack, they divide faster and without limit. Blow them up, and you fill the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

> air with microbial devouring mouths. They're in the water in the food chain, they get inside people's bodies and eat their way out. They go on until there is no food for them left. No people, no commensals, no plants, no tools, nothing. It is genocide. There is no other outcome.
>
> (*Phoenix Café*, 269)

These Aleutian weapons are weapons of genocide. There is no possibility of a war of limited exchange. In the final novel of the trilogy, humans attempt to make their own version of Aleutian weapons, for use in the Gender War.[14] As I will discuss in more detail below, this is a war between two ideological positions – Traditionalist and Reformer – that is popularly understood as the war between the Men and the Women.

The Aleutian, Catherine, is appalled to discover that the humans plan to use a version of Aleutian weapons in this war: "That's insane! Weapons attack biochemical identity. They can't distinguish between *political parties*! Bright thinks everything that lives on this whole planet belongs to what we'd call the same brood. Sharing life, sharing self" (*Phoenix Café*, 298). Clearly, the notion that weapons designed to attack based on biology would be able to distinguish between political parties is absurd. However, this incident also provokes the reader to think about our cultural constructions of identity based on the body and our social discriminations between different bodies. Is it any less absurd to think that we can assess someone's worth, their abilities and potential based on their gender or their race? Is there something fundamentally different about the races and the genders that biochemical weapons could discern? The appeal of such ideas to certain humans is apparent in continued attempts to locate and define differences between sexes, races, and sexual preferences through a reading of the body's chemical or genetic information. In Catherine's speech, we see again the message, often repeated through this trilogy, that

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

humans and the rest of life on earth are one WorldSelf. The risk of deploying Aleutian style weapons is the risk of genocide, not just for all humans on earth but for all life on earth. These associations link Jones' description of how humans could be different – how we can understand her fictional Aleutians as a model for how we could construct our understanding of humanity – to environmental and anti-nuclear discourses. The models we construct to understand humanity and its relation to the rest of the world construct meaning; they do not simply describe the 'reality' we find.

I now want to turn to considering how the definition of identity as "the individual characteristics by which a person or thing is recognized" circulates through these novels. Read as a group, one of the main questions that these novels ask is, what is cultural identity? As I have already argued, the novels portray the attempts of human characters to establish the boundaries of human cultural identity and the deconstruction of these attempts to root individual identity in difference from the other. As well, the representations of cultural identity in the novels reject mind/body dualism. What I want to turn to now is the novels' interrogation of the culture/nature binary in assessing the relative impact of biology and ideology on the construction of identity. This interrogation is accomplished through the characters of Bella, in *North Wind*, and Catherine, in *Phoenix Café*. While the halfcastes are figures of cultural miscegenation, Bella and Catherine represent a type of biological miscegenation, although they are actually more akin to the transgenic products of modern genetics than they are to the offspring of different races.

Bella is the product of a tissue sample taken from Johnny Guglioni, which somehow has been modified to produce an Aleutian fetus.[15] The Aleutians have two

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

motives in producing this hybrid: to heal an interpersonal conflict and to reveal the location of the FTL travel device. Both goals would require that Bella access Johnny's memories. Although Bella's body is Aleutian in its anatomy – no nose, Aleutian hermaphroditic genitals, limbs which can reverse in a way that human limbs cannot – her[16] biochemistry seems to be human. Bella's true identity is not revealed until near the end of the novel. For most of the novel, she is presumed to be a person from the Aleutian ensemble who has a disability: "The librarian was isolate. His body produced no wanderers, or very few, and could not assimilate other people's mobile cells. It was a rare condition and incurable. The deficiency was so bound up in his chemical identity that there was no way of correcting it which would leave Goodlooking[17] in existence" (*North Wind*, 39). This disability puts Bella outside of Aleutian culture in a number of ways: she is impeded in her ability to read the Common Tongue; her sexual encounters cannot include the sharing of wanderers; and she can recover only a part of the lesson provided by studying records of her previous lives, as the records exude biochemical information that is inaccessible to Bella.

Bella's lack of biochemical diffusions means that, unlike most Aleutians, she can be confused about her identity. Bella's identity is the central mystery of the novel. At various times in the novel she believes that she is Maitri's librarian, the identity she has studied in the records; Johnny's human daughter, also named Bella, who she believes was kidnapped from earth by Aleutians; and finally – when her origins are revealed – the reincarnation of Johnny himself. When Bella discovers the truth of her creation, she complains, "What had been done to her was cruel. If you don't know who you are, you are cut off from the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

WorldSelf. You can't know God if you don't know what aspect of God, the WorldSelf, is you. If you don't know who you are, you are mad" (*North Wind*, 204). She withdraws from Aleutian culture for a time and lives on earth among the halfcastes. Ironically, she is the only biological hybrid among them. Biological manipulation is not able to bridge the two cultures; Bella does not have Johnny's memories and cannot heal the past between Johnny and Clavel or lead the Aleutians to the FTL device. Clavel tells her, "You are not Johnny. Maybe the best way to describe you is to say you are Maitri's librarian, wearing a rather strange prosthetic body in which you are no longer disabled. That's who you are, that's what we achieved" (*North Wind*, 245). Bella ultimately comes to the conclusion that "Race is bullshit, culture is everything. No matter how I was built, I'm an Aleutian" (*North Wind*, 250). Thus, the representation of Bella supports the nurture side of the nature/nurture divide. It is not that Bella's material body, her nature, is irrelevant as her material body has clearly been significant in producing her experiences of isolation within the Aleutian community. However, of the two components that work to form a cultural identity – biological material or DNA, and studying the records or ideological interpellation – it is the cultural interpellation that ultimately forms Bella's self. Such a representation cautions against ideologies that suggest that the body is a reliable informant that can be used to discover the 'truth' of the subject; the nature of the body does not exist outside of the nurture that structures the meaning of its various activities and expressions. Bella's body is Aleutian because her relationship to it has been formed within Aleutian ideology, as is evidenced by her feeling that she has been cut off from the WorldSelf by having her 'true' Aleutian identity hidden from her.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

In contrast to Bella, human DNA in Aleutian body, Catherine is the product of Aleutian DNA formed into a human body. In the final novel of the trilogy, *Phoenix Café*, Catherine is the current reincarnation of Clavel, who has chosen to spend his final days on earth as a human female. Like Bella, Catherine is the product of genetic engineering: an Aleutian fetus which is transferred into a human womb and modified so that its morphology will be human. Catherine's anatomy is human but her memories of her previous lives, as Clavel, sometimes cause her to feel uncomfortable in her body. Its actions and limits are strange and unknown to her: "The body was human, the spirit knew a different set of rules. Under any stress she simply forgot how to behave" (*Phoenix Café*, 18-19). Although she is limited by her human body, Catherine is not in doubt about her identity: "The records had a biochemical content that her human body could not process: a haze of living inscription that left the screen but could not penetrate her human skin. But one day it had come to her, exactly as if she were a normal Aleutian, without a shadow of doubt, that this was herself. *I am me*" (*Phoenix Café*, 24). The combination of Bella and Catherine reinforces the idea that "race is bullshit; culture is everything." Although Catherine is born from a human mother, Maitri raises her as his ward, entirely within Aleutian cultural norms. Her birth mother will not acknowledge that Catherine is her daughter in any way, and always calls her "Miss." Although Catherine has human DNA, she is no more capable of understanding the human culture than any other Aleutian. Having a human body does not give her a human personality, and having a female body does not make her a 'woman'.[18]

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

If the representations of Bella and Catherine suggest that nurture rather than nature forms the self, then what of the body? The body, as a material marked by culture, still plays an important role in the novels given the value humans place on the body as a marker of political allegiance and social worth. This idea is expressed in the novels through the halfcaste characters, and through the Gender Wars which form the background to the alien encounter. If the sense of self diffused through the entire world is the most difficult aspect of the Aleutians for the humans to comprehend, gender division is certainly the most difficult aspect of human culture for aliens to grasp. The aliens insist upon seeing the humans as a single brood – all made of the same Self from the Aleutian point of view – and they cannot understand the human division of the species into two groups based on morphology. They grasp that the humans are divided into political factions which seem to be rooted in gender distinctions – a concept which is partially fueled by the fact that they mistake the World Conference on Women which is in session when they arrive for the world government. The Aleutians feel that their inability to differentiate the two broods causes them to make mistakes in local politics. By the conclusion of *White Queen*, the aliens have requested that humans wear uniforms in order to specify gender when interacting with Aleutians: the Woman uniform has padding to emphasize the breasts and buttocks, and the Man uniform has a well-padded codpiece.

According to a human character in the novel, the gender conflicts being discussed at the World Conference on Women are really issues of labour. The combination of patriarchy and capitalism has produced a situation where the most disadvantaged economic class and those who suffer the poorest working conditions also happen to be

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

females.[19] The conflict escalates into a series of worldwide riots, called the Eve Riots by the media. From that point forward, the distinction between gender conflict and political conflict becomes blurred for both humans and Aleutians:

> Thereupon a whole package of worthy, virtuous reforms of human behaviour, including a better deal for 'biological females,' became known as the Women's Agenda. After the sabotage crisis there was a backlash, and the Men's Agenda emerged. The Men were the traditionalists, and they included plenty of women who agreed that a traditional division of labor, responsibility and material wealth between the genders was natural and right. (*North Wind*, 23-24)

The human notion of gender has been confusing to the Aleutians from the start. The explanation for the division that circulates among the Aleutians is that the human race is divided into two broods, which they refer to as the "childbearers" and the "parasites."

As the conflict shifts from the gender-based discussion started at the World Conference on Women to the more generalized political conflict between the Traditionalist and their opponents, the Reformers, the Aleutians become increasingly confused about human gender. The problem is that "there are biological males on the Woman's side, and biological females on the Men's side" (*North Wind*, 17). The Aleutians are unable to comprehend the connection some humans draw between biology and gender.

> The Aleutians recognized among themselves a spectrum of personality traits, which seemed to match quite closely what humans regarded as 'masculine' and 'feminine' qualities ... though to Aleutian perception many human males were feminine and many females were masculine; and of course either could be on the Men's side or on the Women's. All very confusing! But in Aleutia worrying if you were 'masculine' or 'feminine' was the sign of a trivial mind. (*North Wind*, 27-28, ellipses in the original)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

From this Aleutian point of view, the 'natural' connections that are often assumed between biological sex and social gender appear as arbitrary constructions. As Judith Butler has argued, gender is a performance that demonstrates an allegiance to a particular ideological picture of reality. In the world of these novels, this relationship is made very clear: adopting gender norms indicates support of the traditionalists' Men's agenda, while resisting gender norms indicates support of the reformers' Woman's agenda.

Butler analyses a heterosexual norm and the ways in which desire, as well as personality traits, are expected to follow 'naturally' from biological sex. The Aleutian trilogy does not explicitly take up this issue. However, Aleutian cultural practice separates sexual activity from reproductive activity. This suggests that, from their point of view, the notion that desire is a natural expression of biological morphology would also be incomprehensible. Jones is able to critique our sex/gender system by showing the reader how ridiculous and artificial it is. Jones also makes many ironic comments about the destruction caused by this system. During the 300-year period that comprises the novels' setting, human social conditions deteriorate, largely due to the contamination of land so that it is no longer suitable to produce crops. Many humans blame the Aleutians for this problem as the Aleutians have established some terraforming projects that have had negative side effects. However, the novels clearly state that the destruction is mainly the result of the continuing gender wars. Despite the arrival of a species from another planet – and a hermaphroditic species at that – humans continue to tear apart their world over conflicts about gender roles. Jones suggests that some of the blame may be laid at the aliens' door, simply because they are hermaphrodites: "The superbeings made it valid for

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

everybody to be a person. But – cut it any way you like – that means there's twice as many fullsized humans in any given area than there used to be, and still only one planet. Naturally, there's a war" (*North Wind*, 95). The bottom line is that arguments about gender, or race or any other feature of the body as a marker of social worth are ultimately arguments about the appropriate distribution of material resources.

Again and again in these novels, Jones shows humans clinging to the notion of a natural body and then deconstructs these representations to reveal the body as a social product. Halfcastes mutilate or, less pejoratively, modify their bodies so that they resemble the gender-neutral and nose-less Aleutians. The halfcaste culture, on the surface, supports a reading of the body as necessary marker of group; in order to be like the Aleutians, the halfcastes must modify their bodies. What the representation of the halfcastes ultimately suggests, however, is that the shape of the body is irrelevant. The body modification does not bring the halfcastes any closer to an Aleutian identity – in fact, the Aleutians are rather suspicious of halfcastes. It is only the humans who take this body modification seriously, subjecting the halfcastes to various discriminations ranging from social slights to pogroms.

> When the whole giant planet was in the grip of 'Aleutian fever,' there had been some locals who went to extremes. They cut off their noses, they gave up talking aloud. They had their 'male' or 'female' bodies altered in imitation of the ungendered traders. They declared themselves immortal and searched human moving-image records for traces of their past selves ... They were called 'halfcastes' – a term that had nothing to do with the facts. The 'purebreds' (another term that made no sense), both Men and Women, despised them. (*North Wind*, 18)

The halfcaste culture again shows that gender is a performance that does not have to be enacted, regardless of physical anatomy. In fact, halfcaste culture demonstrates the degree to which all identity is an imitative performance of ideological norms. A key halfcaste

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

character in *North Wind* explains, "I'm not a Man, not a Woman, not an Aleutian. Whichever role I take, I feel like one of the others playing a part. That's why I call myself Sidney Carton. He's a character in a drama-movie, chiefly famous for pretending to be someone else" (*North Wind*, 19). The halfcaste culture expresses the link that may be drawn between Aleutian cultural practices and the ideological world outside the novel. The cultural representations we consume are our imagined selves, even if we do not institutionalize this assumption of subjective images as a religion.

In a discussion of representations of the body as marker of social meaning, it becomes apparent that one of the things that is absent from these novels is an explicit representation of the discourse of racism. The novels do present human characters of many different races, and the action is set in many locations including Africa and Thailand as well as western locations. Edward James has argued[20] that the question of race is often displaced onto the alien in science fiction. What this often means is that the world of the science fictional text is peopled entirely by white people, and the text's anxiety about other races is transferred to the aliens in the text.[21] While there are non-white characters in this trilogy, there are not any representations of racial tension between them. However, the anxiety and hatred often expressed by racist discourse is found in human responses to the aliens. In *White Queen*, the anti-Aleutian group of that name attempts to sabotage the alien ship; in *North Wind*, an anti-Aleutian uprising forces the aliens to leave earth for a time; and in *Phoenix Café* the Renaissance movement is committed to recovering a lost human technology and culture.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Although there are no representations of racial conflicts between humans, race, then, is not an entirely absent discourse. The representations of resistance to Aleutian presence are presented in terms of understanding the alien encounter as a metaphor for colonial encounters. The language of Indian colonialism is used in exchanges between Aleutians and humans in *North Wind:* Sahib and "tame" locals. As with many historical colonial encounters, it is technology that most distinguishes the Aleutians from the humans. Braemar Wilson, the leader of the resistance group in the first novel, explains her antipathy toward the Aleutians in terms of fear of human obsolescence: "I know that they don't mean us any harm. They don't have to. It's historically inevitable. If they're superior that means we're inferior. Right? If we're inferior, then give it a generation or so and there'll be Aleutians in our jobs, Aleutians in the White House; and two doors to every leisure center; two kinds of life" (*White Queen*, 178). Braemar's assessment, which seems excessively paranoid in the first novel, has proven to have some basis by the third. The Aleutians have not taken over human political structures, they have simply replaced them, dividing the world up into protectorates in a style reminiscent of the British Empire. Also, the Aleutians' purpose has always been economic gain, another colonial link.

Johnny's rape becomes a metaphor for understanding the relationship between the colonizer and colonized, the exploitation of one party to satisfy the other party's desire. For Johnny, one of the worst aspects of the experience was his own seeming complicity in it. Although he did not understand himself to be asking for sexual contact, he found that he was aroused by the experience nonetheless. Johnny feels most violated by the sense of having his own body turned against his conscious desires, feeling torn between his sense of

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

having been raped and his sense of having been sexually gratified. This sense of doubled consciousness is the aspect of rape most useful for understanding it as a metaphor for the colonial experience. The struggle between the colonizer and the colonized is ultimately a struggle about the meaning of events. The metaphor of rape explains this struggle for both Aleutians and humans:

> To an Aleutian rape has the same meaning – if you can call it that – as the human act. When they *lie down* together, as they say, the exchange of wanderers, a polite constant in social interaction, becomes a flood. Wanderers are directly absorbed through mucous membranes, sometimes in enormous numbers. Thus, their lovemaking, as the human gestalt, is essentially an act of chemical communication. Rape, as among humans, is the means of imposing a stronger party's version of events on futurity.
> (*North Wind*, 94).

This particular rape further resonates with colonial discourse in the sense that Clavel thought that he was responding to Johnny's desires, helping Johnny as it were. This is reminiscent of the British Empire's sense of 'white man's burden' and the seemingly genuine confusion of some British when the natives were not grateful for the benefits provided by colonialism.

By the third novel, the natural resources of earth have been exploited or destroyed – granted, this is not the aliens' fault – and the Aleutians are preparing to depart the depleted planet and leave the humans to struggle through rebuilding the mess. The Aleutians have radically altered the earth in ways both damaging and useful. Their project to flatten the Himalayas, a long-term climate improvement project, reduced the amount of arable land and caused many (temporary from the Aleutian point of view) deaths. On the other hand, their biological technology eliminates many pollutants from the water supply and provides a method for preparing uncontaminated food without requiring cleaned

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

surfaces. Jones presents a very ambivalent attitude regarding the consequences of the Aleutian encounter:

> The Aleutians are ... ignorant, well-meaning foreigners. They were trying to help us and they made mistakes. The situation has had human parallels. Who should know that better than the people of India? We must not forget that Aleutian trade goods have made an immense difference to the poor; far more difference, more quickly than we could have made with political solutions. (*North Wind*, 107)

It is possible to read this as a defense of colonialism: yes, mistakes were made but superior technology ultimately improved the lives of the natives. However, I believe that Jones has a different intention in mind, one that is related to how the alien encounter is typically presented in science fiction.

One of the typical ways of representing the alien encounter in science fiction is to present the aliens as superbeings whose superior knowledge and/or superior social organization will save human beings from our own destructive tendencies.[22] Jones makes it quite clear that the humans in the novel are responding to the alien presence through the expectations that have been generated by the tropes of the genre. Describing the education in xeno-anthropology provided to those humans chosen to interact first with the aliens, a representative reports, "We were shut up for a weekend ... And forced to peruse an inordinate quantity of science fiction" (*White Queen*, 97). This comment, humour notwithstanding, points to the most important argument that Jones is making through this set of texts. The aliens will not save us. We must fix the damage we do to ourselves, our constructed others, and our world. We must discover ways to work through conflicts created by discriminatory constructions of race, gender or other difference. We must fix the damage we do to our environment that inevitably threatens our own survival. We

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

must fix problems of overpopulation, starvation, lack of potable water, poverty. In short, the trilogy is about how we must find our own solutions to our own problems. It explicitly refuses the rapture-like escapist ideology found in many other science fiction texts.

My reading of the novels has emphasized the Aleutian sense of continuity between self and Other, and their rejection of the mind/body separation. The emphasis throughout the trilogy on the connections between self and world suggests that any solutions we do find to our problems must be collective solutions, not the individual heroic solutions also often favoured by science fiction. My reading of this trilogy has also pointed to the ways in which concepts of the body inform our political and social choices. The notion that mind and self are separate from the material world of things encourages us to see ourselves as separate from nature and entitled to exploit it as an object. As I discussed in my introduction, mind/body dualism has also supported misogyny, associating women with the body and men with the mind. Finally, mind/body dualism is a way of constructing a sense of self out of repudiation, a process that projects all the disavowed qualities onto an other which is then despised and diminished. At the same time, Jones does not reify the body as that which determines character or identity. In her presentation of Aleutian culture she portrays a relationship between body and self that could be described by Grosz's metaphor of the Möbius strip: internal and external integrally bound together. Biochemical signals and internalization of cultural representations both form identity.

Jones' Aleutian trilogy is a noteworthy example of the interpenetration of boundaries between unexpected others – the Aleutians – and problematic selves – a vision

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

of ourselves as more like than unlike the aliens. As I discussed above, one of the reasons it is important to interrogate such representations is to look for spaces where change could take place, to examine how these representations may help us to construct an alternative understanding of our own social world. All representations, including fictional ones, work to construct our understanding of the social world and the identities we adopt to participate in this social world. Texts that provide reverse discourses, those representations which resist and rewrite the cultural givens, may push us to work to change our social world so that it more closely resembles the fictional ideal. I have argued that in the *Aleutian* trilogy, Jones wishes humans to understand the continuity between themselves and her representations of the Aleutians. Specifically, the novels suggest that we should resist representations that encourage us to see ourselves as separate from the world; that we should reject the notion that gender and sexuality follow from biological sex in 'correct' or 'normal' configurations; and that we should be suspicious of any discourse which describes character by assessing either the morphology or genetic information of the body alone.

In its exploration of what lives at the boundaries between self and other, human and alien, Jones' trilogy provides us with examples of what Haraway has called the promises of monsters, figures that generate new possibilities rather than fearful responses. Haraway sees monsters as trying to find "an absent, but perhaps possible, other present" ("The Promises of Monsters," 295) which focus on nature as constructed, not found. Haraway argues for a new way of looking to "produce not effects of distance, but effects of connection, of embodiment, and of responsibility for an imagined elsewhere that we may yet learn to see" ("The Promises of Monsters," 295). Jones' trilogy is an example of one

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

such imagined elsewhere. As they prepare to leave earth at the end of the final book, one of the Aleutians observes that humanity has changed through its interactions with the aliens: "I think, you no longer quite see yourselves the way you did when we arrived, as separate objects in empty space. You feel yourselves to be, like us, part of a continuum. Part of the heterarchy of life, where it's natural for all boundaries to be in continuous negotiation" (*Phoenix Café*, 227). It is my hope that through reading these novels and thinking through the arguments I have made in this chapter, readers may learn to see themselves differently, and may similarly change.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

NOTES

[1] Clearly the Aleutians is an odd name for a 'alien' race since it describes a geographical location on earth. As I will argue in this chapter, Aleutians do not see themselves as radically Other from the people of earth, and they do not often use spoken language among themselves. In order to communicate with humans, they adopt earth languages, primarily English. The Aleutian Islands are the location where the aliens first reveal themselves to humans, leading to the humans using the term Aleutian to refer to the aliens. When the aliens are later asked what their home is 'really' called, they reply "Aleutia." From the alien point of view, the place does not need a formal (that is, spoken) name unless they are speaking to outsiders. They see the use of the name Aleutia to describe their home as a way of translating from the Common Tongue, which is not spoken aloud, to English. As an Aleutian character explains it, "Our articulate languages are extremely fluid and contextual ... People change their spoken names, and the names for things, constantly. In the context of the Expedition to Earth, it's natural for us to use Sanskrit or English or whatever seems appropriate" (*Phoenix Café*, 142-143).

[2] The rape of Johnny is a central moment in the trilogy and I will discuss this incident in more detail below.

[3] I will discuss the significance of human vs. Aleutian use of faster-than-light travel in more detail below.

[4] In her reading of the first novel in the trilogy, *White Queen*, Jenny Wolmark argues that this narrative style means that all viewpoints are presented as provisional and transitory, denying the notion that a dominant hegemonic interpretation as 'true' is possible.

[5] The angled brackets < > are used in the text to denote exchange between the Aleutians in what is called Common Tongue while conventional punctuation " " is used to denote speech exchanged audibly. The Common Tongue will be discussed in more detail below.

[6] See Chapter 2 for a more detailed discussion of DNA which includes an explanation of why a large portion of our DNA is regarded as 'junk'.

[7] Throughout the trilogy, the aliens fail to understand the human distinction of sex/gender. In their notion that they are all 'people' they use the masculine pronoun to denote the neutral pronoun, as has largely been the practice in human languages. The Aleutians are often insulted when addressed by the she pronoun, as they – rightfully – see this as an attempt to reduce them to a less-than-person subject position.

[8] It is significant that this quotation highlights the role of gender in our ideological subject formation. The idea that gender roles are an artificial cultural construction – a performance in Judith Butler's terms – is another theme of the novels which will be discussed in more detail below.

[9] Unlike Haraway's cyborg, the Aleutians are a representation of this crossing of boundaries as something that is 'natural', an inevitable part of their being-in-the-world. Haraway, in contrast, argues that the cyborg resists being coded as natural; one of its strengths as a metaphor is that it forces one to realize that it is made, not found, as are all objects of human inquiry. In an attempt to reconcile this apparent difference, I would argue that it is our desire to read the body as natural that creates a tendency to see any activity or product of the body as part of the natural. In fact, the aliens exercise a form of biotechnology to construct their commensals – animal machines – that could as easily be read as cultural.

[10] It is interesting to note Johnny's disgust and fear of the interpenetration of self and other in terms of the discourse on AIDS that currently circulates. AIDS is about fear of the contamination of the other into the self. In *White Queen*, Johnny is infected with a virus called QV which is related to AIDS in terms of the way discourses about the virus circulate. It is an infectious virus that has been passed from technology to humans through the medium of the protein based blue clay technology. Johnny is ridiculed about having 'sex with machines' which is reminiscent of discourses which construct AIDS as a punishment for inappropriate sexual activity. Johnny is required to enact containment protocols during all his bodily contact with either humans or machines, a vivid representation of how fear of contamination works to isolate the afflicted individual.

[11] See "The Promises of Monsters," p. 297.

[12] Earlier in the sense of a 'human history' chronology, although the passage comes from a later text. This is one example what I believe to be a strength of Jones' work in this trilogy. Like the humans who are characters in the novel, the human readers are required to assess and construct meaning based on information that is always partial and provisional. The novels require the reader to actively renegotiate, revisit and revise throughout the reading process.

[13] The intersection of AIDS fear with previous fears of miscegenation is demonstrated particularly by hysterical notions that AIDS, which does infect primates, came from Africans who had sex with monkeys.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

---

[14] The humans test their experimental weapons on the 'daughters' of Traditionalists (male side in the gender war). These 'daughters' are revealed to be clones produced from the tissue of the parent – usually the father – who are genetically altered to permanently remain little girls. These "traditionalist young ladies" are used as sex toys by their families. The Traditionalist humans believe that this creation of another life form simply to exploit it for their own gratification is analogous to the Aleutian creation of commensals to perform tasks. The novel displays the radical distance between the Aleutian affection and consideration for the commensals and the brutal treatment of the young ladies, suggesting again the damage that results from the human failure to perceive a continuity between self and other. Even when the other is made from one's own tissue, humans can still treat it as abject object.

[15] Other than specifying that reproduction is parthenogenetic, but that the genetic makeup of the offspring is triggered by some chemical event that 'calls' forth one of the three-to-five million genetic individuals that constitute Aleutian DNA, not much information is provided about Aleutian reproduction in the novels. Even the Aleutians themselves have no idea what triggers a pregnancy, although stress is one of the proposals. In any case, there seems to be some way of ensuring that a single individual is born only once within a generation. It is not clear whether the total population of Aleutia remains constant at all times, that is, if there is a birth for each death as in Piercy's *Women on the Edge of Time*. In any case, given this scarcity of information regarding reproduction, it is not clear in what way the tissue is modified in order to allow it to become a fetus. However, given the Aleutian ability to mold desired objects from biological tissue, and the repeated motif that humans and Aleutians are "no different flesh," it is my belief that we are to understand that this tissue remains human at the DNA level, although most of the gross physical features of the body become Aleutian.

[16] Bella prefers to be called by the pronoun "he," as this is the human pronoun that the Aleutians understand to mean a full human being. However, her disability and weakness make her appear female to humans. Therefore, the female pronoun is often used to refer to her in interactions with humans or descriptions from a human point of view, while the male pronoun is used when the description is from an Aleutian point of view.

[17] Bella is called Goodlooking in the Common Tongue during the first portion of the novel which is set at an Aleutian enclave. Relations between the humans and Aleutians are strained at this time. Humans attack the Aleutian enclave and Goodlooking, with the aid of a halfcaste, is the only Aleutian to escape. On the advice of this halfcaste, Goodlooking adopts the formal title Bella, a name which has the same denotative meaning but which 'sounds' more like a 'real' name to humans.

[18] The Aleutians cannot comprehend human notions of gender, particularly the relationship between physical body, sexual practice and social/political identity that is so important to human concepts of gender. I will develop this idea in more detail below.

[19] See the collection edited by Hennessy and Ingraham for one example, among many, of the ways in which this assessment is an adequate description of the effects of patriarchy and multinational capitalism on the lives of many women today.

[20] See "Yellow Black, Metal & Tentacled: The Race Question in American SF" in *Science Fiction, Social Conflict and War*.

[21] This is also the strategy of the science fiction film. It is interesting to note that such representations can combine an explicit anti-racist message with depictions of extreme xenophobia and genocidal destruction of the alien Other. A perfect example of a film of this type would be *Independence Day*, which brought us the rabidly jingoistic message that all humanity can finally be united as one so that it can destroy its common enemy. In other examples, such as the movie *Alien Nation* and the television series based on it, the representation of the alien race is used to explore the racism of our culture, perhaps in a form that is less disturbing than a realist depiction of racism against other humans would be.

[22] A classic example of this is Arthur C. Clarke's *Childhood's End*. In some ways, *White Queen* is a revisionist writing of the tropes of *Childhood's End*. As well, Octavia Butler's *Xenogenesis* trilogy, which will be discussed in the next chapter, also draws on this motif. Many critics of SF, such as Aldiss, Broderick and Delany, have argued that this re-circulation of tropes and motifs between novels is a characteristic feature of the genre.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Chapter 2: Posthuman Bodies in the Genetic Age

> *The atomic age began with Hiroshima. After that no one needed to be convinced we had a problem. We are now entering the genetic age; I hope we do not need a similar demonstration.*
>
> *Robert Sinsheimer*[1]

Both Octavia Butler's *Xenogenesis* trilogy and Iain M. Banks *Culture* trilogy deal with post-human worlds – worlds in which the human animal has been genetically altered to become something other than what we would today refer to as a 'normal' human. Both of these authors imagine a future in which the unexpected others are our problematic selves: humans modified by genetic manipulations. The mutations are achieved by crossbreeding with an alien species in Butler's novels and by "genofixing" augmentation to improve upon nature's design in Banks'.[2]

Recent advances in genetic engineering suggest that their imaginings might not be so far afield from contemporary possibilities as might initially be suspected. Newspaper accounts promise that "Personality can be transplanted, researchers find"[3] and that smarter mice can be produced by inserting an extra gene.[4] Genetic testing and biological manipulation are increasingly becoming a part of everyday life and consumer culture. Patented genetic interventions include Microsort, a process available at some IVF clinics that allows one to choose the sex of one's fetus,[5] and Easy Answers home-based paternity test kits, marketed to relieve the "suspicious minds" of males who feel that their partner is misleading them regarding their role in an unplanned pregnancy.[6]

As the quotation from Sinsheimer suggests, all is not rosy in this brave new world. Genetic information and social conclusions based on it can have pernicious as well as beneficial consequences for social subjects. In their analysis of some of these

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

consequences, Nelkin and Lindee argue that this particular historical moment is characterized by what they refer to as "genetic essentialism. Genetic essentialism reduces the self to a molecular entity, equating human beings, in all their social, historical and moral complexity with their genes" (*DNA Mystique*, 2). Whether or not one is troubled by this propensity for genetic determinism is related to how one constructs genetics in discourse. Those who favour the advances made possible by genetic engineering tend to construct a continuum between such practices and more accepted manipulations of nature such as selective crop-breeding, animal husbandry, and clinical medicine. The improvements they extol include more robust and nutritious food sources that will solve the world's food distribution problems, and human freedom from disease.[7] In terms of human genetic engineering, such enthusiasts tend to construct the practice in relation to other advantages that people 'naturally' try to give their children, such as a better education. Improved health is most commonly presented as the key benefit genetic research and engineering offer to humans. With the aid of genetic screening, fetuses with single-gene defects such as Down's Syndrome, Tay-Sachs disease, and cystic fibrosis can now be identified and aborted. Additionally, scientists believe they will soon be able to identify genetic predispositions to other diseases such as cancer or heart disease and thereby counsel the patient toward a lifestyle that will minimize his or her risk.

Those who are more pessimistic tend to construct their representations in terms of the continuum between genetics and eugenics as social practices, and warn of the dangers of social discrimination that are inherent in its usage.[8] Critiques of genetic engineering point to problems in its application for health improvement. Nancy Wexler questions the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

ethics of providing genetic screening in cases where there is an ability to identify the disease but no ability to treat its effects ("Clairvoyance and Caution," 231).[9] Nelkin and Tancredi warn of the power of 'scientific information' to be interpreted as hard fact by the general public, erasing the evaluative role of the clinician. As well, they argue that our cultural mood of genetic essentialism means that whenever a disease is determined to have a genetic proponent, there is a tendency to read that proponent as the determining factor for the disease (*Dangerous Diagnostics*, 41). Russo and Cover also identify this problem in their discussion of the search for a genetic cure for cancer even though testing suggests that 70-90% of cancers are caused by environmental rather than genetic factors (*Genetic Engineering*, 123). Finally, as Miringoff points out, while the goal of predictive diagnosis is to counsel people to alter their lifestyles to escape the consequences of their genetic predispositions, such an option is often only available to the wealthy (*Social Costs*, 68). In the absence of changes to the social structure, the benefits of genetic engineering will be restricted to an economic elite.

This economic slant is most apparent in the application of genetic screening during pregnancy and in the genetic manipulations associated with assistive reproductive technologies (ARTs). Farquhar demonstrates that the discursive image of the infertile woman – as white, middle-class, heterosexual and married – is at odds with the real experience of infertility, which affects more coloured and poor women than white women, and which is not limited to heterosexual couples.[10] To a large extent, these discursive constructions do reflect the reality of those who have access to ARTs and genetic screening during pregnancy. Such technologies are deployed along political lines and, in general,

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

reflect a desire to solve social problems with individual, medical solutions rather than through systemic change. Arguing that more social benefits could be produced through programs such as subsidized prenatal nutrition and chemical-abuse treatment for pregnant women, Miringoff writes, "while we utilize expensive genetic procedures for middle- and upper-class women, to prevent diseases such as Down's syndrome, we permit lower-class women to give birth to underweight, undertreated, and chemically exposed babies, producing similarly injurious forms of disease and retardation" (*Social Costs*, 150).[11] Although the lure of profit has increasingly meant that those who provide ART services will offer them to anyone who can afford the price, in the past there were attempts to restrict access to heterosexual couples. As recently as 1994, the American Fertility Association produced an ethics report arguing that "a married heterosexual couple in a stable relationship provides the most appropriate environment for the rearing of a child" (*The Other Machine*, 181).[12]

The most prevalent and realistic fear associated with the possibilities presented by genetic engineering and genetic testing is that this data will be used to create discriminatory social categories. As discussed above, the current 'treatment' available for those fetuses identified as having a genetic disorder is abortion. In this social context, it becomes overwhelmingly important to understand what is being labeled as a disease and in whose interests such labeling is being done. Gays and lesbians justifiably fear that the discovery of a 'gay gene'[13] could lead to the labeling of this gene as defective and social pressure to selectively abort such fetuses.[14] In the cases of more clearly physical rather than social 'abnormalities' the issue becomes one of where to draw the line in order to determine

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

which lives are worth living and which are not. While most people would support aborting a fetus who has Tay-Sachs disease – inevitably fatal during the first few years of life – the issue becomes more obscure when considering a disease such as Huntington's, in which the afflicted individual will show symptoms only after 2-4 decades of 'productive' life. As many[15] writers point out, while the rhetoric is that abortion is the answer that is best for the child – to avoid its suffering – it can all too easily slip into a discussion of the relative costs to society and contributions to society that variously 'disabled' people make. The consequence is that a "'bottom line' on human value emerges" (*Social Costs*, 18). Further, Miringoff indicates that activists for disabled rights argue against selective abortion of disabled fetuses, a perspective which tends to undermine arguments that it is for the sake of the child that the abortion is done.[16]

In addition to the control of over which bodies will be allowed to be born – a genetically controlled selection of which bodies matter – there are fears that genetic information will be used to discriminate against those bodies already here. Disabled people fear that social attitudes toward them will change based on the perception that they are people who should not exist, an extension of the attitude toward disabled fetuses as babies that should not be born.[17] In the United States, the overwhelming fear is that information about genetic predispositions will be used to deny medical insurance to those who most need it.[18] Both Miringoff and Nelkin and Tancredi[19] cite evidence that testing for genetic predispositions is being used to restrict employment opportunities for jobs in which exposure to chemicals is part of the work environment and the person has tested positive for a susceptibility to such chemicals. As with other examples, the problem is

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

reduced to the individual – who has a problem of susceptibility – and removed from the social – a workplace environment which should be made safer for all workers.

In each of these examples, the common theme that emerges is that social problems can be solved through biology, an attitude Miringoff calls Genetic Welfare and defines as "the desire to improve the human condition through genetic and reproductive intervention. Its proponents are those who seek to modify the genetic foundation of human life, to bring about a healthier society, with fewer human problems" (*Social Costs*, 6). The perspective of Genetic Welfare is that it is the body, alone, that determines our social being, and that the body can unproblematically be understood as something purely 'natural', an immutable, biological given of all one's abilities and shortcomings. Changing the body can take the place of changing social structures and can eliminate everything from disease to poverty to anti-social behaviour.[20] As Nelkin and Lindee succinctly put it, DNA has become "the secular equivalent of the Christian soul" (*DNA Mystique*, 2). DNA is seen as holding the key to what makes us human and to what makes us the particular humans that we each individually are.

The most problematic social consequence associated with this understanding of genetics is the idea that genetics can be used to distinguish what constitutes a normal from an abnormal example of a human. The Human Genome Project is popularly represented as a search for the 'code of codes', the 'Holy Grail', the 'bible' or the 'key' that will allow us to decipher humanity.[21] One of the problems with this perspective, as Fox Keller argues, is that it is not rooted in the scientific reality of genetic variation. Genetics threatens to be the most sinister example of the power of a discourse to produce its normalized subjects –

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

both through its representations of what it is to have 'normal' genes and through its power to control the materialization of genetic combinations through selective abortion or IVF screening. The Human Genome Project desires to map 'what it means to be human', to create a 'base-line norm' for humanity, even though there are as many as 3,000,000 base pairs of difference between individuals ("Nature, Nurture," 294). As the examples above suggest, the decisions regarding which of these variations are 'normal' or 'diseased' will be made based on social classifications, which vary with time and space. The power of genetic manipulations could provide us with the tools to ensure that the genetic ingredients for our current social configurations are those which are passed on to future generations.[22] A further conundrum, as Fox Keller goes on to argue, is the issue of where the agency for making choices about normality or abnormality resides, if all humans – who could make such choices – are simply expressions of the determination of their genes. It becomes overwhelmingly important to pay attention to "how the authority for prescribing the meaning of 'normal' is distributed" ("Nature, Nurture," 299).[23]

If we want this power to decide distributed beyond scientists, it becomes crucial to ensure that genetic possibilities and consequences are discussed in discourses beyond scientific journals. In such discourses, social perception is not always linked to hard scientific fact. Farquhar points out that in popularized representations of ARTs, the baby in the bottle image is dominant, even though ectogenesis is not yet possible nor is it anticipated to be possible soon (*The Other Machine*, 27). The line between fiction and non-fiction is often blurred in these discourses as writers rely on fictional examples or narrative renderings of 'real people' in an attempt to bring home the social implications of these

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

technologies.[24] Lee Silver's book *Remaking Eden* provides one of the strongest examples of this tendency in his imagining of the future polarization of society between the GenRich[25] and naturals, and the eventual elimination of naturals as evolution 'naturally' moves on to the superior GenRich as the next evolutionary step. Further, he imagines humans of the future having abilities such as seeing in ultra-violet and infrared light ranges or hearing radio waves directly through one's ears, abilities that he believes can be created through the combination of human and animal genes. I cite this example to argue that in attempting to understand the social effects of genetic modification, non-fiction writers are grappling with the questions in the mode of science fiction. I believe that this blurring of genre boundaries is significant in two ways. First, as I argued in my introduction, it suggests that both fiction and non-fiction are discourses in which writers attempt, 'seriously', to work through social and political ideas. Second, in terms of the discourse on genetics, it is becoming increasingly difficult for the non-scientific reader to distinguish between 'real' risks and 'purely fictional' ones.

Octavia Butler: Be(com)ing Human:

As we saw in the first chapter, science fiction as a discourse is often concerned with marking the boundaries of humanity, with determining the core of human identity. This concern is shared between science fiction and contemporary discourses on genetics; in Octavia Butler's *Xenogenesis* trilogy, the two discourses of science fiction and genetics intersect.[26] The trilogy tells the story of a group of humans who have survived a nuclear holocaust and of the alien species who have enabled that survival. The aliens, Oankali, are a trading species and the medium they trade is genes: "We trade the essence of ourselves.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Our genetic material for yours. ... We do what you would call genetic engineering. We know you had begun to do it yourselves a little, but it's foreign to you. We do it naturally. We must do it. It renews us, enables us to survive as an evolving species instead of specializing ourselves into extinction or stagnation" (*Dawn*, 43).[27] The Oankali continually change themselves, evolving into new and different forms through the incorporation of DNA from the other species they encounter as they travel through space.[28] As the surviving humans discover, the Oankali do not plan to simply exchange data and part ways. They envision a partnership between humans and Oankali in which inter-breeding will eventually produce a third species, neither human nor Oankali.[29]

The Oankali are a three-gendered species with 'normally' gendered males and females and a neuter gendered third partner called an ooloi. Ooloi have a special organ – an organelle – that they use to "perceive DNA and manipulate it precisely" (*Dawn*, 43). In Oankali reproduction, there are five parents: Oankali male and female, partner-species male and female, and ooloi. The ooloi performs a role that is somewhere between that of genetic engineer and IVF technician, taking DNA from all five parents, editing and mixing it to produce the desired result, and then implanting the embryo in one of the female parents. One of the central motifs organizing the trilogy is the Oankali's contention that humans are genetically flawed. As an Oankali explains to a central human character:

> Your bodies are fatally flawed. The ooloi perceived this at once. At first it was very hard for them to touch you. Then you became an obsession with them. ... You have a mismatched pair of genetic characteristics. Either alone would have been useful, would have aided the survival of your species. But the two together are lethal. It was only a matter of time before they destroyed you. ... You are intelligent ... That's the newer of the two characteristics, and the one you might have put to work to save yourselves. You are potentially one of the most intelligent species we've found, though

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

> your focus is different from ours. Still, you have a good start in the life sciences, and even in genetics ... You are hierarchical.[30] That's the older and more entrenched characteristic. We saw it in your closest animal relatives and in your most distant ones. It's a terrestrial characteristic. When human intelligence served it instead of guiding it, when human intelligence did not even acknowledge it as a problem, but took pride in it or did not notice it at all ... That was like ignoring cancer. (*Dawn*, 40-41)

Due to this flaw, the Oankali deny the ability to reproduce to those humans who choose not to breed with the Oankali. Although they will allow such humans – called Resisters – to live autonomously and separately, they feel that "it *is* a cruelty ... [to] give them the tools to create a civilization that will destroy itself as certainly as the pull of gravity will keep their new world in orbit around its sun" (*Adulthood Rites*, 463). The Oankali are genetic essentialists, and they believe that the human genetic predisposition toward hierarchy inevitably dooms human civilization.

The first novel in the trilogy, *Dawn*, describes the experiences of Lilith Iyapo, a black woman whom the aliens wish to use as their primary liaison. The Oankali have taken all the humans who survived the nuclear war, put them into stasis for approximately 250 years, and are now beginning to awaken them to explain the situation. During this time, the Oankali have restored the earth so that it is again suitable for habitation. As Ruth Salvaggio has observed, Octavia Butler's heroines are characterized by their ability to compromise and survive, and Lilith is no exception. As the human who demonstrates the best ability to accept this situation, she is chosen by the Oankali to be the person who awakens the first group of human colonists and teaches them the skills they need to return to a renewed earth, one which lacks the technology that had characterized their lives before the war.[31] The second novel, *Adulthood Rites*, concerns the experiences of Lilith's Oankali-

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

human son, Akin, and is largely devoted to his life project of defending the human Resisters, arguing that they deserve a chance to continue in a genetically unadulterated form. This novel ends with the Oankali acceptance of Akin's proposal that Mars be terraformed to support life and that the human Resisters have their fertility restored and be allowed to settle on Mars. The final novel, *Imago*, primarily concerns Lilith's Oankali-human ooloi child, Jodahs. Jodahs is the first ooloi born of the human-Oankali mix. Ooloi are the controlling participant in reproduction as they are the ones who choose the genetic configuration of the offspring. Jodah's birth, therefore, marks the maturity of the new genetic mixture of human and Oankali, finally able to reproduce themselves without mating with older, pure Oankali ooloi.

The key issue driving the narrative in *Dawn* is Lilith's status vis-a-vis the Oankali and the humans. In short, is she a traitor to her race? This is certainly the way that many of the humans feel about her. The Oankali never mistreat the humans in any way – in fact, they saved them and their planet from the consequences of a human-caused nuclear war – yet many humans fear and resent the Oankali.[32] The main reason for this is the threat that the Oankali present to human identity: humans will continue, but their offspring will be genetically different due to mixing with Oankali genes. The hatred directed toward Lilith is similar to the homophobia analyzed by Patrick Hopkins[33] in both its expression and its source. The Oankali threaten what it means to be human and most humans, including Lilith, never pause to consider whether this might be a good thing. Lilith is labeled a traitor because she appears to participate in activities that threaten the constructed boundary between human and non-human, much as the gender traitor

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

threatens the boundary between male and female. Nikanj, Lilith's ooloi mate, tells her "Our children will be better than either of us ... We will moderate your hierarchical problems and you will lessen our physical limitations. Our children won't destroy themselves in a war, and if they need to regrow a limb or to change themselves in some other way they'll be able to do it" (*Dawn*, 243). Lilith, however, to a large extent shares the Resister perception that the Oankali are "going to extinguish [humans] as a species by tampering genetically with our children" (*Dawn*, 227).

The Oankali attitude toward humans brings us back to the discourse of genetics and its eu-genetic arguments about improving the species. The Oankali, with their ability to read genes, are a biological equivalent of genetic screening. They believe that human genes doom humanity to hierarchical competitiveness and self-destruction. The novels are full of examples that prove the Oankali correct. The first human that Lilith encounters following her isolation among the Oankali tries to rape her. The first group of humans that Lilith awakens and trains soon form competing cliques between those who believe Lilith's 'story' of aliens and those who believe she is lying to them. The male leader of the group who resists her most actively, Curt, insists on mandatory heterosexual pairing among those awakened. Leading an attempted rape of a woman who refuses sexual advances, he claims "We pair off! ... One man, one woman. Nobody has the right to hold out. It just causes trouble" (*Dawn*, 173). Members of this first group of colonists kill Lilith's human lover, Joseph, because his Oankali-given improved healing abilities make them fear his difference. Once the humans have returned to Earth and leave the Oankali to form Resister settlements, these settlements begin to raid and vandalize Oankali-human

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

settlements, and later, each other. Guns are among the first technologies that are re-invented by the humans. Roaming groups of Resister men buy or steal women from the permanent settlements, and steal children from the Oankali-human settlements to sell them to the infertile humans. A human who steals Akin later shoots an animal Akin is petting, simply for the pleasures of killing it and of frightening Akin.

Despite all these examples, Butler nonetheless retains sympathy for the humans and devotes most of the second novel in the trilogy to arguing the case that they deserve a second chance. The Oankali have reserved one-third of their number, a family division called the Akjai, to continue the genetic mix of Oankali as they existed prior to human contact. This is a type of insurance policy, in case the genetic combination that emerges from breeding with humans proves to be unstable and becomes extinct. Akin believes that "There should be a Human Akjai! There should be Humans who don't change or die – Humans to go on if the Dinso and Toaht unions fail" (*Adulthood Rites*, 371). Akin doesn't share the genetic essentialist perspective that characterizes most Oankali in their assessment of human potential and he comes to champion the Resister cause:

> Who among the Oankali was speaking for the interests of resister Humans? Who had seriously considered that it might not be enough to let Humans choose either union with the Oankali or sterile lives free of the Oankali? Trade-village Humans said it, but they were so flawed, so genetically contradictory that they were often not listened to. He did not have their flaw. He had been assembled within the body of an ooloi. He was Oankali enough to be listened to by other Oankali and Human enough to know that resister Humans were being treated with cruelty and condescension.
> (*Adulthood Rites*, 396)

As Michelle Green argues in her article, "There Goes the Neighbourhood," Butler makes "tricky" use of essentialism in her novels (167). Despite the many examples of humans

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

reverting to predictable form in the novels,[34] she never collapses the narrative to the genetic essentialism perspective of the Oankali. Despite an almost overwhelmingly negative portrayal of the prejudice and violence which characterize the 'pure' humans, Butler refuses to endorse the eugenics perspective that it is a kindness to curtail the reproduction of such 'defectives'.

Butler's trilogy suggests that while genetics may offer us clues to our identity and potential, it is not a script that determines our fate. While the body is important to understanding our identity, social experiences shape and change us as well. Akin gains his pivotal role as spokesperson for the Resisters not through sharing genetic material with humans – as do many other Oankali-human children born before Akin – but through his experience of human culture during the time he lives in a Resister settlement after being kidnapped. By casting the genetic engineers as aliens who threaten our continued existence as a species, Butler's discourse is able to focus our attention on the risks of genetic manipulation. Instead of representing a flawed 'them' – the disabled, homosexuals, the mentally deviant, etc. – who should be eliminated from the gene pool through selective abortion or genetic manipulation, Butler suggests that the entire human genome is flawed. This representation brings home the issue at stake in genetic discourses that advocate the purging of this-or-that gene from the gene pool: the elimination of people like me. In engaging with the world of Butler's novel, no human is able to consider his- or her-self as exempt from this 'me', as the privileged possessor of 'normal' genes. *Xenogenesis* helps everyone empathize with the perspective of the so-called genetically flawed.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Even after the Oankali have approved Akin's plan for the Mars colony, they still believe that it is a bad idea, doomed to failure:

> The Oankali *know to the bone* that it's wrong to help the Human species regenerate unchanged because it *will* destroy itself again. To them it's like deliberately causing the conception of a child who is so defective that it must die in infancy. (*Imago*, 518)

However, despite this certainty, the Oankali respect Akin's right to speak for the humans based on his experience of living with them. The reference to the humans as an infant recalls the use of selective abortion in contemporary genetic practices, and encourages the reader to consider the practice in light of this ethic. The non-disabled do not have the right to decide whether or not disabled lives are worth living. Further, the conviction that the Oankali have in the correctness of their assessment – they know through their innate ability to read the genes – parallels the common perception of the adequacy of genetic assessments, a belief that is not defensible.[35] Through the voice of Akin, Butler challenges this assessment, arguing, "Chance exists. Mutation. Unexpected effects of the new environment. Things no one has thought of. The Oankali can make mistakes" (*Adulthood Rites*, 488). Even if we choose to believe that it all comes down to our genes, we are cautioned against believing that everything can be known in advance.[36] Even at the cellular level, the body is a product of both nature and culture; using regulator proteins, the body responds to its environment, turning sections of its genetic code on and off in response to the conditions it experiences (*Genetic Engineering*, 39). Green reads the trilogy as a demonstration of "how human agency can triumph over prejudice, violence and essentialism" ("There Goes the Neighborhood," 187) and cautions against reading it as a serious discussion of human genetic flaws. In my view, the novel is a serious discussion of

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

the flaws of the discourse of genetics, and its arrogant presumptions to separate the flawed from the normal.

In addition to its representations of genetics and suggestions of human genetic flaws, *Xenogenesis* deals with questions of the body through the representation of Lilith's body and the question of Lilith's agency in her first pregnancy with the Oankali. As well as being able to read the human genetic code, the Oankali believe they have some skill in reading the desires of the body. Although she no longer has control over her own fertility, Lilith has been promised by her ooloi mate, Nikanj, that she will not be made pregnant until she is ready, and that she will be the one to decide her readiness. However, at the end of the first novel, Nikanj tells Lilith that it has made her pregnant. Lilith is upset about being forced into a pregnancy against her will, but Nikanj explains that it was only acting on Lilith's silently expressed desires: "you are ready to be her mother. You could never have said so. ... Nothing about you but your words reject this child" (*Dawn*, 242-243). Later, another human asks Lilith if it were true that she wanted to become pregnant at that time. Lilith responds, "Oh, yes. But if I had the strength not to ask, it should have had the strength to let me alone" (*Adulthood Rites*, 269).

Lilith's dilemma raises the question of relationship between body and subjectivity. Lilith's body expressed her desire to have a child, but it did not express the full extent of her subjectivity – her simultaneous and contrary desire to resist inter-breeding with the Oankali. The Oankali romanticize the body, believing that it inevitably speaks the truth while words and consciously expressed desires can be used to deceive, even to deceive oneself. This representation of the body both reinforces the notion of a mind/body split,

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

and recalls various discourses in which the 'truth' revealed by the body – such as the truth of woman's desire in rape when conception occurs that I discussed in the introduction – is used to undermine the agency of the subject. Nikanj discounts Lilith's statements – "nothing about you but your words reject this child" – and in doing do it erases Lilith's agency, at least as far as she is concerned. Human concepts of intersubjectivity and agency rely on representation and language to fill the space between one person and another; we have no concept that allows for an intercorporeal sense of communication. If Lilith's body speaks a truth, the question becomes, whose truth does it speak? As a woman and as a black person, Lilith already has had the experience of having her body positioned in the discourse of another. Susan Bordo describes the risks to women in a context in which their bodies are viewed as speaking more truthfully than their self-representations (*Unbearable Weight*, 76), and Franz Fanon explains the consequences for black subjectivity that emerge from being socially positioned in terms of one's body first and one's individuality second ("The Fact of Blackness"). In both cases, a culturally informed 'reading' of the body's meanings is taken to be more relevant than the self-representations of the subject in the body.

Just as Butler cautions us against accepting the Oankali's genetic essentialism, she also warns us against romanticizing the body as a pure expression of nature and truth. The issue of the truth that Lilith's body speaks suggests, as does Jacqueline Rose, that we need to develop a more complex understanding of subjectivity and agency in which "desiring something is not the same as, and is not reducible to, wanting it to happen" (*Why War?*, 235). We are again returned to Grosz's image of the Möbius strip and the necessity to

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

understand the body as both a product of culture and a natural material, as both the self and a vehicle or house whose desires the self can choose to indulge or deny. Within the context of the trilogy the Oankali are shown to make mistakes in their interpretation of humans. They believe that they will protect Joseph, Lilith's human lover, by increasing his strength, but instead he becomes a target for those who fear difference and change. They underestimate the vehemence with which male humans respond to Oankali sexual couplings in which such males feel "taken like a woman" (*Dawn*, 201) and tainted by homosexual desire (as the couplings also involve a male Oankali). These errors in interpretation warn the reader against accepting the Oankali reading of humans through their bodies, and returns us to the discourses of genetics and attempts to read human potential or fate through genetic predispositions. Again, Butler's trilogy suggests that it is a mistake to rely on the body to reveal the whole truth.

The method of reproduction in Oankali culture – through the selection of genes under ooloi control – suggests analogies with ARTs. Susan Squier suggests that the five parents of Oankali couplings provide a comment on the varieties of parenting arrangements that are possible with new reproductive technologies. Marleen Barr argues that "Butler's alien Oankali, who alter humanity's reproductive capacity, are an exaggerated version of real-world biological alterations of women's bodies" (*Feminist Fabulations*, 84-85). Citing Corea's critique of ARTs as something that moves reproduction from the control of women to the control of patriarchy, and fears that practices such as surrogate pregnancy will produce a "Brothel of Wombs," Barr argues that Lilith's enforced pregnancy is a condemnation of current reproductive technologies as they are used in the hands of

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

"technodocs" (*Feminist Fabulations*, 88). Barr's argument becomes somewhat confused, however, as she tries to sustain a reading of the novels as both a critique of ARTs and a representation of the Oankali as positive, life-revering entitles whose "plan is for the best" (*Feminist Fabulations*, 85) and who provide "a potentially positive new space in which to be free from patriarchy" (*Feminist Fabulations*, 86). As I have already argued above, I believe that Butler's portrayal of the Oankali is more ambivalent that Barr's assessment suggests. While Butler is clearly critical of the self-destructive tendencies of humans, she sees even greater risks in the hubris of assuming that there is an all-knowing subject position – alien or scientific – that could presume to correct these faults.

Dion Farquhar argues for a more positive reading of the potential of ARTs to restructure social relationships around parenting and reproduction:

> By making possible the division of maternity into three components – genetic/chromosomal, uterine/gestational, and social/legal – and paternity into two components – genetic/chromosomal and social/legal – they expose the constructedness of 'natural' laissez-faire reproduction of heterosexual intercourse, enlarge and diversify meanings of kinship beyond the limits of 'blood,' and deromanticize conjugal reproduction through commodification. (*The Other Machine*, 190)

One of the key points that Farquhar makes in her analysis of discourses about ARTs is that both those who are in favour of such technologies and those who oppose them rely on a fixed understanding of certain terms: mother as female and housewife, father as male and breadwinner, parent as heterosexual, and family as biogenetic (*The Other Machine*, 11). Those feminists who fear the impact that ARTs may have on the social status of women envision the womb as yet another part of women's bodies that can be exploited by patriarchal culture, while other feminists feel that the prospect of ectogenesis may at last

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

free women from the trap of domesticity represented by pregnancy and nursing.[37] In both cases, however, reproduction is still seen as something that primarily concerns women, and both discourses structure reproduction as something that was previously 'natural' and which now moves into the domain of technology and culture.

As Farquhar argues, the domain of human reproduction is already something that is cultural rather than natural, and the options offered by ARTs merely make this fact more apparent. The economic contract to reproduce a male's genetic material through a surrogate pregnancy merely makes more apparent the way in which women have been providing this 'service' to men through the contract of marriage. Surrogate pregnancies also break the link between gestational motherhood and social motherhood, suggesting an opportunity to restructure parenting relationships outside of the heterosexual family. In *Xenogenesis*, Butler's representation of Oankali reproduction and parenting relationships provides an opportunity to explore some of these more positive aspects of ARTs, although Butler's representations themselves remain rather conservative. For example, the genetic mix of five parents in Oankali offspring suggest that both reproduction and parenting can be separated from heterosexuality.[38] Although the moment of conception is separated from sexual activity in both IVF and Oankali reproduction, in both examples – as IVF is currently used – there remains a relationship of sexual desire between the parents. However, this is not necessary to the practice of reproduction in either case, and could be used as a ground from which to argue for the separation of sexuality and reproduction, undermining discourses which rely on the 'natural' status of sexual reproduction to restrict expressions of sexual desire to those activities which lead to reproduction.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

However, *Xenogenesis* does remain rather conservative in its representations of both sexuality and reproduction in two ways. First, although the coupling of five partners through the ooloi suggests the possibility for homosexual desire, the novels resist open representation of homosexuality. The five partner coupling *requires* a previously developed heterosexual couple from each species to join together with the ooloi. Once bonded with an ooloi, no human partners – homosexual or heterosexual – can touch one another directly; all sexual contact must now pass through the 'filter' of the ooloi. This filtering of the ooloi – and descriptions of the sexual stimulus that the partners experience from the ooloi during sexual activity – suggests that desire continues to be channeled through normative paths in the couplings. Descriptions of desire in the novels either emphasize the continuing desire of the heterosexual couple for one another (positing the ooloi as simply a conduit for this desire whose presence masks the existence of the other heterosexual couple on the other 'side') or emphasize the pleasures of masturbation (situations when a single partner couples with the ooloi alone). Second, the novels retain a sort of romanticism of the female body and its natural bond of mothering in their representation of Lilith. As I discussed above, although Lilith feels that cooperation with the Oankali is the most pragmatic course of action under the circumstances, during the first novel she shares the Resister perspective that the Oankali's plan will eliminate humans as a species. However, by the second two novels, Lilith has had a number of children and has come to realize that a part of her and of human culture does continue in these children. At the same time, however, Lilith continues to feel trapped by this relationship to her children: the option of joining the Mars colony is not available to her because she will not leave her children. This

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

change in Lilith's perspective suggests a construction of the female body as somehow more 'natural' than the male body as Lilith is compelled by her biological bond to her children to remain with the Oankali. Human males, in contrast, are considered to be 'natural' wanderers who do not bond with their children in the same way.[39] This representation of the association of women with children also recalls the current cultural construction of black women in a racist American culture in which the legacy of slavery has resulted in African-American women bearing the bulk of responsibility for raising children because husbands and fathers are often absent.[40]

The final way in which the body is important as a motif in this trilogy is in the representation of the first ooloi children to be born of the human and Oankali genetic partnership. Lilith's child Jodahs is the first to move through the puberty-like transformation from non-sexed child to young ooloi (whose neuter gender is still considered a sex by the Oankali). As a construct[41] ooloi, Jodahs' body has remarkable powers of morphological transformation, a heritage of the cancer 'gene' in humans that so intrigued the Oankali because of its powers to alter cell reproduction and growth. Once it[42] enters a stage of sexual maturity, Jodahs finds that its body responds to the desires of those it desires, and changes its shape to become most pleasing to these others. Eric White, in "The Erotics of Becoming: *Xenogenesis* & *The Thing*," has pointed out that the construct ooloi are a representation of the subject as always-in-process. The construct ooloi are literal representations of those forces of subject formation I discussed in the introduction: the body itself changes in response to the perceived demands of the community of others. Jodahs, and later its sibling Aaor, are the embodiment of Foucault's

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

disciplined subject. White argues that construct ooloi represent Butler's desire to articulate a balance between social stability and essentialism. While it is possible for them to change – they are not wholly determined by their subject position – they need community to avoid dissolution, suggesting that the subject must discipline his body to community standards in order to avoid psychosis.

In the absence of mates to bond with, construct ooloi lose their sense of self, their coherent body image. Without external cues indicating which form to assume, the body fails to retain its integrity:

> Something had gone seriously wrong with Aaor's body, as Nikanj had said. It kept slipping away from me – simplifying its body. It had no control of itself, but like a rock rolling downhill, it had inertia. Its body "wanted" to be less and less complex. If it had stayed unattended in the water for much longer, it would have begun to break down completely – individual cells each with its own seed of life, its own Oankali organelle. These might live for a while as single-cell organisms or invade the bodies of larger creatures at once, but Aaor as an individual would be gone. In a way, then, Aaor's body was trying to commit suicide. (*Imago*, 662)

As I discussed in the introduction, our sense of self is constructed out of our identifications, and our ability to enter into human society is predicated upon recognizing a call of ideology that *is* to our unique body and self. Butler's representation of the construct ooloi makes literal this idea of subject formation: the subject itself, its individual identity and its body morphology change in response to changing social expectations. Jodahs and Aaor become the perfect mates for those they desire, but they risk dissolution in the absence of mates who provide them with a social role.

There are two ways of reading this representation. One is to view it as a negative representation of the normalizing power of ideology: it controls how our bodies materialize

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

and it controls the subjectivities that emerge in conjunction with those bodies. However, a space for agency, or at least for social change, is also implicit in Butler's representation because, as White has noted, the construct ooloi are capable of change. From this perspective, the power of ideology to reproduce itself through producing bodies and subjects is shown to be susceptible to re-articulations and new formations. Thus, we may also read Butler's representation as an example of the power of reverse discourse as de Lauretis has defined it. Jodahs and Aaor change in response to a changing context, forming new identifications and new morphologies. If we read the mates that Jodahs and Aaor encounter as a representation of ideology, and Jodahs and Aaor themselves as representations of the human becoming a subject in response to the calls of ideology, their malleability suggests a space for cultural change. Butler's construct ooloi thus become a literal representation of how the subject and the social are mutually constitutive, and that through the production of cultural texts which offer new types of identifications, we may change the subjects formed through these identification and so change the social context produced by these subjects.

A second way to read the construct ooloi is in terms of Foucault's ideas about bio-power and its ability to constitute subjects through the normalizing power of dominant body images. Again, we can see this representation as a negative indictment of the destructive power of such normalized body images to destroy the identity of those subjects who fail to inhabit them successfully. Jodahs and Aaor literally have no sense of self – no bodily integrity – unless they can construct themselves in response to the desire of another. However, Gail Weiss's work on body images suggests a different perspective from which we

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

could view the process of inhabiting many body images. Weiss argues that it is normal, and in fact healthy, for individuals to have multiple body images that they move between in response to the context that the body/subject occupies. Weiss does not believe that such multiple body images suggest that the subject is wholly determined by outside cultural forces. For Weiss, multiple body images are not a sign that the subject is unable to develop a coherent sense of self. Instead, these images help us to retain a constant sense of self throughout many changes to our cultural context. She writes:

> For the nonpathological subject, I am suggesting, it is the very multiplicity of these body images which guarantees that we cannot invest too heavily in any one of them, and these multiple body images themselves offer points of resistance to the development of too strong an identification with a singularly alienating specular (or even cultural) image. That is, these multiple body images serve to destabilize the hegemony of any particular body image ideal, and are precisely what allows us to maintain a sense of corporeal fluidity. (*Body Images*, 100)

From this perspective, we can read the construct ooloi as an opportunity for agency to emerge in the exchange between subject and context. Just as Collins' cautioned us against viewing popular culture as a homogenous vehicle for the expression of dominant ideology, so Weiss cautions us against perceiving culturally offered body images as inherently oppressive. The variety of potential identifications prevents a single hegemonic articulation from entirely determining a subject. The construct ooloi are a troubling representation, precisely because they suggest that outside of the desire of another, outside of the community, one loses identity and dissolves. This image is troubling because it forces us to face the subject – that overdetermined and ever-changing entity, structured by cultural inscription – while it refuses to allow us the solace of belief in a stable self. However, I belief that the construct ooloi can ultimately be read as a positive image, both

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

because they foreground the mutual construction of self and the social, and because their malleability suggests that we are not 'stuck' with the current cultural formation of our identities. We can imagine an elsewhere and work to materialize it. The fact that the construct ooloi materialize in response to the desire of the other need not be read negatively; it simply suggests that the identities and social realities we produce are always community products. Articulating an identity outside the space of community is psychosis, and the only way in which our reverse discourses can have political efficacy is if they compel community belief in the newly articulated.

In summary, Butler's trilogy suggests that the body and its genetic code are part of the subject, not just a base material house, but that an understanding of the body alone is not sufficient to understand human consciousness. The body, in Butler's work, is a cultural as well as natural product. *Xenogenesis* cautions us against adopting a perspective of either genetic essentialism – in which we believe that all human potential can be predicted through reading our genes – or the perspective of genetic welfare – in which we believe that we can find genetic solutions to social problems. The construct ooloi are another example of genetics producing the unexpected: neither Jodahs nor Aaor was supposed to develop into the ooloi gender, and their fluid morphology in response to partners is an unanticipated ability. The Oankali represent the promise of enhanced health that genetic science offers to us,[43] but Butler insists that freedom from disease should not be purchased at the cost of genetic variations – people – deemed flawed or abnormal. *Xenogenesis* is not a condemnation of genetic engineering and the benefits it may provide to society. In fact, the portrayal of the Oankali is far more positive than the portrayal of most humans.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

However, the trilogy is a caution against too strong a faith in genetics to unlock the mysteries of humanity, and against the possibility that genetic information could be used in socially repressive ways. We never get to discover the fate of the Mars colony: perhaps it self-destructs as the Oankali predict, but hope that it will succeed remains.

Octavia Butler resists easy solutions to complex problems in her novels. As Michelle Green has argued, she refuses to create a utopia in which conflicts are resolved through the elimination of difference ("There Goes the Neighbourhood," 170). Instead, she focuses on the hard but nonetheless necessary struggle to live together despite difference. In many of her novels,[44] Butler deals with the problems of racism and prejudice, and our inability to solve these problems through education and communication alone. In *Xenogenesis*, although Butler sympathizes with human suffering both from disease and from what is represented as a biological tendency toward hierarchy, she refutes the notion that genetic manipulation can produce a utopia. Butler narrates with sympathy the fears of those humans who have become obsolete as humanity moves on to its next genetic configuration of human-Oankali hybrids. This perspective provides a supplement to those of advocates of genetic engineering such as Lee Silver. In the conclusion to *Remaking Eden*, a non-fiction discussion of the possibilities offered by genetic engineering, Silver envisions a future in which human 'naturals' have become extinct, no longer able to compete in a world that is now dominated by the superior GenRich. Although Silver recognizes that some will suffer from this shift, he represents the transition as a 'natural' one, much like that from *homo erectus* to *homo sapiens*. Butler's trilogy complements this imagining by offering the excluded story from the perspective of those who are so supplanted.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Iain Banks: The Culture-al Body:

Upon initial assessment, Iain Banks' *Culture* trilogy[45] shares many features with the world offered by Butler's Oankali, that is, if one chooses to focus on the aspects of the Oankali civilization as a utopia in which everyone is free from disease and want. A more accurate parallel might be found in TV's *Star Trek* universe, an imaged elsewhere with which Banks' Culture shares many features. However, Banks' representation does not share *Star Trek*'s non-intervention directive. The Culture is a collective of humanoid species who live in cooperation with sentient machines – non-humanoid, autonomous entities called drones and highly advanced Minds who occupy and control one of the many mobile habitations or vehicles that comprise the bulk of the Culture's geography. The Culture is characterized by equality – machine sentience is fully recognized as constituting personhood – and there is no material want. The Culture is amazingly efficient at recycling and seems to manufacture most of what it needs from space debris. Culture citizens are characterized by extreme genetic modification – called genofixing – which provides them with increased longevity, freedom from disease, the ability to switch from male to female morphology, and access to a variety of chemicals that alter mental and emotional states through secretions of their drug glands.

The Culture appears to be a truly ideal place to live. In addition to the information available in the novels themselves, Banks has outlined his vision of the Culture's social and political structure in his essay "A Few Notes on the Culture."[46] Banks represents the Culture as "an expression of the idea that the nature of space itself determines the type of civilisations which will thrive there" ("Notes"). The political organization of the Culture

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

and its absence of conflict are rooted, Banks believes, in the nature of space-faring civilizations that are based on mobile habitations. The very mobility of these habitations, he argues, prevents any territorial competition between them. At the same time, the hostile environment of space and the need for cooperation among those residing on a space station or ship to guarantee the survival of everyone on it ensures social stability within the ship or station itself. One of the key utopian aspects of the Culture is that "nothing in the Culture is compulsory" ("Notes"). Banks believes that social ostracism will be a sufficient threat to make certain that the over-riding concern of everyone will be to preserve social stability. In Banks' utopia, the absence of material deprivation has eliminated the motive for crime.

What Banks seems to fail to see is that his recipe for social stability is dependent upon a kind of social homogeneity. In his Notes, he stresses that diversity and the freedom of each individual to pursue his, her or its own path is the cornerstone of the Culture. The Culture is typically represented as a product of the sentient Minds whose intelligence exceeds that of any other organism, and Banks claims that "a universe where everything is already understood perfectly and where uniformity has replaced diversity, would, I'd contend, be anathema to any self-respecting AI" ("Notes"). Despite this claim, however, the picture of the Culture that emerges from the novels is one of a strange sort of conformity within diversity: Culture citizens are free to explore a wide variety of sexual combinations, lifestyle choices, and hobbies, but certain moral and ethical principles are entrenched. Banks' Culture is in fact the progeny of liberal humanism. Like liberal humanists, Banks[47] believes in the infinite perfectibility of man and human culture

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

through the exercise of reason. As I discussed above, his view of human subjects is a very rationalist one in which actions are guided by the relative weight of gains and consequences and where absence from material want eliminates crime. Banks' Culture does not conceive of a space in which desire itself might produce actions deemed 'anti-social' and in which infinite freedom to pursue diversity might lead to conflicts over ethics. Banks, like liberal humanists, seems to believe that a common and stable ground for ethics would emerge and be endorsed universally by all free subjects. In both ideologies, the individual and his freedom takes precedence over community, a perspective that is buttressed by a faith that a collection of rational individuals each pursuing his or her own self-interest and personal improvement will 'naturally' lead to a good community.

The tension among the competing beliefs in individual freedom of expression, in the possibility of human perfection, and in stable and universal moral guidelines emerges in Banks' novels through the interaction of the Culture with other civilizations. The most problematic aspect of the Culture is its belief that its moral perspective is so enlightened as to entitle it to interfere in the domestic affairs of other civilizations in order to 'encourage' these civilizations to move toward an ethic that more closely matches that of the Culture. It is a struggle for Banks to reconcile this perspective with the liberal humanist belief in individual freedom, a struggle that is also part of the 'real world' history of liberalism and its connections to colonialism and the suppression of other cultures. In his Notes, Banks argues that "the Culture doesn't actively encourage immigration; it looks too much like a disguised form of colonialism. Contact's preferred methods are intended to help other civilisations develop their own potential as a whole, and are designed to neither leech away

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

their best and brightest, nor turn such civilisations into miniature version of the Culture." However, the perspective that emerges from my reading of the novels does not support this contention; instead, what emerges is a representation of Bank' Culture citizens struggling with 'white man's burden'.

Unlike Butler's heterogeneous utopia, Banks' Culture is one in which conflict is eliminated by the elimination of cultural (that is, ideological, ethical) difference. As a character from a society that the Culture is attempting to intervene in remarks:

> Zakalwe, has it ever occurred to you that in all these things the Culture may not be as disinterested as you imagine, and it claims? ... They want other people to be like them, Cheradenine. They don't terraform, so they don't want others to either. There are arguments for it as well, you know; increasing species diversity often seems more important to people than preserving a wilderness, even without the provision of extra living space. The Culture believes profoundly in machine sentience, so it thinks everybody ought to, but I think it also believes every civilization should be run by its machines. Fewer people want that. The issue of cross-species tolerance is, I'll grant, of a different nature, but even there the Culture can sometimes appear to be insistent that deliberate inter-mixing is not just permissible but desirable, almost a duty. (*Use of Weapons*, 254)

The Culture is a demonstration of the power of culture itself to colonize – to mold subjectivities and hence to create a social order in the image of its ideology. One of the ways that the Culture ensures harmony and homogeneity throughout its broad realm of influence is through the modification of the bodies of its citizens. The human body becomes a polymorphous playground through genetic augmentation: "machines could do everything else much better than [humans] could; no sense in breeding super-humans for strength or intelligence, when their drones and Minds were so much more matter- and energy- efficient at both. But pleasure . . . well, that was a different matter. What else was the human form good for?" (*Use of Weapons*, 273, ellipses in the original). Banks indicates

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

that "virtually everyone in the Culture carries the results of genetic manipulation in every cell of their body; it is arguably the most reliable signifier of Culture status" ("Notes"). This genofixing includes the ability to change the physical morphology of the body, eliminating bodily distinctions as a ground for social discrimination.

It is difficult to be too critical of Banks' utopia, as it does, indeed, seem like an ideal place to live. Human desire is the only reason to engage in work because sentient machines are always available to perform manual and intellectual tasks more efficiently and effectively than can humans. Humans may continue to perform these tasks for the simple pleasure of accomplishment, but no one is required to sell his or her labour in an exploitative relationship. Even the machines only perform tasks they desire to do, yet somehow all socially necessary work gets done. In his Notes, Banks explains that non-sentient automation is sufficiently advanced to accomplish all the mundane tasks. However, the risk remains that this perfection can only be achieved through the elimination of difference. The male and female distinction remains, but any individual can move from one subject position to another; racial variances are effaced through inter-breeding and through the ability to modify one's appearance to any racial characteristics one chooses. Banks' Culture is too easy a utopia, and thus it is one that does not provide a critical perspective on human attempts to achieve utopia through biological modification. In Banks' universe, it is possible to solve social problems through biology alone.

One explanation for Banks' seemingly accepting attitude toward the eu-genetic implications of his utopia may be the fact that Banks believes that the body is not essential to subjectivity. In his Notes, he writes that Minds "bear the same relation to the fabric of

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

the ship as a human brain does to the human body; the Mind is the important bit, and the rest is a life-support and transport system." The body, then, in Banks' explicit statements, is little more than a container for subjectivity: changing it should have no significant impact on identity. Despite this representation, however, I believe that Banks remains attached to the notion of a natural body, as my reading of the novels will demonstrate. Despite his claim that the body is not the "important bit" of the person, each of Banks' three Culture novels reveals an attachment to the notion of body as self, though not necessarily as the 'best' part of the self. Even within his Notes, this tendency is apparent. Banks describes the Culture's sex changing process in the following terms: "An elaborate thought-code, self-administered in a trance-like state (or simply a consistent *desire, even if not conscious*) will lead, over the course of about a year, to what amounts to a viral change from one sex into the other" ("Notes," my emphasis). In this description, we see again the notion of the body as natural, rather than as cultural, and as something that is therefore closer to some pure notion of the Truth. Just as Nikanj argues that the desire of Lilith's body superceded her consciously expressed desires, in the Culture one's unconscious desires will emerge as morphological symptoms of the body as it moves between sexes. Banks also adds, "usually, a mother will avoid changing sex during the first few years of a child's life. (Though, of course, if you want to confuse your child ...)" ("Notes", ellipses in the original). This notion that the female sex is somehow essentially appropriate to motherhood – even within a social context of continually changing morphologies – again suggests an unacknowledged attachment to understanding our contemporary constructions of the body as 'natural'.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Banks' unacknowledged but nevertheless crucial attachment to a concept of the 'natural' body betrays his allegiance to Cartesian mind/body dualism and its ideological investments. As I argued in my introduction, the heritage of Cartesian mind/body dualism has been that some subjects – male, white, heterosexual – have historically been able to construct themselves as unmarked by the body, while other subjects – women, non-whites, gays and lesbians – have been seen as having a closer connection to the body, often expressed as being *reduced* to the body. What this reduction entails is that embodied subjects (those whose bodies mark them as different) are not able to attain true subject status, as subjectivity – more properly self – has been equated with the mind alone. Thus, liberal humanism intersects with the Cartesian mind/body split is a very pernicious way. Liberal humanism emphasizes individual freedom and, like Cartesian dualism, it presumes a neutral and transcendent individual subject who can go about pursuing this freedom. However, this free individual is equivalent to the unmarked, non-embodied mind of Cartesian dualism. Some subjects can never attain the status of 'individual' to pursue their freedom of expression and make their choices part of the community of values.

Liberal humanism severs the subject from his or her embedded-ness in material circumstances, just as Cartesian dualism severs the mind from its relation to the body. The politics of each suggest that the individual has a constant essence or identity regardless of circumstances, and that there is something universal about this essence of being human. Thus, the politics of liberal humanism advocate for both individual freedom and individual responsibility, for the absence of government constraints and controls. The individual is either 'worthy' and will succeed, or else will fail as a result of his or her

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

inherent inferiority of character or effort. Liberal humanism shares the perspective of genetic welfare that social problems can be solved through individual change, effacing the effects of systemic discriminations. Liberal humanism does not allow for a critique of the structures that produced a particular individual in a social relation of oppression. Like Cartesian dualism, liberal humanism suggests that there is an abstract essence of 'human' that can be separated from material circumstances and, again like dualism, it refuses to acknowledge that this 'essence of human' has historically been constructed from the perspective of white, male, heterosexual, Western subjects.

The problem with both liberal humanism and Cartesian dualism is that they are grounded in abstraction and – as abstractions – they cannot provide concrete political solutions to social problems. Terry Eagleton has argued:

> Liberal humanism is a suburban moral ideology, limited in practice to largely interpersonal matters. It is stronger on adultery than on armaments, and its valuable concern with freedom, democracy and individual rights are simply not concrete enough. Its view of democracy, for example, is the abstract one of the ballot box, rather than a specific, living and practical democracy which might also somehow concern the operations of the Foreign Office and Standard Oil. Its view of individual freedom is similarly abstract: freedom of any particular individual is crippled and parasitic as long as it depends on the future labour and active oppression of others.
> (*Literary Theory*, 207-208)

As I suggested above, Banks' utopia is attractive. However, it shares the limits that Eagleton has diagnosed for liberal humanism. Both are systems of personal morals and do not have an adequate theory for a politics of community. As I will show in my readings of the novels, the gap between the abstract ideals of liberal humanism and a concrete notion of how to put such ideals into practice creates a tension in Banks' work between his statements in his Notes and the stories in the novels.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

In the Notes, Banks is strongly supportive of the Culture's social and ethical system. In each of the novels, however, he represents the viewpoints of characters who are highly critical of the Culture. *Consider Phlebus* is the novel that presents this viewpoint most aggressively through the character of Horza. Horza is a Changer, a humanoid species with shape-shifting ability, who has decided to join with a non-human alien race, the Idirans, in their war against the Culture. The Idirans do not offer much to recommend them as a species: their political system is rooted in their theology and the belief that they are chosen superiors in the universe. They put this ideology into practice through a policy of never-ending territorial expansion; those 'inferior' species that they encounter are offered the choice of enslavement or extinction. An Idiran who refuses to believe that the Changer is his ally treats Horza himself with contempt and abuse. All other species are simply soulless animals to the Idirans.

Despite this, however, Horza remains convinced that the Idirans are preferable to the Culture, and his rationale for this choice is rooted in the concept of what is 'natural':

> On a straight head count [of those killed] the Idirans no doubt do come out in front, Perosteck, and I've told them I never did care for some of their methods, or their zeal. I'm all for people being allowed to live their own lives. But now they're up against you lot, and that's what makes the difference to me. Because I'm against you, rather than for them ... I don't care how self-righteous the Culture feels, or how many people the Idirans kill. They're on the side of life – boring, old-fashioned, biological life; smelly, fallible and short-sighted, God knows, but *real* life. You're ruled by your machines. You're an evolutionary dead end. ... The worst thing that could happen to the galaxy would be if the Culture wins this war.
>
> (*Consider Phlebus*, 26)

Horza's objection to the Culture is integrally linked to his rejection of machine sentience. He believes that its machines run the Culture – which does appear to be true, to a large

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

extent – and that this fact somehow makes the culture of the Culture opposed to biological life. Again, his objections are expressed in terms of valuing what is natural over what is artificial: "[The Culture] could easily grow forever, because it was not governed by natural limitations. Like a rogue cell, a cancer with no 'off' switch in its genetic composition, the Culture would go on expanding for as long as it was allowed to. It would not stop of its own accord, so it had to *be* stopped" (*Consider Phlebus*, 169-170).

Granted, it is not appropriate to reduce the perspective of this character to the perspective of the author. In fact, although he is the central character of the novel, in many ways Horza is not portrayed as its hero; despite his claims to value life he is perfectly willing to kill others in order to further his own ends, and his rejection of machine sentience is represented as a type of racism. Nonetheless, I do find it curious that Banks would choose to write his first novel set in the Culture universe from the point of view of a character who is completely opposed to the Culture, given Banks' enthusiastic support for the Culture as expressed in his Notes. The novel is deeply pessimistic as well: not only does Horza die by the end, but we are also informed in a 'historical' appendix to the story that the Changer race was wiped out as a species during this war, although the war itself was insignificant: "A small, short war that rarely extended throughout more than .02% of the galaxy by volume and .01% by stellar population" (*Consider Phlebus*, 490). This pattern of focusing on characters who are not truly part of the Culture continues through the other two novels: in *The Player of Games*, the central character, while a Culture citizen, is one who is characterized by *ennui* as he finds the Culture rather boring; the central character in *Use of Weapons* is a Special Circumstances mercenary, one of the members of a

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

non-Culture civilization who are used by the Culture to perform interventionist tasks that Culture citizens themselves find rather distasteful.

I believe that this curious tension between pro- and anti- Culture sentiments in the Culture novels can be explained by Banks' unacknowledged attraction to the concept of the body as natural and as inessential to subjectivity as I discussed above.[48] The tension seems to emerge from Banks' recognition that the concept of the natural body has been deployed in politically oppressive ways in societies characterized by hierarchical division. Banks wishes to develop his utopia based on egalitarian terms and, like Butler, he seems to feel that the human animal is incapable of producing such a utopia on its own. The desire to characterize the body as purely natural – the unimportant life-support and transport system – reveals Banks' attachment to the philosophical heritage of mind/body dualism. Banks' utopia is controlled by the Minds, the ideal of what humans should aspire to be according to this philosophical heritage in which the body is a base, carnal, limiting prison. Without bodies, the Minds are not seduced into the vulgar life of sensation. The infinitely malleable bodies of the Culture are actually a way of transcending the body, of suggesting that the body does not matter, as its matter can be formed to suit the desires of the mind.

Despite the fact that the Culture seems to welcome diversity – in bodies – it is rooted in a concept of uniformity – of values or ethics, of human nature grounded in universal reason. As I have argued above, the Culture can be considered a representation of liberal humanism; liberal humanism has a history of being that which marks the boundary between humans (the civilized) and barbarians (those with competing definitions of what it means to be human). This boundary producing and maintaining work of liberal

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

humanism is similar to the boundary work accomplished by Cartesian dualism which, as I argued in my introduction, has been used to justify the exploitation of animals and other 'others', objects to the abstract mind's subject. To become the liberal humanist individual, one must rise above the 'base' desires of the particular body, and embrace the universal rationalism that is the mind; in practice, this has meant rising above what pertains to marked female, non-white and gay and lesbian bodies.

Despite his arguments that the Culture's genofixed bodies allow its citizens to pursue what seems to be a harmless hedonism, Banks' trilogy contains an undercurrent which suggests that the body's desires are not as valuable as those of the mind. Thus, although Banks' representations suggest that the body is culturally malleable, his work ultimately suggests that it is the mind, not the body, that makes us who we 'are', and therefore reintroduces a note of essentialism into his characters. This motif is most apparent in *The Player of Games*, a novel that recounts the experiences of a Culture citizen, Gurgeh, in the non-Culture civilization of Azad. Azad is a civilization in which bodies matter very much. Azad has an extremely repressive social system that is founded on discriminations based on body morphology. Azad has three genders: the lowest are the females, who are primarily used for sex; the second are the males, who sell their bodies to the state as soldiers; and the third gender, Apices, hold all the political and social power. Apices have sexual organs that combine features of both of what we would call male and female.[49] Azad culture is fiercely hierarchical along their sex distinctions, and is characterized by entertainments[50] that emphasize cruelty toward and domination of the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

'lower' sexes. The Culture is opposed to the ethos of Azad and the novel concerns its attempts to undermine Azad's political structure.

Banks portrays the Culture's antipathy to Azad as an attitude that applies to the Culture's machines more than to its humans. When Gurgeh arrives in Azad, the Culture's resident ambassador, Za, complains: "They're all the same those machines; want everything to be like the Culture; peace and love and all that same bland crap. They haven't got the' – Za belched – 'the sensuality to appreciate the' – he belched again – 'Empire'" (*The Player of Games*, 135). This passage again suggests the mind/body dualism that buttresses the representations of the body in these texts. Za's body is emphasized as he makes these comments, and it is emphasized in a negative way. The body puts one at risk; it indulges in gross sensuality and cares more for its own gratification than for social justice. This representation of the body as that which compromises the social structure recalls the way in which discourses representing women and non-whites as more closely bound to the body have been used to deny such 'embodied' subjects access to political and social power. Despite the suggestion in Banks' Notes that social utopia can be achieved, in part, through the body modification of genofixing which could thereby eliminate the grounds for body-based discriminations such as racism and sexism, Banks is not a genetic essentialist. Far from being irrelevant, the body is that which threatens his utopia; Banks' utopia is grounded on pure reason, the suppression and denial of the body, and hence can best be represented by the Minds that dominate it.

Inevitably, this mind/body dualism breaks down in the Culture novels as it does in its other incarnations. The 'natural' body is always already cultural, and it is simply self-

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

delusional pretence to believe that one can repudiate everything unpleasant about humans, call it body and natural, and somehow expel it from utopia. This repressed body continues to re-emerge in the texts, again suggesting the appropriateness of Grosz' model of the body as a Möbius strip that is both self and not self. The limitations of a social order based on an appeal to the abstract concept of universal human nature become apparent as Banks attempts to give his utopia concrete form. The repressed body returns to reveal that all subject positions are embodied ones, insisting that bodies as well as minds must live in utopia.

It is through the character of Horza that the return of the repressed body can most clearly be seen in the trilogy. Horza is a shape-shifter, a humanoid who can alter the physical morphology of his body to imitate other humanoids of various species. Horza's very being, therefore, is a metaphor for the ways in which the body is cultural, able to be molded and shaped into different forms by different social circumstances. That Horza remains the same person throughout these various shiftings suggests, as does Banks' argument that the body is not the 'important bit' of subjectivity, an adherence to mind/body dualism. However, as I indicated above, Horza is ideologically opposed to the Culture, seeing it as something 'artificial' rather than 'natural', as for stagnation rather than for life. This opposition is expressed through Horza's contempt for sentient machines, suggesting that he personally believes that the body rather than the mind is the essential component for 'true' subjectivity. In Butler's trilogy, we saw that a continually changing body image could be read as something positive, something that allows the body/subject to respond to the demands of context without surrendering all agency to

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

external determinants. Both the recognition that the body is part of the subject and the recognition that the body is always-already cultural are important prerequisites to successfully inhabiting a multiplicity of body images without falling into a psychosis of fragmentation. Due to his insistence that the body should be purely natural and that the forces of nature are more moral than the designs of disembodied consciousness, the character of Horza is unable to hold these beliefs. He must believe in a stable body, one that is immune to the influence of culture.

It is then somewhat ironic that his 'natural' body is one that continually changes its outward morphology to match that of whomever he is currently impersonating. Near the end of the novel, Horza experiences a moment of horror that reveals that he has not been able to maintain a stable identity throughout the changes to his body's external appearance. Just before he falls unconscious due to injuries, "a look of the utmost horror, an expression of such helpless fear and terror [comes over his face]. ... 'My name,' he moaned, an anguish in his voice even more awful than that on his face. 'What's my *name*?'" (*Consider Phlebus*, 478). Horza's fear that he has no identity is reflected in the appearance of his unconscious body:

> The face of the man on the stretcher was white as the snow, and as blank. The features were there: eyes, nose, brows, mouth; but they seemed somehow unlinked and disconnected, giving a look of anonymity to a face lacking all character, animation and depth. It was as though all the people, all the characterizations, all the parts the man had played in his life had leaked out of him in his coma and taken their own little share of his real self with them, leaving him empty, wiped clean. (*Consider Phlebus*, 481)

This passage suggests that Horza's body has been crucial to the construction of his self – the self-conscious, unified, and autonomous face he presents to the world. His body

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

continually occupied a type of Lacanian mirror stage in which he modeled both external morphology and the internal coherent structure of self on an image in the external world. In the absence of such a model, his face becomes "blank" – there is no internal essence to animate his features. His 'real self' was always a construction, a fabrication of coherence that fragments; it becomes 'disconnected' when he is not consciously connected to a specular image. In his insistence upon the 'naturalness' of his body, Horza has invested too heavily in a concept of self as stable and unchanging; when this belief in his own consistency is challenged, he finds himself without other grounds upon which to build his identity. The subject, his ideologically imparted identity, cannot sustain the illusion of coherence and self-sufficiency in the absence of external stimuli.

One of the ways in which it becomes clear that the body is a risk in Banks' estimation is through his portrayal of the changes experienced by the character of Gurgeh in *The Player of Games*. Gurgeh is the Culture's finest games-player, and he travels to the Empire of Azad to participate in its game of Azad, a game that is used by the Empire literally to pick its Emperor. The Special Circumstances branch of the Culture – that branch which is involved in direct intervention in the internal affairs of other cultures in order to 'guide' them appropriately – believes that it is necessary to undermine the game of Azad in order to destroy the political stability of the Empire and hence pave the way for progressive social change. What is significant about Gurgeh's experiences while in Azad in terms of this discussion of the body is that Gurgeh's character is changed by experiences of his body. During his time in Azad, his body responds to the pleasures it offers – pleasures

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

of domination and subordination – that change Gurgeh from a Culture-like subjectivity, appalled by the cruelties of Azad, to an Azad-like subjectivity, appreciative of the Empire.

Gurgeh's susceptibility to the Empire appears to be rooted in the 'weaknesses' of his body, his lust for the sensations that accompany being on top in a hierarchical structure. Gurgeh had these tendencies before he came to the Empire but he did not overtly express them in the repression of others; once his body undergoes the experiences offered by the Empire, he loses many of his inhibitions.[51] Describing his obsession with game-playing to a friend, he says:

> I ... [sic] *exult* when I win. It's better than love, it's better than sex or any glanding; it's the only instant when I feel ... real. ... Me. The rest of the time ... [sic] I feel a bit like that little ex-Special Circumstances drone, Mawhrin-Skel; as though I've had some sort of ... [sic] birthright taken away from me. (*The Player of Games*, 21-22)

During his time in the Empire, these tendencies are emphasized and extended for Gurgeh. As he becomes more and more absorbed in the game of Azad, he begins "thinking differently, acting uncharacteristically. He is a different person" (*The Player of Games*, 231). The change that Gurgeh experiences, the alteration of his subjectivity in response to the effects of material reality on his body, are related to Charles Peirce's concept of habit-change as it has been elaborated upon and used by Teresa de Lauretis. A habit-change is the third level of interpretents that link objects and signs in the external world to their effect on the internal world of the experiencing subject. A habit-change is a change in the subject's tendencies toward action, and it results from a history of previous experiences and exertions.[52] The concept of habit-change provides a mechanism for understanding the ways in which the experiences of the body change subjectivity. As Gurgeh plays Azad, his

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

"brain [is] adapted and adapting to the swirling, switching patterns of that seductive, encompassing, feral set of rules and possibilities" (*The Player of Games*, 232) and he becomes a more feral subject in response. The drone accompanying him observes a "callousness in his play that was new" and believes that "the man had altered, slipped deeper into the game and the society" (*The Player of Games*, 247). Our narrator, later revealed to be the drone himself, asks us to consider the change in Gurgeh as he learns more of Azad the game and Azad the Empire, considering both "What will he make of such knowledge? More to the point, what will it make of him?" (*The Player of Games*, 232).

The body is less pivotal in *Use of Weapons* than it is in the first two novels, but again Banks suggests that the body is cultural as well as natural and that – to humankind's detriment – the body is an essential part of the self. The main character is this novel, Cheradenine Zakalwe, is a mercenary working for the Culture. The novel narrates two stories – the first in standard chronological order and the second in reverse. The first story concerns Zakalwe's present mission, one for which he has been brought out of retirement. The second story, in reverse chronological order, recounts Zakalwe's past missions for the Culture and leads us back to the traumatic event in his past which caused him to leave his own planet and become a Culture mercenary. Throughout the various descriptions of Zakalwe's past adventures, lots of attention is paid to the details of his bodily injuries: the experiences that lead to his wounding, his subjective experience of pain, and the Culture's near-magical ability to restore his body despite repeated injury. At its most extreme, Zakalwe's entire body is replaced after he has been decapitated and only his head is recovered.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Despite this representation of the body as seemingly irrelevant – its parts literally replaced without effect – Zakalwe's body is represented as an essential part of his subjectivity. At the end of the novel we discover that this character is not Cheradenine Zakalwe – a leader of his native planet – but is instead Elethiomel, Cheradenine's step-brother who led a rebellion against him. The traumatic incident from the past – in which Cheradenine received the body of his sister, Darckense, fashioned into a chair – is revealed as something that this character committed rather than something he was a victim of. The focus on the suffering of 'Zakalwe's' body throughout the novel has been the story of his attempts to achieve redemption through the suffering of his body. His true morphology is found in his internal body image, one that remains consistent throughout the various Culture-al modifications and repairs to the external material. This body image is represented by a physical scar that he continues to 'feel' even after his entire body has been replaced: a scar he received when a bone-chip from Darckense's leg, shattered by a gun wound, pierced his chest. This incident from their childhood continues to haunt him and remind him of the monster he has become in his ability to make anything, even her body, into a weapon to serve his ends. Again, we see that the body is not quite as irrelevant as Banks suggested in his Notes. 'Zakalwe's' subjectivity continues to be formed by images of bodies: his own as containing a reminder of Darckense, and his image of her body formed into a chair that fuels his self-hatred.

The body in Banks' trilogy is thus both the ground for the subject/self – the necessary image of coherence that the self needs – and the threat to a Culture's most deeply held ideals – which are those of the purely rational mind of Descartes. The contrast

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

between the Culture and Azad represented in *The Player of Games* provides a clear representation of the link between the philosophy of a culture and the physical bodies that can materialize within this culture. This contrast provides a literal demonstration of Judith Butler's contention that

> There is not necessarily one imaginary schema for the bodily ego, and cultural conflicts over the idealization and degradation of specific masculine and feminine morphologies will be played out at the site of the morphological imaginary in complex and conflicted ways.
> (*Bodies that Matter*, 87)

As I have already discussed above, social divisions on the basis of the body's sex distinction characterize the Empire. Because the Empire is so committed to this social structure, it needs to demarcate firm and fixed lines between the sexes. The Empire cannot tolerate the fluid sexual continuum of Culture-al bodies; for citizens of Azad, biology must be destiny, or the entire social order is threatened. The Empire is rather appalled that the Culture regards "homosexuality, incest, sex-changing, hermaphrodicy and sexual characteristics alteration as just something else people did, like going on a cruise or changing their hair-style" (*The Player of Games*, 225). The Culture can treat the body as a malleable object, but Azad requires a conception of the body as fixed in nature, a sign of pre-destined worth. Banks makes it clear that it is an ideological distinction – not a technological one – that determines this difference. In a discussion of the absence of sexual 'switching' in Azad, Gurgeh is informed, "genetechnologically, it's been within their grasp for hundreds of years, but it's forbidden. Illegal" (*The Player of Games*, 75).

A social system that is rooted in body-based discriminations must not allow evidence that such distinctions are constructed and arbitrary to emerge. The Empire uses

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

familiar rhetoric of 'natural' differences to justify its oppression of two of its sexes. However, just as Banks suggests that the maintenance of these differences serves the social status quo, he also reveals that their origin is similarly culturally engineered:

> A programme of eugenic manipulation has lowered the average male and female intelligence; selective birth-control sterilisation, area starvation, mass deportation and racially-based taxation systems produced the equivalent of genocide, with the result that almost everybody on the home planet is the same colour and build. (*The Player of Games*, 80)

Rather than evoke the new eugeneticist discourse of human improvement, Banks takes us back to the 'old eugenics' of elimination of those deemed socially worthless. The Empire clearly evokes the worst of Nazi social policies. In contrasting this society to the Culture, Banks suggests that the Culture's use of genetic manipulation is comparatively innocent – to increase human pleasure, to eliminate disease, to expand the range of human diversity. However, as I discussed above, the Culture shares with the Empire a concept of the body as natural: as 'naturally' revealing innate superiority or inferiority in the case of the Empire, and as the necessarily repressed expression of all that is natural (animal-like and destructive) in humanity in the Culture's deference to its disembodied Minds. Although Banks holds the Culture out as an exemplar, it is worthwhile to remember that the desire to improve the species – however benevolently conceived – easily slips into social repression of those who don't 'measure' up. The fears surrounding the discourses of genetics that I discussed at the beginning of this chapter suggest that we should be wary of accepting Banks' too-easy utopia.

Banks asks the reader to reflect upon the social construction of sex/gender categories and their link to political power in our own world. In a direct address to the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

reader just before Gurgeh's arrival at Azad, the narrator explains the conventions it (the narrator is a drone) will follow in using personal pronouns to describe Azad citizens:

> I have chosen to use the natural and obvious pronouns for male and female, and to represent the intermediates – or apices – with whatever pronominal term best indicates their place in their society, relative to the existing sexual power-balance of yours. In other words, the precise translation depends on whether your own civilisation (for let us err on the side of terminological generosity) is male or female dominated.
> (*The Player of Games*, 99-100)

Marain, the Culture's language, has a single personal pronoun to apply to any subject with the status of personhood, which ranges across the male to female sexual spectrum and includes sentient machines. In the English 'translation' of the novel, the masculine personal pronoun is used to describe apices. The invitation to compare sexual power-relations on Azad to sexual-power relations in our real world, in the context of the obvious constructed nature of sexual difference in Azad, encourages the reader to see the sex/gender system as an expression of culture rather than as one of nature. Finally, this invitation to return to the 'real' world can be extended to other aspects of the novel, allowing the reader to reflect also on the advisability of striving for genetically-produced utopias and of denying that the body is part of the self.

Conclusion:

The discourse and practice of genetics represents two dangers. The first is the risk of genetic essentialism, the belief that all that is significant about a human can be determined and predicted from genes. The danger represented by this concept is that we will construct a new class of the dispossessed through genetic discrimination, a danger that threatens to extend to a practice of eu-genetics through the desire to eliminate 'defective'

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

genes. The second is the risk of genetic welfare, the judgment that genetic tinkering can solve all social problems. The danger in this perspective is its ability to reinforce the social status quo and divert resources away from work aimed at changing the social system as all problems have been reduced to those of the individual and his or her failure to 'fit' with the current social system. Each of these dangers is linked to other discourses on the body and the ways in which constructions of the body have been used in socially repressive ways to unfairly distribute power and material resources.

Butler's trilogy grapples with the notion of genetic essentialism, ultimately arguing that while the body is one source of truth about the self, it is not the only source or even a privileged source. Despite her evident understanding of the flaws of human society, Butler does not believe that they can be fixed by fixing our genes, and she forces the reader to confront the genocidal implications of extreme genetic modification. Banks' trilogy initially seems to support the idea of genetic welfare in the sense that his utopia is grounded upon extensive modification of the body. However, a closer reading of the representation of the body in Banks' work suggests that his argument is undermined by an attachment to mind/body dualism. Banks' purely rational utopia requires the suppression of the body but – as the characters of Horza and Gurgeh show us – this repressed body returns to destroy the imagined coherence of the rational subject. Ultimately, then, this representation diagnoses the error of the perspective of genetic welfare. Just as Banks wishes to project all that is negative about the human subject onto the body, so, too, does the perspective of genetic welfare encourage us to project all that is wrong with our social

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

structure onto the bodies of individual 'deviants'. In both cases, this repressed body will return to undermine the illusory coherence of the subject and the social order.

Clearly, the practice of genetic engineering is one that is here to stay in our culture, a Pandora's box that cannot be un-opened. However, this fact does not mean that the discourses of genetic essentialism and genetic welfare must remain hegemonic in our engagement with this technology. Through my reading of these two trilogies, I have suggested some of the risks associated with these discourses. Butler's trilogy, in particular, suggests a space where change could take place, a possibility to engage with the possibilities offered by genetic engineering within a context of community and social relationships. The Oankali 'genetic engineers' – the ooloi – are not revered specialists who isolate themselves from the larger community. They engage in their work in a context in which they have relationships with those they treat. Further, the Oankali, despite their conviction of the absolute correctness of their genetic assessments, do not allow this conviction to erase the perspective offered from social rather than 'scientific' assessment. Banks, in contrast, with his too-easy utopia, makes genetic modification a technological ability that is removed from the human social context and therefore also from any debate that could exist regarding its appropriate use.

Although fears of genetic engineering are often expressed in terms of its ability to create grotesque, transgenic biological monsters, the true risks that it represents are the social problems it may contribute to or create. Although the discourse of genetics suggests the nature/nurture debate is over, and that nature has won, it is still the social choices we make regarding what is 'natural' that matter. Nurture, or the social, still controls how and

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

where 'natural' bodies can materialize. The new abilities provided by genetics to manipulate nature make it all the more imperative to engage critically with our discursive representations of the 'natural' and the 'normal' as we now possess the power to remake nature in our image. The necessary supplement to the science discourse of genetics and its representations of the 'natural' body is an understanding of how culture also contributes to the body. We are returned to Grosz's image of the Möbius strip, the requirement to sustain, simultaneously, the dual perspectives of inner and outer, nature and culture, and biology and environment. Genetics only gives us the starting point. How we will proceed with it is still a matter of the social choices we make surrounding it, and the agency we construct and apply to those entitled to make these choices. As my critique of Banks suggests, these choices cannot be conceived as merely individual ones within the paradigm of liberal humanism's emphasis on individual freedom; the world we create as we support or prohibit various uses of genetic technology must include the perspective of community, the voice of all social subjects, and an acknowledgement of the ways in which social structures work to position these subjects in uneven ways vis-à-vis the technology.

We do not need to fear that the unexpected others emerging from genetic engineering will be monsters. Instead, the monsters may be our problematic selves, our desire to define a 'base line' of normality for the human genome and limit to the very cellular level those bodies we allow to materialize. Even that most favorite literary example of the monstrous – Frankenstein's creation – was made monstrous by his socialization, not by his biology. Almost in spite of itself, the discourse and practice of genetics is an exemplary representation of the reality that the body is a cultural as well as a natural

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

product. In *Xenogenesis*, the human Resisters are opposed to genetic mixing because they fear that their children will not be human anymore. The implications of the practice of technology exhort us to pay close attention to how we choose to construct this notion of what is 'human' or we, too, run the risk that our children will not be human, as they will lack the diversity of contemporary humanity.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

NOTES

[1] From "An Evolutionary Perspective for Genetic Engineering," quoted in Miringoff, *The Social Costs of Genetic Welfare*, p. 162.

[2] It should be noted that Banks' novels imply that there is transgenic breeding among various humanoid species. This is explicitly mentioned in *The Player of Games* when Yalson explains her pregnancy by the fact that her mother was from the Culture and therefore Yalson "inherited the genofixing for trans-species mating" (391). Additionally, Beychae suggests to Zakalwe in *Use of Weapons* that "the Culture can sometimes appear to be insistent that deliberate inter-mixing is not just permissible but desirable, almost a duty" (254). Further, a short story not discussed in this project ("The State of the Art") demonstrates that the Culture did not originate on earth. However, the main characters in these novels are described – exempting the genetic modifications, of course – in terms that are recognizably human. As I argue in my introduction, I believe that it is appropriate to consider such representations as models for possible 'real life' becomings.

[3] Brad Evenson, *The National Post*, August 19, 1999, A1. The same experiment results were reported in *The Edmonton Journal* in Lisa Krieger "Nice mice just a new gene away," August 22, 1999, B2.

[4] Jeff Barnard "Talk about building a better mousetrap; this gene experiment created smarter mice," *The Edmonton Journal*, September 2, 1999, A1.

[5] Lisa Belkin "It's a ~~Girl/Boy~~ or Whatever You Want" *The Edmonton Journal*, August 15, 1999, F1.

[6] B.K. "Are You My Daddy?" *Elm Street Magazine*, September 1999, p. 26.

[7] For examples see Silver and Aldridge.

[8] For examples see Nelkin and Lindee, Nelkin and Tancredi, Mirgingoff, Kevles and Appleyard. Russo and Cove present a quite balanced view that acknowledges benefits that may result from genetic manipulation of food crops and animals, but which warns against the dangers of allowing such technology to be applied to humans. Their analysis includes a discussion of the continuum between eugenicists and geneticists in terms of University appointments in Britain, the US and Germany.

[9] There are two aspects to this argument. Wexler's article focuses on the case of Huntington's disease, a disorder whose symptoms do not emerge until middle-age. Wexler cites her experiences in studying the disease in a community in Venezuela and the risk that someone who finds out that he or she is to suffer this debilitation will choose to kill himself or herself rather than let the disease emerge. The more commonly cited moral objection, which Wexler also discusses, is the 'treatment' of abortion for those fetuses found to have a genetic abnormality. Miringoff also analyses this second aspect of the moral implications of genetic screening.

[10] See *The Other Machine*, especially p. 72-86. The counter discursive image is that of the hyper-fertile coloured and/or poor woman (the 'welfare mothers syndrome'). Both of these images relate to eugenics discourses from the beginning of the century, particularly in America, which emerged, in part, as a response to immigration and fears that 'superior stock' were being out-bred by 'inferior stock'. Farquhar points out other intersections of social values and genetic science emerging in discursive constructions of 'innocent' infertile women and 'non-innocent' infertile women – those who have difficulty conceiving due to previous sexual promiscuity, delayed child-bearing to pursue career or education, and those who wish to pursue parenting outside of a heterosexual couple.

[11] See also Bordo *Unbearable Weight*, p. 76 and Haraway *ModestWitness@SecondMillenium*, p. 205 for further discussion of the increased social control exercised by medical practitioners over the reproductive freedom of poor and non-white women as compared to that of middle-class, white women.

[12] The more recent ability to select the sex of an embryo during IVF – the Microsort procedure discussed in "It's a ~~Girl/Boy~~ or Whatever You Want" *The Edmonton Journal*, August 15, 1999, F1 – is currently restricted to couples who already have at least one child and who wish to sex-select for the opposite sex. However, the experience with other IVF technologies suggests that as soon as the procedure and equipment become more widely available, price will be the only criterion required to qualify. Genetic research and its attendant technologies and procedures are money-making businesses, and governments are unlikely to have much ability to regulate their use in the face of stockholders who wish to see their profit, and a global economy in which genetic research firms can be moved to another country to avoid restrictions (see Silver and Kevles). Those limits that have been successfully enacted have been done through careful assurance that all countries agree to the same standards (an example is the agreement not to conduct experiments on

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

human fetuses). For a discussion of the current controls in place see Watson and Kevles. In the case of Microsort, the fear is, of course, that there will be an overwhelming preference for one sex. The *Journal* article suggests that North Americans indicate a preference to sex-select for female children and Belkin suggests that this may be because women have more control over their reproduction in the West. It should be noted that this is an expressed preference for people who *want* to undergo the procedure as there are not yet sufficient numbers of people who have used the procedure to report on its results. Nelkin and Tancredi report sex-selection in preference for male children through the use of abortion in India (*Dangerous Diagnostics*, 65). The ability to selectively choose which pregnancies to continue based on genetic information about the fetus raises an ethical question for feminists and clinicians, both of whom may be stuck between not wanting to advocate abortion for the reason of trying for a 'better baby' but who also do not want to see a woman's right to choose an abortion restricted in any way. Cowan looks at this issue in her article "Genetic Technology and Reproductive Choice: An Ethics for Autonomy."

[13] It should be noted that this common way of expressing genetic difference is not scientifically accurate. The genetic markers found for certain single-gene disorders – and sought for other 'conditions' such as homosexuality, depression, alcoholism, etc. – are not actually different genes but are different forms of the same gene (see *Remaking Eden*, p. 204).

[14] As Russo and Cover point out, homosexuality was only removed from the psychiatric classification of diseases (*Diagnostic Statistic Manual*) in 1974 (p. 212).

[15] Miringoff, Nelkin (alone and also with both Tancredi and Lindee), Greely, Fox-Keller.

[16] See *The Social Costs of Genetic Welfare*, especially p.18-20. For those who doubt that the practice of selective abortion could start to be applied to an increasingly wide circle of examples, consider the 1985 book *Should the Baby Live? The Problem of Handicapped Infants* (Helga Kuhse and Peter Singer, Oxford UP) which argues that some infants with severe disabilities should be killed. Consider also that genetic treatments for 'abnormalities' have been demonstrably increased in scope. For example, human growth hormone is used to treat dwarfism in children to allow normal growth through puberty. In the past, when the supply of the hormone was limited to that which could be extracted from cadavers, the scope of treatment was limited to those children who couldn't produce any of the hormone in their own bodies. Now that genetic engineering can provide an unlimited supply of the hormone from bacteria, the scope of treatment has been extended to those children who are considered 'too short' for their age (see Ruth Hubbard and Elijah Wald *Exploding the Gene Myth*, Beacon Press, 1993, p. 163).

[17] If this seems like an attitude that is rooted in paranoia, consider the fact that in the US physicians can be sued with wrongful life (the disabled individual sues the physician for failing to treat or prevent the disabled birth) and wrongful birth (the parents sue the physician for the same reasons) suits. It doesn't seem like a far step from this perspective to an argument that says that parents who choose to have a disabled baby despite the predictions of medicine should therefore assume the entire financial burden of their choice. In an economy in which we are continually looking for ways to reduce the economic burden of social programs, it seems entirely feasible that 'special' services that can be identified as non-essential (as the 'special births' could have been prevented) will be targeted for reduction or elimination.

[18] See Greely for a further discussion of the ramifications of the intersection of medical insurance and employment in the current American healthcare system. As most employers are also insurers, the risk is that genetically 'afflicted' individuals will be denied employment opportunities as the insurers do not wish to bear the burden of their medical expenses. As Greely points out, the solution is not as simple as straightforwardly legislating against such discrimination as the likely consequence of this would be that employers would then choose to stop providing medical insurance as an employment benefit. Further, if private health insurers are restricted from discriminating against those with genetic markers of disease, the economic system which currently underpins American health care insurance (profits for stockholders) will collapse. This situation is further complicated by the fact that "there may be little correlation between positive tests and impaired performance. Yet data from tests are compelling: though a person may have no symptoms, a diagnosed predisposition to a disease can itself be perceived as a kind of abnormality, a disability, a disease" (*Dangerous Diagnostics*, 102). Robert J. Sawyer's SF novel *Frameshift* considers the problem of genetic testing and health insurance.

[19] *The Social Costs of Genetic Welfare*, p. 13 and *Dangerous Diagnostics*, p. 83.

[20] If all of this sounds suspiciously familiar, see Kevles and Nelkin and Lindee for a discussion of the continuing rhetoric between eugenicists from the beginning of the century and geneticists at its end.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

---

[21] For a discussion of these various representations of genetics in popular sources, see *The DNA Mystique*. For examples of scientists using them without irony, see *The Code of Codes*.
[22] This is assuming, of course, that such complex social patterns can be reduced to genetic propensities, which seems doubtful to me. However, scientists have demonstrated an almost religious ecstasy over the fact that, not only has genetics finally answered the nature/nurture dilemma in favour of nature, but that it has also finally completed the scientific project of man to conquer the forces of nature. Consider the National Academy of Sciences' study of life sciences published in 1968: its rhetoric suggests that genetics will allow us to overcome the de-centerings of the Copernican and Darwinian revolutions – "Now he [man] can guide his own evolution. In him, Nature has reached beyond the hard regularities of physical phenomena. Homo Sapiens, the creature of Nature, has transcended her. From a product of circumstances, he has risen to responsibility. At last, he is Man" (from Fox Keller, 288 – p. 928 in original entitled "Biology and the Future of Man"). As Nelkin and Lindee point out, we still inhabit an age in which we feel a need to define the limits of nature and the beginnings of man. Many technologies challenge what it means to be human: machines can think; VR can simulate experience; animals rights suggests humans are not unique; cyberbodies challenge the idea of an organic base to human uniqueness; sociobiology links human culture to primate (*DNA Mystique*, 42). More than ever, we now rely on the body – as DNA – to define our identity. A further complication of this dilemma is the fact that if we believe that genetic predispositions determine a person's fate, the knowledge of this genetic script may influence how parents and society treat a child, thereby producing the very subject that was predicted by genetics (see further, *Social Costs*, 50). If this scenario seems too close to the image of Huxley's *Brave New World* (and hence unrealistic) consider evidence cited by Nelkin and Tancredi regarding the over-diagnosis of hyperactivity in school children and the state's insistence that such children be treated with Ritalin in order to be allowed into classrooms (*Dangerous Diagnostics*, 120). It is far easier to diagnose and accept biological explanations for problem children – which can quickly be fixed by drugs – than to look at more complicated issues like family stress, over-crowded classrooms, etc. (issues which frequently require economic and social structure solutions).
[23] The default tendency will be for the discourse of genetics to be deployed in socially conservative ways. As Nelkin and Lindee argue, "Charged with cultural meaning as the essence of the person, the gene appears to be a powerful, deterministic, and fundamental entity. And genetic explanations - of gender, race or sexual orientation - construct differences as central to identity, definitive of the self. Such explanations thereby amplify the differences that divide society" (*DNA Mystique*, 126).
[24] See Silver for the strongest example of the blurring between fiction and non-fiction. Appleyard provides the best example of creating narrative from real people in his use of the example of his niece in his argument against selective abortion of disabled fetuses.
[25] For a science fiction example of a society polarized by genetic modification see Nancy Kress' *Beggars* trilogy.
[26] Butler's use of genetic engineering in her trilogy is not an example of 'hard science' SF, that is, SF which deals minutely and as accurately as possible with the details of the science it represents. Butler's use of genetics is usually read as a narrative trope that permits Butler to engage with the themes she is interested in exploring about human culture and values. In my reading of her texts, I juxtapose her representations of genetic engineering with contemporary responses to the 'real' science. My rationale for this approach is that it is precisely the ways in which representations of genetic engineering are in fact 'arguments' about the same themes as Butler's fiction is about that is the focus of my project. That is, I am interested in interrogating the assumptions about human 'nature' and about appropriate uses of technology that are embedded in the non-fictional representations. My argument is that many non-fictional accounts of genetic engineering (how we should use it, why we should use it, who should use it) are in fact as 'metaphorical' and 'symbolic,' – are ideological stances about values rather than simply hard scientific fact – as is Butler's work.
[27] All quotations are taken from a combined edition of the trilogy published under the title *Xenogenesis* by Guild America Books. No date is given for this edition. The copyright dates for the novels are *Dawn*, 1987, *Adulthood Rites*, 1988 and *Imago*, 1989. I will indicate which novel I am quoting from in the text, but all page references will be to this combined edition.
[28] This ability suggests that in Butler's imagined future, all species in the universe? galaxy? share the same genetic code (four bases) that is shared by all living things on earth. This further suggests that Butler's work shares the perspective discussed in Chapter 1 that a more socially constructive way of being-in-the-

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

world would be to consider ourselves as part of the same being as all other living things. As Nelkin and Lindee point out, this conclusion is one that logically emerges from genetic information such as the common structure of DNA in all living things and the fact that human DNA and chimpanzee DNA is different by approximately 1% (*DNA Mystique*, 126). However, rather than focusing on these similarities, the thrust of genetic science has been to look for differences that distinguish humans from other species and that distinguish normal from abnormal humans. Again, this emphasizes that the nature/nurture debate is far from over: the very 'facts' of genetic science cannot escape being socially constructed by culture.

[29] This means 'not Oankali' as they were when they encounter humans, as the history of the Oankali suggests that they keep calling themselves Oankali throughout their genetic transformations. The Akjai – examples of the Oankali as they were before they encountered humans – have distinctly different morphologies from the Oankali that interact with humans in the novels.

[30] David Theo Goldberg argues that the idea of hierarchy is one of the preconceptual grounds for a racist discourse. Goldberg argues that any effective resistance to racist discourse must consider both its content and its preconceptual grounds. Butler's trilogy presents one of the examples of SF in which the anxiety about race and racial boundaries is displaced onto an alien other. The human characters in the novels are from a wide range of human racial types – explained as a consequence of the few pockets of survivors following the nuclear catastrophe – and there is no evidence of racial tension between them in the novels. Instead, all of this hostility is projected onto the Oankali, humans who remain with the Oankali, and hybrid offspring. In her other work – especially *Kindred* – Butler explicitly examines the theme of racism and it is therefore not surprising that she would identify hierarchy as a human flaw. Further, the socially pernicious uses of the discourse and practice of genetic engineering are also rooted in hierarchical distinctions about which lives are worthwhile.

[31] The Oankali technology, like Jones' Aleutians, is organic. The ability of the ooloi has been used to alter non-sentient species in ways that allow them to serve as tools for the Oankali, and to enjoy their role. Their ship is also a living organism, with which they share "an affinity, but it's biological – a strong, symbiotic relationship. We serve the ship's needs and it serves ours. It would die without us and we would be planetbound without it. For us, that would eventually mean death" (*Dawn*, 38). Interestingly, this sense of organic technology, rooted in genetics and the ability of organisms to adjust to their environment, is similar to descriptions of the organic changes it is believed that earth underwent in its move from a nitrogen-rich atmosphere to an oxygenated one. Lynn Margulis and Dorion Sagan write in *Microcosmos: Four billion years of microbial evolution*. NY: Touchstone, 1986: "In their first two billion years on Earth, prokaryotes continuously transformed the Earth's surface and atmosphere. They invested all of life's essential, miniaturized chemical systems – achievements that so far humanity has not approached. This ancient high *bio*technology led to the development of fermentation, photosynthesis, oxygen breathing, and the removal of nitrogen gas from the air" (17).

[32] Human fear of the Oankali is very visceral. When Lilith is first forced to spend time near one, she must force herself to resist her revulsion. The reason for this fear and revulsion, which easily becomes hatred, is rooted in the fact that Oankali bodies are different from human bodies. The Oankali have tentacle-like sensory organs, which the humans perceive as snakes. As I discussed in the introduction, the fear of bodily difference often lies at the heart of discourses of racism, sexism and homophobia. In discussing both his Oankali and his human heritage with her son, Akin, Lilith tells him: "'Human beings fear difference,' Lilith had told him once. 'Oankali crave difference. Humans persecute their different ones, yet they need them to give themselves definition and status. Oankali seek difference and collect it. They need it to keep themselves from stagnation and overspecialization. ... You'll probably find both tendencies surfacing in your own behaviour. ... When you feel a conflict, try to go the Oankali way. Embrace difference'" (*Adulthood Rites*, 321). Like hierarchy, Butler diagnoses human fear of difference as one of the causes of our social problems. Additionally, Lilith's statement to Akin about humans needing difference to give themselves definition and status points to the role of repudiation in the constitution of the self.

[33] See the introduction for a discussion of Hopkins' article.

[34] This includes behavior that continues even after the Mars colony option has been offered to them. Even Akin has his doubts: "They were not killing each other over the Mars decision, but they were killing each other. There always seemed to be reason for Humans to kill each other. He would give them a new world – a hard world that would demand cooperation and intelligence. Without either, it would surely kill them. Could even Mars distract them long enough for them to breed their way out of their Contradiction?" (*Adulthood Rites*, 484).

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

[35] For example, see Wexler on the interpretation of results of genetic screening. As the markers may change from group to group, a negative response can mean both that the disease is not present or that the disease is not marked by one of the ways that may be tested. Nelkin and Tancredi discuss the various interpretative aspects to any biological testing throughout their work. Eric Lander discusses some of the technical issues involved in DNA fingerprinting and the high potential for error in the procedure.

[36] It seems to me impossible not to come to this conclusion when we consider that the current state of science has no idea what *most* of our DNA does. The genetic mapping of the DNA sequence breaks it down into sections of genes – whose functions are then tested – and a large remainder commonly referred to as 'junk' DNA. No one knows what – or if – this DNA accomplishes although it is typically assumed that it serves no purpose, as it seems to be composed largely of random numbers of repeated sequences. Within the 'useful' sections of DNA (genes), the sequence is further divided into exons – those bits with actually code for protein construction – and introns – seemingly more useless DNA that is discarded in the transfer from DNA to RNA to proteins. The actual portion of DNA believed to be useful (called cDNA for code DNA) is only a tiny proportion of the total code. Given this lack of knowledge, it seems a bit premature to advocate reducing the gene pool by eliminating certain gene forms known to cause disease. Colonialism has already reduced the existing genetic variation among humans through large-scale reduction of aboriginal populations. The Human Genome Diversity Project is attempting to gather and catalogue some of these variations and is itself raising interesting moral questions. For example, a Guaymi woman was 'discovered' whose blood contained a unique virus whose antibodies were useful in treatment of leukemia. The company who discovered this property of her blood attempted to patent their discovery, raising the question of whether the 'product' is owned by the body that originally produced it, or the company that manufactured a marketable product from it (see *ModestWitness@SecondMillenium* p. 251-256).

[37] Marge Piercy's *Woman on the Edge of Time* represents a feminist utopia that includes ectogenesis as a necessary ingredient to women's equality.

[38] See Silver, p. 178-188 for a discussion of how it is technologically possible to produce an embryo that is a genetic mixture of homosexual partners. It is not possible for two parents of the same sex to be the *only* genetic contributors to the fetus, but it is possible to ensure that their genes do make up at least 25% each of the resulting child.

[39] This is yet another example of Butler's 'tricky' essentialism; however, the notion that human males are 'natural' wanderers is undermined by the character of Akin who, against expectations, chooses to remain close to home.

[40] I am indebted to Heather Zwicker for pointing out this connection between Butler's construction of motherhood and the different ways in which black and white women experience motherhood in our contemporary culture.

[41] "Construct" is the designation used to distinguish Jodahs – and later his sibling Aaor – as ooloi that combine both human and Oankali genetics. It is a rather problematic term as it implies that the children from the human-Oankali genetic partnership are constructed – that is, produced in a way that is cultural rather than natural – while the children that the ooloi have among themselves prior to mating with humans are somehow produced in a 'natural' way. However, the information about Oankali reproduction provided in the novels suggests that all offspring are produced in the same way – through an ooloi selection of the genetic mix. The use of this term construct suggests that Butler may have some residual sense of the body as purely natural *unless interfered with by technology* as, presumably, trans-species reproduction is not possible without technological intervention. Once the Oankali have evolved into whatever blend will emerge from human-Oankali mixing, the next generations begin to reproduce alone. Such reproduction is somehow considered more natural as it more closely resembles our sexual reproduction. Butler's use of this term in a trilogy in which she challenges the idea of the natural body suggests how easily unacknowledged assumptions about the body can emerge in our discourse.

[42] The "it" refers to the neuter ooloi gender. However, it is tempting to think of Jodahs as a "he" because it most commonly assumes a male form in response to the desire of a female mate (more on this below). As the ooloi is the dominant partner in Oankali sexual couplings, the tendency to portray the neuter Jodahs as a male is perhaps further evidence of an underlying conservatism in the novels.

[43] One of the benefits that the Oankali offer to the humans that live with them is correction for any diseases. For example, Lilith awakens in *Dawn* to discover the scar from an operation to remove a cancerous growth, and metastasis is prevented throughout Lilith's life by Nikanj's observation of her cells. In *Imago* the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Oankali discover a community of humans who are able to reproduce themselves because a single female among them was fertile and became pregnant after a rape. This reproduction, inevitably, is completely in-bred as all subsequent births within the community are from this woman and her offspring. A recessive genetic flaw in this stock – creating a disease of excessive bone growth – dooms these people to painful and disfigured lives without Oankali intervention.

[44] See particularly *Kindred* in which a white son of a plantation owner is unable to resist his interpellation as a racist plantation owner despite a close intellectual relationship with the main black character, Dana, and his romantic involvement with another black character. The social context that teaches him racism and social structures which require him to participate in this racism or lose his own social power prove stronger than the powers of intellectual understanding in which he is forced to recognize that Dana is his intellectual superior. This novel also presents an interesting representation of the process of bio-power producing subjectivity. Dana is a 20th century black woman who is somehow drawn into the pre-Civil War past of her ancestors. Initially, Dana retains her 20th century perspective on the institution of slavery and is somewhat contemptuous of the subservient blacks of that time. However, through her experience of the abuse of her body – the same abuse regularly visited upon slaves – Dana finds that this action of culture upon her body has produced in her the subjectivity of a slave.

[45] I am calling the three novels *Consider Phlebus* (1987), *The Player of Games* (1988), and *Use of Weapons* (1990) a trilogy only in the sense that they are all set in the Culture and – at the time I conceived this chapter – they were Banks' only work set in this universe, with the exception of a short story. Since that time another book *Excession* (1996) has been set in this universe. This final book will not be discussed in this chapter.

[46] Copyright, 1994. Available from Rutger's SF Lover's archive at http://sflovers.rutgers.edu.

[47] I think it is safe to ascribe to Banks himself belief in the ideals represented by the Culture given that this is the way he presents them (as his beliefs) in his "Notes."

[48] Horza himself is shown to be a product of culture, not nature. It does seem somewhat ironic that Horza would be so adamantly opposed to the Culture's body modifications since his own body is continually moving between one form and another as he changes himself to impersonate various others. Horza believes that his organic ability is natural and contrasts it to the Culture's body enhancements. However, a Culture character has an insight into Horza's motivations that demolishes Horza's construction of the contrast between the natural body and the cultural body. Speaking to Horza in her mind, this character ponders, "*Who are you? What are you? A weapon. A thing made to deceive and kill, by the long dead. The whole subspecies that is the Changers is the remnant of some ancient war, a war so long gone that no one willing to tell recalls who fought it, or when, or over what. Nobody even knows whether the Changers were on the winning side or not. But in any event, you were fashioned, Horza. You did not evolve in a way you would call 'natural'; you are the product of careful thought and genetic tinkering and military planning and deliberate design . . . and war; your very creation depended on it, you are the child of it, you are its legacy. Changer change yourself ... but you cannot, you will not. All you can do is try not to think about it. And yet the knowledge is there, the information implanted, somewhere deep inside. You could – you should – live easy with it, all the same, but I don't think you do ... And I'm sorry for you, because I think I know now who you really hate*" (*Consider Phlebus*, 362-363, italics and ellipses in original).

[49] The Azad style of reproduction has interesting parallels to the relationship to reproduction that can be produced through assistive reproductive technologies. In Azad, "The dominant species is humanoid, but, very unusually – and certain analyses claim that this too has been a factor in the survival of the empire as a social system – it is composed of three sexes. ... The one on the left ... is a male, carrying the testes and penis. The middle one is equipped with a kind of reversible vagina, and ovaries. The vagina turns inside-out to implant the fertilised egg in the third sex, on the right, which has a womb. The one in the middle is the dominant sex" (*The Player of Games*, 74). This relationship, in which the genetic mother of the offspring is the apex – whose ovaries produce the egg – while the gestational mother of the offspring is the female – in whose womb the fetus grows – can be mapped to surrogate parenting contracts in which the surrogate mother provides only gestational 'service' for a fetus created from combining an egg and sperm recovered from the contracting parents. In discussions around surrogate parenting and other ARTs, the contracting parents express concern regarding the 'quality' of the surrogate mother if her egg is to be used in reproduction, but are typically less concerned with the 'quality' of the surrogate mother if she will not be contributing any genetic material to the child (see *The Other Machine*, 35-41). This belief that the genetic contribution to the child is more significant than the social environment in which the child gestates is

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

another example of genetic essentialism. Banks describes Azad culture as having believed, until recently, that the female sex was irrelevant to reproduction as they contributed only the gestational container and he links this belief to other examples of their irrational gender prejudice: "You know for millennia females were thought to have no effect on the heredity of the children they bore? They've known for five hundred years that they do; a viral DNA analogue which alters the genes a woman's impregnated with. Nevertheless, under the law females are simply possessions. The penalty for murdering a woman is a year's hard labour, for an apex. A female who kills an apex is tortured to death over a period of days" (*The Player of Games*, 204).

[50] Some examples: "'Now Level Three,' the drone said. ... The screen held his gaze ... The screams echoed through the lounge, over its formseats and couches and low tables; the screams of apices, men, women, children. Sometimes they were silenced quickly, but usually not. Each instrument, and each part of the tortured people, made its own noise; blood, knives, bones, laser, flesh, ripsaws, chemicals, leeches, fleshworms, vibraguns, even phalluses, fingers and claws; each made or produced their own distinctive sounds, counterpoints to the theme of screams. .... 'That one is live ... it is taking place now. It is still happening, deep in some cellar under a prison or a police barracks.' ... 'This is no special night, Gurgeh, no festival of sado-erotica. These things go out every evening'" (*The Player of Games*, 209-210); and "'We gain a great deal of pleasure from knowing at what cost this music is bought. ... each of those steel strings has strangled a man. ... [the pipe is] a female's femur, removed without anaesthetic ... The drums are made from human skin. .... You see, Gurgeh, one can be on either side in the Empire. One can be the player, or one can be ... [sic] played upon'" (*The Player of Games*, 222).

[51] It is interesting to note that the text links Gurgeh's desire to dominate to his 'abnormal' sexuality – in the Culture's terms. He refuses to have sex with partners of the same gender, and has remained a male throughout his life. In refusing him, one of the women he propositions explains: "'I feel you want to . . . take me,' Yay said, 'like a piece, like an area. To be had; to be . . . possessed.' Suddenly she looked very puzzled. 'There's something very . . . I don't know; primitive, perhaps, about you, Gurgeh. You've never changed sex, have you?' He shook his head. 'Or slept with a man?' Another shake. 'I thought so,' Yay said. 'You're strange, Gurgeh.'" (*The Player of Games*, 24, ellipses in the orignal). Additionally, the majority of his lovers choose to become male shortly after being with him. This sexual predilection explains another part of Gurgeh's attraction to Azad, as it is a social system of great sexual discrimination.

[52] See *The Practice of Love*, p. 299-309.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Chapter 3: Return of the Repressed Body

> *In pop culture, practice comes first; theory follows limping in its tracks. Before the era of labels, cyberpunk was simply 'the Movement' – a loose generational nexus of ambitious young writers ... [who] found unity in their common outlook, common themes, even in certain oddly common symbols, which seemed to crop up in their work with a life of their own. Mirrorshades, for instance ... Mirrorshades prevent the forces of normalcy from realizing that one is crazed and possibly dangerous. They are the symbol of the sun-staring visionary, the biker, the rocker, the policeman, and similar outlaws.*
>
> *Bruce Sterling*

Bruce Sterling's dramatic claim for cyberpunk – that it is subversive to the forces of normalcy, crazed and possibly dangerous – has not been supported by many of the critical assessments of the genre. Cyberpunk is a curious phenomenon within the field of science fiction: it has provoked considerable critical debate and discussion both within and beyond 'fandom', a debate that seemingly has survived the sub-genre itself.[1] Discussions of cyberpunk often focus on definitions: who is or is not a cyberpunk author, and what are the constitutive features of the genre that allow us to make these categorizations. While the debate is by no means closed, I would submit that texts which can be classified as cyberpunk share the following characteristics: direct human interface with computer systems and some type of information network; a world dominated by multinational corporations rather than governments; young, hip outlaw heroes who live on the legal fringes of the social world; and – most pertinent to my discussion – characters who display a revulsion toward the body as mere 'meat'. Sterling, the 'movement's' most vocal promoter during its inception, has argued for the subversive potential of the genre, its allegiance with the hackers and rockers who challenge the socio-economic status quo. However, critical assessment of the genre by critics such as Darko Suvin[2] and Istvan

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Csicsery-Ronay, Jr. suggest that the subversion of cyberpunk lies more in its style than in its substance. The most cynical assessments, such as Suvin's, suggest that cyberpunk is simply a successful marketing strategy: "Is cyberpunk, then, despite all trendy mimicry of rebelliousness, complicitous with the owners and managers of the culture industry, finally with the death-dealing *zaibatsu* so well described by Gibson, and merely trying to get some crumbs off their table by flaunting its own newness as a marketable commodity?" (364).

Certainly, marketing itself as a distinctive sub-genre has been a successful strategy for cyberpunk if measured in terms of the attention that the genre has received from academics. The cyberpunk movement has been the subject of a huge outpouring of critical work including special issues of *SF Studies* (1992) and *Genders* (1993) devoted to the topic. Part of the reason that cyberpunk has been the focus of so much critical discussion can no doubt be attributed to the wide range of assessments the sub-genre has provoked. Larry McCaffery, following in Sterling's laudatory vein, has argued that cyberpunk offers the cognitive maps that Jameson calls for in *Postmodernism*, helping the human subject orient him- or her-self to the world of late capitalism.[3] Scott Bukatman contends that cyberpunk is one of the cultural representations that re-installs human agency at the site of the terminal, the very site where technology intervened in and deconstructed the human subject's edifice of its own autonomy and unity.[4] Veronica Hollinger maintains that cyberpunk shows people engaging with and controlling technology rather than being dominated by it.[5]

Cyberpunk has received its share of criticism as well as praise. The two most common criticisms of the genre are that it is merely misogynistic, boys'-own-fantasy

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

escapism, and that it offers only individual transcendence, not social solutions, to the problems it diagnoses.[6] Csicsery-Ronay writes: "All of the ambivalent solutions of cyberpunk works are instances/myths of bad faith, since they completely ignore the question of whether some political controls over technology are desirable, if not exactly possible" ("Cyberpunk and Neuromanticism," 193). Andrew Ross suggests that, far from being "crazed and possibly dangerous" to the status quo, cyberpunk is instead the worst nightmare of violence and decay that can be projected onto the 'inner city' by the white, suburban males who are typically cyberpunk authors.[7] Nicola Nixon's scathing critique – delivered in "Cyberpunk: Preparing the Ground for Revolution or Keeping the Boys Satisfied?" – most succinctly states the various complaints that feminist critiques have brought to the debate. Nixon describes the sub-genre as one that lacks a political agenda, for all its claims to be subversive, and she points out the misogyny which grounds many of the sub-genre's tropes. Nixon links the repression/rejection of the body in cyberpunk to the misogynistic tradition of Cartesian dualism which associates the body with reviled femininity and posits a mastery and transcendence to the masculine mind. As Nixon convincingly demonstrates, the imagery of "penetrating" defenses and "riding" programs used to describe cyberspace runs suggests that cyberpunk heroes are successful because of "their facility, in short, as metaphorical rapists" (234). Nixon further argues that the history the sub-genre creates for itself, a history which admits to influences from male New Wave and hard SF authors but omits the influence of feminist SF from the 1970s, is further evidence of its repression of what has been feminized.[8]

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Although wary of the volume of critical responses that have already been made to cyberpunk, in this chapter I am going to provide a cultural analysis of three cyberpunk texts: William Gibson's *Neuromancer*, the text which marks the beginning of cyberpunk as a sub-genre; Pat Cadigan's *Synners*, one of the few examples of a female-authored cyberpunk text; and Raphael Carter's *The Fortunate Fall*, a text which functions as an ironic response to cyberpunk, sharing the sub-genre's tropes without succumbing to its political naiveté. Anne Balsamo has argued that feminist analysis of cultural texts should examine the ways in which such texts both thematize cultural pre-occupations and offer cognitive maps of emergent social formations (*Technologies*, 161). I believe that much of the criticism of cyberpunk that I discussed above has focused on the first of these goals. In this analysis, I will focus on addressing the second category of assessing the cognitive maps that cyberpunk does offer of life in the so-called Information Age. I will connect my reading of these texts to cultural analysis of the material consequences of computer and virtual reality technologies on our contemporary world, looking particularly at the materiality of the body within the texts, and representations of the material body in information technology discourses. As I argued in my introduction, fictional texts offer sites of identification for social subjects. This chapter seeks to interrogate the interventions cyberpunk fiction makes in the mutual construction of the subject and the social in our contemporary world of information technology. As I suggested in my introduction, I think it is time to move past both celebrations of the supersession of the body, and nihilistic pronouncements of its death; rather, we need to engage with the embodied relation to the technological world. With Rosi Braidotti, I think that "In this generalized climate of denial and neglect of the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

terminal crisis of classical humanism, I would like to suggest that we need to turn to 'minor' literary genres, such as science-fiction and more specifically cyber-punk, in order to find non-nostalgic solutions to the contradictions of our time."[9]

In order to understand cyberpunk fiction, it is necessary to understand the concept of cyberspace. Gibson's definition of cyberspace in *Neuromancer* has by now become almost legendary and I will not break tradition by failing to quote it in my discussion of cyberpunk. Cyberspace, writes Gibson, is "the consensual hallucination" into which a cyberspace cowboy's disembodied consciousness is projected. Descriptions of cyberspace in Gibson's novels suggest that it is a type of virtual reality for hackers,[10] a three-dimensional representation of data through which one's perception moves. The term cyberspace has moved from fiction to reality in the fifteen years since Gibson's novel first appeared. Michael Heim defines cyberspace as "the juncture of digital information and human perception, the 'matrix' of civilization where banks exchange money (credit) and information seekers navigate layers of data stored and represented in virtual space" (*Metaphysics*, 150). The appeal of cyberspace is linked directly to the repression of the material body in cyberpunk fiction and, increasingly, in real-world 'cyberspace' encounters in virtual reality or in Multiple User Domain virtual environments on the Internet. Vicki Kirby writes, "cyberspace is ... the space where the perfect body is paradoxically acquired through an annihilation of the flesh" (*Telling Flesh*, 132). The world of cyberspace is the consummate world of the Cartesian dualist: in cyberspace, one *is* the mind, effortlessly moving beyond the limitations of the human body. In cyberpunk fiction, the prison of the 'meat' is left behind; in contemporary cyberspace, enthusiasts hope that one can leave

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

behind sexist and racist prejudices of the meat world. However, as Kirby suggests, the avatars – three-dimensional graphic representations or textual descriptions (depending on the type of MUD) that stand-in for the body – that are adopted in contemporary cyberspace unwittingly extend these prejudices by pandering to cultural images of the perfect body.

As I pointed out in the introduction, Cartesian dualism has a misogynistic heritage. The transcendence of pure mind is a position available to the male subject, while the female subject must remain immanent, absorbing all the limits of materiality that man has cast off in his construction of his own subjectivity. Nixon's analysis of cyberpunk fiction suggests that the biases of Cartesian dualism are preserved intact as it is taken up by cyberpunk: it is the male characters who transcend their bodies and dominate cyberspace, while female characters remain closely linked to their bodily capacities, generally appearing as either *femmes fatales* such as Gibson's Molly, or harmless adolescents such as YT in Stephenson's *Snow Crash*. An insight regarding the appeal of Cartesian dualism, one that links cyberpunk's rejection of the body to Ross' reading of cyberpunk as male-fantasy wish-fulfillment, is provided by Elizabeth Grosz. She writes: "It is in this period [puberty] that the subject feels the greatest discord between the body image and the lived body, between its psychical idealized self-image and its bodily changes. Experientially, the philosophical desire to transcend corporeality and its urges may be dated from this period" (*Volatile Bodies*, 75). Cyberpunk appeals to the (impossible) desire to escape the vicissitudes of the body and occupy the place of self-mastery. Janet Sayer's work on adolescents suggests that a desire to repress the body is more typical of males than of females: "men and boys not only

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

describe being disconnected from talking honestly with others in adolescence about their sexual feelings and experiences. They also describe being disconnected from themselves, particularly from their bodies" ("Adolescent Bodies," 88). The link between adolescent insecurities about bodily control and the cyberspace cowboy's repression of the body is further reinforced by a passage from Gibson's novel. Case, the cyberspace hero, experiences discomfort during an experience of virtually 'inhabiting' another body through the technology of simstim: "For a few frightened seconds he fought helplessly to control her body. Then he willed himself into passivity, became the passenger behind her eyes. ... Case kept trying to jerk her eyes toward landmarks he would have used to find his way. He began to find the passivity of the situation irritating" (*Neuromancer*, 56). Case is able to feel in complete control of himself while disembodied in cyberspace, and finds himself irritated by this state of experiencing bodily perceptions without being able to master the material body.

Analyses by both Anne Balsamo[11] and Allucquère Rosanne Stone[12] suggest that gender bias is preserved in 'real' cyberspace as much as it is in cyberpunk representations. Gendered styles of communication and culturally dominant gendered stereotypes of beauty continue to structure people's choices in cyberspace.[13] The repetition of gendered patterns of interaction in cyberspace tends to work to the disadvantage of women, and puts women at risk for material disadvantage as proficiency in technologically-mediated interactions becomes more important for employment and social success (*Technophobia*, 33). Further, Stone explains that the technological limitations of rendering bodies in cyberspace using computer technology may actually tend to reinforce stereotypical notions about body,

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

gender and beauty rather than free the subject from the restrictions of 'meat' judgements. Given the current limitations in bandwidth – the amount of information that can be translated and updated within a certain time period – those engineers who work on methods for rendering humans visible in cyberspace are concerned with efficient transfer of information. Stone has found similarities between the techniques explored by such researchers and the discourse of phone sex workers: "For the work of both is about representing the human body through limited communication channels, and both groups do this by coding cultural expectations as tokens of meaning" ("Will the Real Body Please Stand Up?" 102). For both groups, the body materializes through an encoding/decoding process which relies on the sender and the addressee using similar assumptions about the body so that the addressee may 'fill in the blanks' of the limited representation with imagination. Such a representational strategy is more successful deployed in efforts that support the status quo than in those which challenge it.[14] As Rosi Braidotti ironically comments, "what I notice is the repetition of very old themes and cliches, under the appearance of 'new' technological advances."[15]

Sherry Turkle's work suggests that gendered notions of behaviour as well as gendered constructions of appropriate body appearance are reproduced in cyberspace. Turkle examines the experiences of two individuals who participate in MUDs, a man named, ironically enough, Case and a woman named Zoe.[16] Both tried 'cross-dressing' in their MUD experience, the practice of using an online identity whose gender is opposite to one's own gender. Both Case and Zoe reported that they felt more free to express anger and aggression when in their cross-dressed identity: Case because he felt that an aggressive

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

woman conveyed an impression of strength and sufficiency while an aggressive man conveyed the image of a bully; and Zoe because she felt that an aggressive man was perceived to be assertive and in control, while an aggressive woman was perceived to be a bitch. What these encounters suggest to me is that cyberspace is not a world in which we can transcend the body and assumptions that are made based on its morphology. This is not to argue that either Case or Zoe did not experience the greater sense of freedom that they reported; instead, it is to suggest that while we are aware of the constructions/constraints imposed upon our own gender, we are not as experienced at decoding those imposed upon the opposite gender. Both Case and Zoe knew how to answer the call of ideology to their material, real-life gender, but both missed the possible readings that may be given to their behaviour based on a presumption of the opposite gender. Cyberspace both does and does not help to free us from our gendered identities: it can provide a subjective experience of freedom from our own gendered identities by cross-dressing as another, but these experiences do not do anything to change the system that constructs gender difference and that reads individual actions and motivations through gendered assumptions. Additionally, the contrast between these two stories casts significant doubt upon claims that cyberspace cross-dressing provides an opportunity to find out what it is like to 'be' another gender; it merely offers the chance to experience that gender through one's own ideological assumptions about it.

For all their desire to repress the body and deny its significance, cyberpunk characters – like cyberspace visitors – cannot escape the body. It is ironic that cyberpunk as a genre is hostile to femininity, because the technology that forms the center of the fiction

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

is represented in terms that are associated with femininity: it is technology that penetrates the body and produces a fusion between self and not-self.[17] As Claudia Springer has argued, the aggressively armored, Terminator-like cyborg is a more fitting image for ultra-masculinity than is the cyberspace cowboy: "a more appropriate metaphor for contemporary electronic technology in a two-sex model would be the female sex organs, which are commonly considered to be concealed, passive, and internal, like the workings of a computer" ("Muscular Circuitry," 92). Just as cyberpunk has repressed acknowledgement of its 'mothers', it represses a feminized reading of its technology. Eva Cherviavsky links the repression of the body in cyberpunk to this desire to distance itself from such feminized technology, writing: "the feminization of the techno-body, in other words, is displaced onto its organic component and disavowed at the site of its technological enhancements" ("(En)Gendering Cyberspace," 37). Cyberpunk thus repeats the typical Cartesian binaries: the male is mind and transcendence; the female is body and immanence. Again, an oft-quoted passage from Gibson confirms this assessment: "for Case, who'd lived for the bodiless exultation of cyberspace, it was the Fall. In the bars he'd frequented as a cowboy hotshot, the elite stance involved a certain relaxed contempt for the flesh. The body was meat. Case fell into the prison of his own flesh" (*Neuromancer*, 6). It should now be clear that the misogyny of cyberpunk texts is integrally tied to their repression of the body. This being the case, I want to explore the possibility of creating a feminist reading of the social consequences of "a certain relaxed contempt for the flesh" in our being-in-the-world through restoring the repressed body to my analysis of these texts.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Gibson's *Neuromancer* is generally considered the text that defines the cyberpunk world. Direct interface between humans and computers, the cyberspace matrix, the body as meat, and the outlaw as hero are all tropes that can be traced to this text. As the quotation above suggests, it is not difficult to find evidence of repression of the body in this novel. However, despite evidence of Case's contempt for the flesh, both his critics and his imitators have overstated Gibson's rejection of the body.[18] Like Thomas Foster, I believe that "cyberpunk does not simply devalue the body but instead also foregrounds and interrogates the value and consequences of inhabiting bodies" ("Meat Puppets," 11).[19] *Neuromancer* tells the story of Case – a cyberspace cowboy[20] – and Molly – a razorgirl[21] – who are hired to break into the Tessier-Ashpool enclave. Their employer is an artificial intelligence (AI) named Wintermute and the reason for their larceny, which they do not discover until shortly before the 'run', is to enable Wintermute to 'cut' the electronic lock that prevents his self-awareness from advancing beyond the limits mandated by the Turing Police. Once the lock is removed, Wintermute will be able to merge with another AI, Neuromancer, and become "the matrix ... the sum total of the works, the whole show" (*Neuromancer*, 269).

Despite his contempt for the flesh, all of Case's actions in the novel can be linked to his body and its needs. Case is recruited by Wintermute in the first place because damage to his body has put him in a vulnerable position, cut off from the cyberspace that was both his passion and his source of income. When he was caught cheating his previous employers, they "damaged his nervous system with a wartime Russian mycotoxin" (*Neuromancer*, 6), preventing him from accessing cyberspace again. Wintermute is able to

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

repair the damage so that Case can return to cyberspace, but he adds his own booby-trap of poisons that will reverse the repair unless Case agrees to fulfill his work for Wintermute. While not in cyberspace, Case is addicted to central nervous system stimulants; cyberspace works as a non-biological stimulant that gives him the same feeling of adrenaline and exaltation. Even his desire to transcend his body is rooted in his body's need for a high. Case's situation is an ironic fulfillment of the typical Sprawl[22] joke recounted at the beginning of the novel: "It's not like I'm using ... It's like my body's developed this massive drug deficiency" (*Neuromancer*, 3). Even Case's eventual emergence from depression and apathy is triggered not by his return to cyberspace, but by the denial of his body's desires: "the rage had come in the arcade, when Wintermute rescinded the simstim ghost of Linda Lee, yanking away the simple animal promise of food, warmth, a place to sleep. ... He'd been numb a long time, years. ... But now he'd found this warm thing, this chip of murder. *Meat*, some part of him said. *It's the meat talking. Ignore it*" (*Neuromancer*, 152). Finally, Neuromancer attempts to lure Case into a virtual reality world where he can be reunited with Linda Lee – his lover who was killed near the beginning of the novel – in the hope of preventing Case from finishing his mission. Case refuses the virtual world, denying that it is real. Despite his enjoyment of cyberspace, he still insists in a reality based in bodily existence. His love for and connection with Linda cannot be valued if it exists only in the virtual world. Although Neuromancer argues, "Stay. If your woman is a ghost, she doesn't know it. Neither will you" (*Neuromancer*, 244), Case rejects this fantasy and returns to his physical body, following the 'trail' of music playing through headphones.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Case's desire to repress his physical body and live in the world of cyberspace is closely linked to a desire to avoid the vicissitudes of the physical body.[23] Material reality is a land of consequences. The harsh world of late, multinational capitalism as portrayed by Gibson suggests a strong motive for spending most of one's time in cyberspace. While he lives as a cyberspace cowboy, Case is able to maintain enough money to survive in this world. However, once he is reduced to living on the street, Case finds it difficult to ensure his material survival.

> In the first month, he'd killed two men and a woman over sums that a year before would have seemed ludicrous. Ninsei wore him down until the street itself came to seem the externalization of some death wish, some secret poison he hadn't known he carried. ... Night City was like a deranged experiment in social Darwinism, designed by a bored researcher who kept one thumb permanently on the fast-forward button. Stop hustling and you sank without a trace, but move a little too swiftly and you'd break the fragile surface tension of the black market; either way, you were gone, with nothing left of you but some vague memory in the mind of a fixture like Ratz, though heart or lungs or kidneys might survive in the service of some stranger with New Yen for the clinic tanks. (*Neuromancer*, 7)

Instead of the losing consciousness of his body in the "bright lattices of logic unfolding across that colorless void" (*Neuromancer*, 5) of cyberspace, Case must work at preserving his body. In a world where everything has become a commodity, even body parts risk being harvested by the more powerful. The cyberspace elite stance begins to look more like a defense mechanism to prevent the subject from realizing how little control it has. Scott Bukatman has argued that "cyberpunk acknowledges the supersession of individual bodily experience in the hyperbolic, overdetermined prose, but the decentering of the human subject performed in the presentation of *other spaces* existing beyond human intervention is undermined by the transformation of these spaces into arenas of dramatic human action"

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

(*Terminal Identity*, 238). I would suggest that although human action is introduced into the 'other space' of cyberspace, such agency is only an illusory escape from the subject's real condition of fragmentation: its lack of efficacy in material reality. Alison Adam and Eileen Green suggest that "the rhetoric of escape – escape from the body, escape from a world gone wrong – has seeded itself into contemporary cyberculture" ("Gender, Agency, Location," 95). This juxtaposition of the desire to escape the consequences of having a body with representations of the material consequences faced by non-privileged bodies in late capitalism is one of the ways in which cyberpunk interrogates embodied reality.

Molly, like Case, has had to modify her body in order to obtain employment in this extremely commodified world. Molly has had razor blades implanted beneath her fingernails, and adjustments made to her reflexes, to increase her fighting ability. In order to pay for these augmentations, Molly has worked as a prostitute, a "meat puppet." Molly distances her self from the experiences of prostitution: it wasn't 'she' who had sex with the clients, it was simply her body that did: "Renting the goods is all. You aren't in, when it's all happening. House has software for whatever a customer wants to pay for" (*Neuromancer*, 147). Like Case, Molly wants to leave the natural body behind; both try to distance their constructions of self from the actions of their bodies. Both Case and Molly believe that they have agency when they use the body as a technological tool – Case's neural interfaces and Molly's cyborg body – and both feel decentered by the notion of being trapped in the exploitable meat. As Thomas Foster has argued, we do not have to read this characterization as a reinscription of the Cartesian categories of immanence and

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

transcendence, but instead can read it as a exposure of the way ideology works to mask the social construction of these categories:

> Case's own relation to his body as 'meat' seems to be mediated through this image of female objectification as a sexual commodity, and it is paradigmatic that this natural, purely physical body has to be produced through technological means, just as the categories of the 'natural' and the 'feminine' in general must be produced. ("Meat Puppets," 23)

As Foster goes on to argue, the body is never purely natural or purely a tool, and it will always be shaped and read in ways that exceed the intentions of its 'inhabitant'. Foster believes that this representation allows cyberpunk to "represen[t] cultural identity as an inescapable, if partial, commodification of subjectivity, as a process of signifying for others in ways that are outside the control of individual subjects" ("Meat Puppets," 25).

Although Case and Molly resist the equation of self and body, Gibson counters this perception in his representation of Dixie. Dixie is a ROM personality construct of a former cyberspace cowboy who 'flatlined' during a run. The Dixie construct assists Case in breaking through Tessier-Ashpool security. Although the construct has Dixie's memories and personality, Gibson does not represent the construct as a complete person. When Case first activates the construct, the following exchange takes place:

> "How you doing, Dixie?"
> "I'm dead, Case. Got enough time in on this Hosaka to figure that one."
> "How's it feel?"
> "It doesn't."
> "Bother you?"
> "What bothers me is, nothin' does."
> "How's that?"
> "Had me this buddy in the Russian camp, Siberia, his thumb was frostbit. Medics came by and they cut it off. Month later he's tossin' all night. Elroy, I said, what's eatin' you? Goddam thumb's itchin', he says. So I told him, scratch it. McCoy, he says, it's the *other* goddam thumb." When the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

> construct laughed, it came through as something else, not laughter, but a stab of cold down Case's spine. "Do me a favour, boy."
> "What's that, Dix?"
> "This scam of yours, when it's over, you erase this goddam thing."
> (*Neuromancer*, 105-106)

Dixie has achieved what is typically assumed to be the ultimate experience for a cyberpunk hero: he has permanently escaped the meat and achieved an existence that does not require a body. However, the experience is represented as negative both from Dixie's point of view – he would rather be erased – and Case's. Despite his belief that the body is merely irrelevant meat, Case feels uncomfortable, a stab of cold down his spine, when he interacts with the construct. Dixie was a close friend and mentor to Case and the construct cannot take his place. Through Dixie, Gibson suggests that being fully human requires embodiment. The phenomena of Alternate World Disorder (AWD) and Alternate World Syndrome (AWS) also suggest how integral embodiment is to human subjectivity. As Heim explains:

> in VR a conflict of attention can arise between the cyberbody and the biobody. In this case, an ontological rift appears as the felt world swings out of kilter, not unlike jet lag. In Alternate World Syndrome, images and expectations from an alternate world upset the current world, increasing the likelihood of human errors. If the Alternate World Syndrome (AWS) becomes chronic, the user suffers Alternate World Disorder (AWD), a more serious rupture of the kinesthetic from the visual senses of self-identity. Treatments for AWS and AWD range from de-linking exercises in cyberspace to more demanding disciplines, such as tai chi and yoga, that restore the integrity of somatic experience.
> (*The Metaphysics of Virtual Reality*, 148-149)

Illness results from the discontinuity of perception between visual information processed by the 'mind' (cyberbody) and kinetic information processed by the 'body' (biobody). The real-life experience of mind/body dualism produces a split in the subject; it is significant

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

that the treatment for this condition is therapies that work to restore a sense of unity between self and body.[24]

Neuromancer has served as a paradigmatic text both to SF writers working in the cyberpunk mode, and to the larger community of readers who work within the computer industry. Stone has argued:

> The critical importance of Gibson's book was partly due to the way that it triggered a conceptual revolution among the scattered workers who had been doing virtual reality research for years: As task groups coalesced and dissolved, as the fortunes of companies and projects and laboratories rose and fell, the existence of Gibson's novel and the technological and social imaginary that it articulated enabled the researchers in virtual reality – or, under the new dispensation, cyberspace – to recognize and organize themselves as a community.
> ("Will the Real Body Please Stand Up?" 98-99)

I want to relate my reading of the novel to cultural analysis of the social impacts of computer telecommunications technology, the technology that gave us both the Internet and those virtual realities currently possible in our contemporary world.[25] Gibson's novel articulates a particular type of subjectivity that is interested in repressing the body, and it suggests why this stance would be desirable: the subject wishes to sustain a construction of mastery and the body undermines this construction; the world of late capitalism is an amoral world filled with economic hardship and the body suffers the consequences of poverty. As I have argued above, I don't believe that this standpoint emerges as the center of the novel; rather, the body is continually shown to be an inescapable part of Case's subjectivity and the actual condition of being without a body is shown to be an absence of subjectivity. In fact, Gibson himself has said that he dislikes critics who praise his novel for

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

being "hard and glossy" when "what I'm talking about is what being hard and glossy does to you."[26]

The hyper-marketing of cyberpunk begun by Bruce Sterling seems to me to have moved away from this insight and toward a glamorization of being hard and glossy, of surpassing the body and its limitations. Contemporary debate on the social consequences of computer telecommunications technology suggests that those readers who identify with Case and perhaps model their subjectivity upon his have created a virtual community – as described by Stone – that supports Case's vision of the world, if not Gibson's. One of the most commonly expressed concerns is that computer telecommunications via the Internet or virtual reality games have become more 'real' to participants than the real social world, paralleling Case's privileging of cyberspace over bodily existence. Although it is often suggested that telecommunications technologies have the power to create new communities that surpass the limitations of geography,[27] more pessimistic critics fear that the consequence of such activity will be the degradation of the concept of community; we may form connections across the globe while isolating ourselves from our neighbours.[28] As Raymond Barglow argues, new technology-mediated communities will tend to reinforce economic classes and contribute to the gap between those with and without wealth: our sense of responsibility may come to extend to the community of our friends on email, but to exclude the homeless in our own city (*The Crisis of Self*, 202).

Ellen Ullman's *Close to the Machine* provides a personal insight into the subjectivity of someone working in a technically intense job within the computer industry. Her descriptions suggests that the 'elite stance' of the cyber-cowboy has already been adopted by

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

computer programmers, even though we have yet to create neural interfaces that would allow programmers to enter the machine. Although current programmers never leave their bodies even perceptually, the body is still repressed and irrelevant during the act of intense programming: "Our bodies were abandoned long ago, reduced to hunger and sleeplessness and the ravages of sitting for hours at a keyboard and a mouse. Our physical selves have been battered away" (*Close to the Machine*, 4). When one works close to the machine, Ullman demonstrates, one begins to think like the machine and adopt the values of hierarchy, consistency, and orderliness that create efficient computer programs. In Ullman's representation, computer programmers view themselves as an elite, more effective than the ordinary users whose poorly articulated and contradictory demands undermine the beauty of the programmers' work: "In my profession, software engineering, there is something almost shameful in this helpful, social-services system we're building. The whole project smacks of 'end users' – those contemptible, oblivious people who just want to use the stuff we write and don't care how we did it" (*Close to the Machine*, 8-9).

Ullman herself recognizes and diagnoses the danger that such an attitude represents. In allowing everything to become abstracted to data, we lose contact with the consequences that are part of material reality, and we lose the ability to connect our actions to a larger social world: "the whole complicated business of international pornography had devolved, in Brian's thinking, to the level of a mathematical problem, some famously difficult proof, a challenge of the mind. He seemed neither attracted to nor repulsed by the content of the stuff he would be sending around. To him, it was just bits, stuff on the wire" (*Close to the Machine*, 62). Ullman describes her own struggle with this realization, as she

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

faces the decision about whether to sell an inherited property on Wall Street. The building is no longer profitable as telecommunications has changed the commuting patterns of Wall Street workers, and the tenant businesses have lost their customer base. When considering the decision in the abstract, Ullman has no difficulty in choosing to liquidate. However, when she visits the site and is confronted with the material reality of the struggling tenants, she realizes that "as much as [she] wanted it to become a financial instrument, the building remained solid, material, hopelessly real" (*Close to the Machine*, 68). Ullman's work is particularly compelling because she acknowledges the attraction of living close to the machine, in a pure and uncomplicated world of data. However, she struggles to retain her own sense of responsibility to the larger social context of her work.

Robert Adrian X suggests even more emphatically the dangers of a worldview mediated by technology. He argues:

> Two realities appear to collide here [sic] the reality of the planet and its actual inhabitants and the reality of the virtual world of the communications infrastructure inhabited by users/consumers. Having no telephones and little purchasing power, the vast majority of humanity cannot achieve 'user/consumer' status. ... But in our media-dominated culture the virtual reality of the television image is so powerful that 'media-reality' is more real than actual experience and the majority of humanity is invisible, appearing only sporadically in connection with some natural catastrophe, war or revolution. ("Infobahn Blues," 87)

Unlike the cyberpunk representations of the outlaw-hacker-hero who is able to escape the vicissitudes of the body and enter cyberspace, in our contemporary world those with access to cyberspace are those with money. Although McCaffery has argued that cyberpunk provides us with a cognitive map to negotiate the world of information technology, the map presented by cyberpunk is misleading. Access to telecommunications technology

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

requires, at the very least, an economic investment in the necessary hardware and subscription fees. Additionally, the notion of universal access does not take into account other barriers such as education and language – English dominates the Internet. Although telecommunications suggests the possibility of creating a utopian participatory, rather than representational, democracy, such imaginings ignore the material reality that the public voice that emerges from this technology is demonstrably that of a white, middle-class, predominantly male elite.[29]

Veronica Hollinger has argued that one of the strengths of Gibson's representation of cyberspace is that it represents social reality as a consensual structure, thereby undermining the power of ideology to naturalize its hegemonic representations. I agree with Hollinger's assertion that "it is only by recognizing the consensual nature of sociocultural reality which includes within itself our definitions of human nature, that we can begin to perceive the possibility of change" ("Cybernetic Deconstructions," 215). However, the cultural analyses of real engagements with cyberspace suggest that this possibility has not been realized. Instead, as Brian Loader argues, "for the vast majority of the world's population, the possibility of constructing virtual identities is entirely dependent upon their material situation. Clearly most people are not free to choose but instead are subject to a variety of social and economic conditions which act to structure and articulate their opportunities for action" ("Cyberspace Divide," 10). This fact complements my reading of *Neuromancer*, which suggests that while the novel articulates Case's desire to escape from his material reality, it ultimately demonstrates the futility of such a project.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

The critique of contemporary cyber-culture and its tendency to isolate people and destroy the ethical context for actions can be related to feminist criticism of the cyberpunk genre. Jenny Wolmark argues that "the possibilities for breakdown of identities as part of a transformative social and political process are never realized, at least not in cyberpunk narratives, because the social and temporal experience of cyberspace is centrally concerned with individual transcendence, with escape from social reality rather than engagement with it" (*Aliens and Others*, 118). Her critique bears an uncanny resemblance to Trevor Haywood's analysis of the social consequences of contemporary cyber-culture. Haywood writes, "the new monasticism that encourages us to see ourselves as totally independent actors who need no more from life than singular access to the communications port of a computer or an interactive TV is the enemy of truly collective reason and debate, and we must not fall for it" ("Global Networks," 27). Given the degree to which the current configuration of cyber-culture can be connected to the representations of cyberpunk, I would suggest that one of the ways that we can "not fall for" this subject position is to offer alternative representations of cyber-citizenship in fiction, subject positions that can allow for alternative identifications and thereby produce different cyber-subjects and, ultimately, a different cyber-culture. It is with this goal in mind that I want to turn to a reading of Pat Cadigan's *Synners*.

Just as Gibson is the predominant figure in discussions of the cyberpunk 'movement', Pat Cadigan – as the most prominent women author writing in this mode – is almost always invoked in feminist responses to cyberpunk. *Synners* tells three intertwined stories. The first involves rock music video creators Gina and Mark and their participation

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

in body modification procedures that will allow them to create video directly from the output of their visual cortices. Mark is literally enthralled by this new technology, mirroring Case's attitude of contempt for the meat[30]: "He lost all awareness of the meat that had been his prison for close to fifty years, and the relief he felt at having laid his burden down was as great as himself. His *self*. And his *self* was getting greater all the time, both ways, greater as in more wonderful and greater as in bigger" (*Synners*, 232). Mark articulates the dream of the Cartesian dualist: his self remains intact once freed from the prison of the flesh – in fact, he is about to exceed his earlier capacities. Gina, on the other hand, is more ambivalent about the appeal of socket technology. While she is willing to undergo the procedure, the novel makes it clear that it is her desire to remain connected to Mark, whom she loves, that motivates her decision. Unlike Mark, Gina remains connected to her body, believing that it is a necessary part of being a human subject.

> 'I want it to matter,' she said. 'I want the fucking music and the people to matter. I don't want fucking *rock'n'roll* porn to go with the med porn and the war porn and the weapons porn and the food porn – shit, it's *all* porn, goddamn fucking video porn. ... 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-res video.'[31] (*Synners*, 199)

Gina insists that a connection to material, embodied reality is essential to ethics, to making representations that matter.

The second story is about Gabe Ludovic, a man who escapes his unfulfilling life of alienating work and a sterile marriage through immersion in virtual reality. In his simulated world, Gabe finds human connection and companionship with two characters that are more real to him than the people in his material world. Cadigan directly links

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Gabe's desire to escape his body with his desire to avoid its vicissitudes, the inevitable consequences of decisions that must be faced in the real world: "too much simulated living, he thought; out here you couldn't just change the program, wipe the old referents, and pick up the story at any point" (*Synners*, 388). Cadigan portrays Gabe as someone who has split his own subjectivity, separating himself from those aspects of his subjectivity that are expressed through embodiment, as a consequence of his desire to escape from material reality and his body. Gabe has been cut off from the real world to such an extent that he finds it disorienting to return to embodiment: "He'd been running around in simulation for so long, he'd forgotten how to run in realife, real-time routine; he'd forgotten that if he made mistakes, there was no safety-net program read to jump in and correct for him" (*Synners*, 239).[32] Through the relationship that he develops with Gina, Gabe is gradually returned to material reality and is able to recognize that his addiction to virtual space was related to his isolation from other people: "Marly's voice spoke casually in his head. *Try to say that five times real fast.* No, not her voice, just his own, he decided. Suddenly he no longer wanted to disown his thoughts and stick false names on them. He didn't have to do that right now, he didn't have to cut pieces of himself off and dress them up in masks and costumes to keep himself company – " (*Synners*, 202). Just as Gina believes that engagement with the material world is necessary for ethics, Gabe comes to realize that involvement with other humans has a value that simulated personalities such as Marly cannot duplicate.

The final story in *Synners* returns to the main motifs in *Neuromancer*: young hacker-heroes and the creation of a self-conscious AI. Reversing the gendered stereotypes that

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Nixon so aptly critiqued in Gibson's work, Cadigan places a female character – Sam, short for Cassandra – at the center of the hacker community. Sam is Gabe's daughter, providing for the final link between the three stories. The community of hackers that Sam belongs to is in hiding from law enforcement because one of them has been caught stealing data about Mark's socket modification. The hackers learn that the sockets may cause strokes, a phenomenon that seems to have developed because Mark experienced a minor stroke while on-line that is being transmitted to other socket wearers. When Mark has a second major stroke on-line, one that kills his body but not his now disembodied subjectivity, the stroke becomes a semi-sentient "virus" – the spike – that infects the entire Net, killing anyone connected by sockets and disabling the communications hardware. Sam and her friends are the only ones who are aware of what has caused the crash of the Net, aided by a self-evolved artificial intelligence named Art E. Fish[33] who exists in the Net. The hackers are able to stage a counter-attack against the spike because they retain an uninfected point of entry to the Net, Sam's modified insulin pump that runs off body power to produce a type of PC Walkman. A connection is established using Sam's insulin pump, and Gina and Gabe use their socket interfaces to virtually enter the Net space and defeat the spike. Like Gibson's descriptions of engagements in cyberspace, they are projected into a three-dimensional environment that – as Scott Bukatman has observed – requires the concept of a body if the individual is to have any efficacy in this space, for all that the body is denied.[34] Without a body, one cannot have perception and one cannot move through space; although the form of the body was left unspecified in Gibson's novel, in Cadigan's the connection to material reality is emphasized as the characters inhabit bodily images that

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

match their physical bodies. In this final confrontation, Gabe and Gina are able to defeat the virus by escaping from the simulated reality, a feat they accomplish through a physical connection to one another's bodies in the virtual space, a repeat of the punch that first united them in the material world.

Cadigan's representation of the hacker community deconstructs the romanticized cyberpunk ideal that escape from the body is possible or even desirable. As I suggested above, I believe that *Neuromancer* also articulates this point of view, although the character of Case is not aware of the degree to which the body still informs his choices. Cadigan's characters are more self-conscious about the continuing influence of the body, in part because the hackers are confronted with Gina and her pragmatic connection to material reality. When a hacker character, Keely, falls down after disconnecting from a near confrontation with the spike on-line, it is only Gina who looks for an explanation in the material world rather than the cyberspace one: "'Just guessing myself,' Gina said tonelessly, 'I'd say he fainted from hunger. When's the last time *you* ate?'" (*Synners*, 372). Cadigan refuses to let her characters – or her readers – become caught up in the exciting illusion suggested by cyberpunk marketing. Describing the experience of living in an abandoned house while on the run from the police, Sam observes wryly:

> 'But then I started softening up to the idea a little. Thinking that it would be kind of . . . oh, exciting, I guess. Romantic, even. Almost like being in the Ozarks again, except freakier. Laptops in the raw, jammers making music. Horny hardware geniuses making cordless modems for you.' She laughed a little and then sighed again. 'But mostly it's being dirty and smelly and not having any safe place to stay and not getting enough to eat.'
> (*Synners*, 268, ellipses in the original)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

In this description, Cadigan demonstrates the appeal of the myth of cyberpunk, but returns her characters – and the community of readers who identify with these characters – to the material facts of social reality. Cadigan's cyberpunk representations insist upon the material consequences of being excluded from the social community due to being labeled a criminal. Even Sterling has recently toned down his excessive rhetoric, observing that – to his knowledge – it remains investigative journalists and police who uncover corruption and conspiracy, not hackers.[35] Cadigan undermines this earlier heroic image of cyberpunk hackers transcending the body and saving the world. They soon realizes that the needs of the body remain a priority, even when they are working to save the Net from corruption; as Keely comments, "Never mind the tech shit, when do we eat? I wish I'd thought of that when I was busy raiding uninfected equipment" (*Synners*, 376). Cadigan includes within her own cyberpunk mythology Stone's axiom that "virtual community originates in, and must return to, the physical. No refigured virtual body, no matter how beautiful, will slow the death of a cyberpunk with AIDS. Even in the age of the technosocial subject, life is lived through bodies" ("Will the Real Body Please Stand Up?" 113).

Anne Balsamo has produced a convincing reading of *Synners*, one which focuses on linking its representations to real-world engagements with technology. Balsamo's reading points to the ways in which *Synners* insists upon embodied rather than escapist solutions to the problems of engaging with information technology. In both "Feminism for the Incurably Informed" and in *Technologies of the Gendered Body*, Balsamo creates a template for reading four main characters as examples of four embodied responses to technology: Sam as the laboring body, Gabe as the repressed body, Gina as the marked body, and Mark as

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

the disappearing body. Balsamo notes the gendered lines that bifurcate these characters' engagements with technology: both Gabe and Mark use the technology to isolate themselves from the social world and to escape their bodies, while Sam and Gina use technology to communicate with others, Sam through the re-establishment of the Net and Gina through her rock videos. As I noted above, cyberpunk has been identified as a sub-genre that appeals to male fantasies of escaping and transcending the body; Balsamo discerns a connection between the male ability to participate in this fantasized escape and the gendered constructions of the body that circulate in our culture. Gina's body is marked by both her gender and her race – "She had the greatest color of skin, all her own, a gift of nature, though he'd seen the same shade in various dye-joints around town, tagged 'Wild Forest Hardwood" (*Synners*, 89) – in the text. As Balsamo argues, Gina's status as marked by race and gender has given her social experiences that continually return her to a consciousness of her body; because that body is read by others, Gina, as the subject who is that body, has learned that she must live with the results of such readings. Gina's marked body and her pragmatic insistence that material reality matters return the reader to an understanding of the body as an inevitable component of the subject's social existence. Cadigan, more clearly than Gibson, demonstrates that the desire to transcend the body is an escapist fantasy which is, as her characters ironically suggest, "*only impossible in the real world*" (*Synners*, 421). As we have seen, Cadigan judges the real world as what matters. The inexorable return of the repressed body is symbolized by the spike – the stroke that Mark avoided by leaving his physical body which now threatens to destroy everything in its path.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Balsamo submits that "in reading *Synners* as a feminist text, I would argue that it offers an alternative narrative of cyberpunk identity that begins with the assumption that bodies are always gendered and always marked by race. Cadigan's novel is implicitly informed by Donna Haraway's cyborg politics: the gendered distinctions between characters hold true to the cyborgian figuration of gender differences whereby the female body is coded as a body-in-connection and the male body, as a body-in isolation" ("Feminism for the Incurably Informed," 692). I concur with Balsamo's reading of the representation of embodiment in the text. However, I have some concerns about whether or not the gendered response to technology falls as easily into these lines of connection and isolation as Balsamo suggests. As Balsamo points out, Sam's body provides the necessary ground from which to stage the attack against the spike. What Balsamo fails to emphasize is the fact that Sam's body is able to function as this ground because it lacks connection to the rest of the network and so it remains uninfected. In the end, it is Sam's connection to the people who are physically present around her and their ability to combine their various technological equipment and skills that allows their triumph. The connection to the Net puts them at risk for infection; by herself, Sam could not risk re-connecting to the Net, nor could she effect any change. It is only by combining her 'clean' point of entry with Gabe and Gina's socket implants and Valjean's 'clean' socket interface that the group is able, collectively, to confront and vanquish the spike. At the end of the novel, Gabe has successfully weaned himself of his addiction to virtual fantasy and re-engaged with the material world. However, he isolates himself in a remote ranch house, refusing to have any Net connection in his home. His connections are with geographically proximate people:

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

the local store where he shops, the local schools for whom he provides video production services. Gabe's choice can thus be read as an implicit critique of the risk of cyberspace that I discussed above: that in distancing us from present, material communities it will distance us from an ethic of care for others. Gabe refuses to succor his loneliness with virtual engagements, choosing to remain engaged with the material circumstances of his socio-political reality.

Thus, I would argue that *Synners* ultimately transcends the gendered representation of engagement with technology split along body-in-connection and body-in-isolation axes. While Balsamo's reading is certainly a correct assessment of the characters' initial engagements with technology, the novel is finally about value of human relationships in the physical world, and a caution against allowing all our relationships to be mediated by technology. Cadigan's novel is not anti-technological but, like Donna Haraway's work, it calls for "a more adequate, self-critical technoscience committed to situated knowledges" (<u>*ModestWitness@SecondMillenium*</u>, 33). Like Haraway, Cadigan asks us to attend to the material consequences of scientific endeavor, recognizing that "All *appropriate technology* hurt somebody. A whole lot of somebodies. Nuclear fission, fusion, the fucking Ford assembly line, the fucking airplane. *Fire*, for Christ's sake. Every technology has its original sin. ... Makes us original synners. And we still got to live with what we made'" (*Synners*, 435). In learning to live with virtual reality technologies, Cadigan is warning us that it is crucial not to allow them to replace our connection with the material world. Her cautions can be related to Ullman's description of the ability of data-based abstractions to sever our connection to the social consequences of our actions and choices. As Gina puts it in her

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

description of rock music that attempts to be socially engaged: "They were all so far away from it, see, they were all so fucking *far away*. They'd say something like 'world peace' and they didn't have the first fucking idea of what the world was like. They saved the goddam whales, and they didn't even fucking *live* in the fucking *world*" (*Synners*, 198). Ullman puts it more tersely when she observes, "Surely we were missing something essential if our idea of other people was a program downloaded from the Internet" (*Close to the Machine*, 181).

Balsamo argues that "the final horizon of this reading is not Cadigan's novel, but rather the insights it offers for a feminist analysis of the politics of new information technologies" ("Feminism for the Incurably Informed," 693). Following Balsamo's methodology, I want to turn now to a discussion of Mark's refrain "Change for the Machines" that is repeated throughout the novel and connect it to other analyses of social consequences of information technologies. Initially, Gabe addresses the phrase to Mark, asking him if he needs change in order to purchase something from the vending machines. However, Mark interprets the phrase as a comment on his upcoming socket surgery, and speculates that "My whole life has been, 'Okay, change for the machines.' Every time they bring in a new machine, more change" (*Synners*, 97). Changing for the machines is a fact of everyday life in our technological culture. Donald Lowe details the changes to physical working environments – and physical injuries on the job – that have emerged from computerization of the workplace.[36] Although changes such as using braces to reduce repetitive motion strain or tinted glasses to reduce computer screen glare are not as invasive as the surgery Mark is to undergo, they do fall into a continuum of modifying the body to more efficiently use machines in our work lives. Performance artist Stelarc believes

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

that "perhaps an ergonomic approach is no longer meaningful. In other words, we can't continue designing technology for the body because that technology begins to usurp and outperform the body. Perhaps it's now time to design the body to match its machines. ... What do we do when confronted with the situation where we discover the body is obsolete? We have to start thinking of strategies for redesigning the body" ("Extended Body," 197). My reading of Cadigan's novel suggests that she uses the tropes of cyberpunk fiction to argue for the necessity of remaining engaged with a material reality of other human beings. The risk of Mark's desire to change for the machines when considered in the context of this material reality is that we begin to see concrete humans as only another part of a production system, not as something uniquely valuable in themselves. Ernest Yanarella and Herbert Reids's analysis "From 'Trained Gorilla' to 'Humanware': Repoliticizing the Body-Machine Complex Between Fordism and Post-Fordism" suggests that this is precisely what is happening in their discussion of the "growing focus on the role of humanware failures (as opposed to software and hardware deficiencies) in these production systems as the main source of injuries on the construction sites" (201).

In changing our bodies to accommodate the use of machines, we change ourselves. In order to use a tool successfully, humans must incorporate that tool into their body image. Even without the physical invasiveness of 'socket' technology, our tools – our machines – become extensions of ourselves: "The writer would be unable to type, the musician unable to perform, without the word processor or musical instrument becoming part of the body image. It is only insofar as the object ceases to remain an object and becomes a medium, a vehicle for impressions and expression, that it can be used as an

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

instrument or tool" (*Volatile Bodies*, 80). As Michael Heim has observed, the way in which we incorporate information technology into our body image is fundamentally different than the process for other tools. Heim writes:

> We use tools, picking them up or putting them down. They do not adjust to our purposes, except in the most primitive physical sense. The wrench fits into my hand and allows wider or narrower settings. The electric screwdriver offers various speeds. Still, the wrench does not become a screwdriver, nor does the screwdriver help me remove a nut. A piece of software, on the contrary, permits me to make any number of tools for different jobs. ... The software interface is a two-way street where computers enhance and modify my thinking power.
>
> (*The Metaphysics of Virtual Reality*, 78)

Computers change not just our body images, but also they influence our thinking and perception; the body and the self are both influenced by information technology. Critics of these changes have pointed to dangers in some of the ways that our subjectivity has been changed for the machines. As I discussed above, Ellen Ullman has identified the way that computers can work to change our perception of our environment and other people from a material reality to bytes of information, atrophying our social consciences. Like Heim, she believes that the computer is a tool like no other:

> I'd like to think that computers are neutral, a tool like any other, a hammer that can build a house or smash a skull. But there is something in the system itself, in the formal logic of programs and data, that recreates the world in its own image ... We believe we are making it in our own image. ... But the computer is not really like us. It is a projection of a very slim part of ourselves: that portion devoted to logic, order, rule and clarity.
>
> (*Close to the Machine*, 89)

Other critics have also pointed out the damage that changing for the machines can cause. In *The Crisis of Self in the Age of Information*, Raymond Barglow describes the alienating effect that reducing the subject to logic, order, rule and clarity has on the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

individual. Barglow is a computer programmer turned psychoanalyst whose work looks at the computer images that are prevalent in the dreams that his patients report to him. Barglow believes that the computer and the dolphin – both nonhuman but sentient beings in his view – are the two current "mirrors in which we hope to recognize ourselves" (*Crisis of Self*, 4). Barglow argues that computers are like internal mental objects that the child has prior to personal differentiation and identity; they emphasize connection rather than separation and counter the whole notion of sovereignty and self-sufficiency (*Crisis of Self*, 6). In exploring the parameters of this self-conception and seeking to treat his patients, Barglow's work is in the tradition of ego psychologists, and is aimed at restoring a sense of unity and self-mastery to a fragmented subjectivity. Barglow believes that the identifications formed between computer users and the technology itself contribute to the postmodern decentering of the subject: "This model of the computer as capable of performance without a performer clashes head on with our view of ourselves as ultimately being in control. If we need not postulate an agent within the computer that is responsible whenever a computer does something, then might there not exist also *human* action without a personal agent who directs it?" (*Crisis of Self*, 90). Perhaps, however, we need not think of this decentering of the rational subject as a negative thing. As Balsamo has observed, the desire to transcend the body is a gendered response of anxiety that "signal[s] a desire to return to the 'neutrality' of the body, to be rid of the culturally marked body" ("Forms of Technological Embodiment," 233); Barglow's crisis of self might similarly be the crisis of a masculine subjectivity whose centrality and autonomy have recently been brought into question.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Bukatman has argued, "the body must become a cyborg to retain its presence in the world, resituated in technological space and refigured in technological terms. Whether this represents a continuation, a sacrifice, a transcendence, or a surrender of 'the subject' is not certain" (*Terminal Identity*, 247). Clearly, Barglow's analysis suggests that changing for the machines – becoming a cyborg – is a sacrifice or surrender of the subject who is now in crisis. What remains to consider is whether or not a feminist reading of this crisis opens up the possibility of a more positive reading of this change. Donna Haraway's by now legendary "Manifesto for Cyborgs" suggests that the body/subject who has changed for – merged with – the machines is an emancipatory figure. The cyborg is a hopeful figure because "by disrupting the stable meanings of the human/machine dualism, other reliable oppositions are also rendered unstable. The cyborg, for Haraway, has the potential to disrupt the persistent dualisms that have been systemic to the logics and practices of domination of women, people of colour, nature, workers, animals" (*Technologies of the Gendered Body*, 35). Unfortunately, this optimistic reading of cyborg imagery does not seem to be realized in contemporary engagements with technology. As people change for the machine, there appears to be an increasing tendency to reduce humans to the object status of machines rather than to challenge the binaries that structure our subject/object distinctions. As Ullman observes, the human operator has become just another upgrade-able component in the computer system: "the skill-set changes before the person possibly can, so it's always simpler just to change the person. Take out a component, put in a zippier one. The postmodern company as PC – a shell, a plastic cabinet. Let the people come and go; plug them in, then pull them out" (*Close to the Machine*, 129).

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Human workers in information technology are discovering, as did Cadigan's heroes, that "although *they* have changed for the machines, the machines didn't change for them" ("Feminism for the Incurably Informed," 692). Both Yanarella and Reid,[37] and Lowe[38] observe that the human worker is expected to adjust the pace of production to the standards set by the technology; the machine does not change to accommodate humans. This is true both for the production assembly line and for programmers who work intimately with the machine and, so it would seem, control it. Ullman describes the anxiety of working in a profession that changes as rapidly as does computer technology. As she approaches middle age, she feels anxious in a world that values only what is cutting edge and new; old hardware and old software manuals are merely trash in this world. As Christopher Dewdney has observed, we live in an age of obsolescence: "we are entering a period of disposable skills, a vast meme landfill of the concepts and routines that we learned for use with various obsolete devices" (*Last Flesh*, 25). All of this change for the machines works to devalue the human and it is this devaluing of human worth that I believe Cadigan seeks to counter with her cyberpunk mythology that privileges real experience over virtual. Barglow argues that:

> technology is essentially contradictory; as a cultural 'text' of a kind, it articulates and extends the fissures and inconsistencies that characterize our lives. We can let that text be written by the interests that currently organize the planet; or we can decide that we are going to write that text collaboratively and democratically, so that technological innovation enlarges the scope of human freedom and self-determination instead of contributing to new forms of irrationality and domination.
>
> (*The Crisis of Self*, 182)

Like Cadigan's notion of the 'original sin' of each technology and our need to learn to live with what we have made, Barglow suggests that a political engagement with the deployment

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

of information technology is required to diminish its alienating effects. My reading of both *Neuromancer* and *Synners* suggests that the way to begin this engagement is by restoring the repressed body and marginalized material reality to our discussions.

Finally, I want to conclude this chapter with a discussion of Raphael Carter's novel *The Fortunate Fall*, a novel which I argue is characterized by its subversion of cyberpunk tropes precisely to restore the repressed body and marginalized material reality to the narrative. I believe that this novel functions as an anti-cyberpunk text, explicitly denying the utopian hopes that cyberpunk sensibilities can use information technologies to intervene in the social. The central character of the story, Maya, is a camera, someone who has been modified with prosthetics and nano-technology so that her experiences can be broadcast to an audience of viewers. The world that Maya inhabits is characterized by extremes of social control. The Postcops – as in Emily Post, guide to socially appropriate behaviour – monitor and 'correct' inappropriate actions in the material world. The Weavers monitor the Net and prevent certain representations from being made. Finally, cameras like Maya work with people called screeners who edit and shape the broadcast, a profession that is somewhere between that of spin-doctor and that of censor. Unlike typical cyberpunk narratives, there are no spaces for subversive sub-cultures to hide in Carter's world. Maya's own relation to her body and her desire is controlled through a suppressor chip, which is revealed to be her punishment for the crime of homosexuality. The suppressor chip prevents Maya from feeling sexual desire of any kind, and represses her memory of her lesbian experiences before being caught.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

The story of *The Fortunate Fall* concerns Maya's research into the anniversary of the liberation of the American death camp Calinshchina in Kazakhstan, and her reunion with her lover whom she lost 20 years before when her suppressor chip was installed. Maya's research into the Calinshchina genocide leads her to a character named Voskresenye, a victim of the Mengale-like experiments carried out at the camps. Voskresenye had been a high school student working with a self-organized underground when the American occupation force captured him. He damaged his socket implants by pouring water into them, thereby destroying brain tissue so that the names of his collaborators could not be extracted from his mind against his will. Voskresenye believed that he would die from this damage, but instead the camp's leading 'scientist'[39] devised a cabling link to connect what remains of Voskresenye's brain with the brain of a whale, allowing his damaged mental functions to be restored through their combined mental power. Voskresenye explains to Maya that this procedure has created a single self that is both him and the whale:

> The corpus callosum, the anterior commissure - why, they're no more than a pair of cables; they link the right and left halves of the brain, just as you might link one computer to another. And they're cables wide enough to merge two lobes into one self, so that if you could not dissect, you would not guess the halves were separate. And if you had a cable, well, why not a cable splitter? Could you not set up a cloverleaf among, not two, but *four* lobes? Would they not then be as intimate with each other as the two hemispheres of the brain are? Would they not merge into a single self?
> (*The Fortunate Fall*, 138)

At the climax of the novel, Maya discovers that the person she believed to be her screener – whom she has interacted with only via virtual presence – is actually the lover from her past, whom she had believed dead. The lover – Keishi is the name she adopts in the screener persona, Keiji was her name when they were lovers – explains that she was able to escape

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

death by uploading her mind into the Net, and then returning the 'program' that was her self into a fleshy existence by using part of the whale's mind.

Maya is the epitome – almost the parody – of Foucault's disciplined subject. The cyberpunk utopian notion that we can free the subject by repressing the body and allowing the subject to escape biological constraints is profoundly rejected in Carter's text. Maya's entire identity is erased through the repression of her body and her desire. She not only no longer *acts* lesbian, she no longer *is* lesbian once her mind is cut off from her body's desires by the suppressor chip. When the chip is disabled and Maya's desires and memories are restored near the end of the novel, she resists this change as an erasure of her current self:

> But I would not touch those memories. I would keep my muscles clenched around them, I would squeeze them into a ball, hard-shelled and separate. They were in me, but I would not make them part of me; as a sunken anchor does not give up its substance to the ocean, or an acorn passes through the stomach whole. I would not become that other woman, who had died when her lover died, twenty years past. I would remain myself.
> (*The Fortunate Fall*, 263)

In this representation of Maya, Carter overwhelmingly rejects the Cartesian separation of mind and body. Although Maya attempts to refuse to "become that other woman," she does not have any choice. When the suppressor chip is disabled, Maya is reconnected to her body as she regains her memory, recalling both her lover's existence and her feelings for this woman.

Although Maya returns to being the woman she was when she was involved in a relationship with Keiji, she refuses to accept that Keishi is truly the person returned. Once again, the body is represented as something that is essential to human subjectivity; Maya

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

refuses to accept that Keiji's personality could have survived the experience of becoming simply data on the Net. Keishi tries to convince Maya that the return to flesh – even the flesh of the whale's brain – has been sufficient to return her soul:

> A soul can't live in the Net, no. But there's nothing mystical about it. It's a physical process – for all intents and purposes the soul is serotonin. If you upload your mind to the Net, at least here in the Fusion, you lose your sensory qualia, your emotions; you become a program. But then if you put it back into a brain, the soul grows back. (*The Fortunate Fall*, 262)

Maya refuses to accept that Keishi is human, telling her "You've forgotten what human emotions are like – you either forget them completely, or you blow them up into something they can never be. Damn it, Mirabara, it's only love. It doesn't mean you want to fuse souls with someone. And it doesn't save the world, or even the people in it" (*The Fortunate Fall*, 285). In Maya's view, Keishi is only a truncated shadow of a complete person, the type of subjectivity that social critics of the information age fear may become dominant as we move toward understanding humans as analogous to computers. As Ullman has warned, Keishi represents only a very slim part of being human: that portion devoted to logic, order, rule and clarity.

When Maya and Keishi plan their first meeting in the real – Maya believing that the possibility to start a new lesbian relationship will exist once her suppressor chip is disabled and Keishi planning to reveal that she is really Keiji – Keishi expresses concern that Maya will be disappointed with the appearance of her 'real' body as compared to the idealized appearance she projects in virtual space. Maya dismisses Keishi's fears, rejecting the idea that the appearance of the physical body is pertinent to love: "I still don't know exactly how I feel about you, but I doubt it would make any difference if you weighed a

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

hundred kilograms" (*The Fortunate Fall*, 175). However, when Maya discovers the truth about Keishi's identity, she rejects any possibility of a relationship because Keishi does not have a physical body. In a macabre enactment of the idea that true love is the marriage of true minds, Keishi wants to move from the mind of the whale – who is dying – to Maya's mind:

> Only a tiny part of me is any kind of flesh. But that part, the part that matters, is in danger. I will die with the whale, unless you let me live. In you. ... I'll keep my memories on the Net. ... Everything that's data. I'll just offload a little of your mind into the Net, and take that space. You'll never feel anything missing. But we'll be together. Always.
>
> (*The Fortunate Fall*, 282-283)

Maya rejects the notion that a relationship conducted only in the virtual space of the Net can be real. In response to Keishi's promises to protect her, love her, and be a companion to her, Maya asks, "'And will you hold me when I'm frightened,' I said, 'Keishi Mirabara?'" (*The Fortunate Fall*, 283). Just as Carter challenges the cyberpunk notion that the subject can be freed by repressing the body, zie[40] rejects the idea that communication technologies can offer new forms of communities and new spaces for interpersonal contact. Material reality remains the space of true community and connection.[41]

Another anti-cyberpunk motif in Carter's novel is zir refusal to represent cyberspace as a 'leveling' field in which those excluded from positions of power in the material world can confront the powerful and emerge victorious due to their talents in negotiating cyberspace. In most cyberpunk representations – including Gibson's and Cadigan's – material advantage in the physical world is rendered null when engagements are staged in cyberspace, and the most significant confrontations in the novels occur in this space.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Carter offers a corrective to such representations, actively refuting the stereotype of the cyberspace cowboy who succeeds against the odds through personal skill and ingenuity:

> She had spent too much time on the Net, where no situation is ever quite hopeless, and where one person, wired right, can stand firm against a thousand. But I, who had stayed behind to sponge her brow with water, still remembered the inevitability of the flesh. ... He looked down along the barrel of his rifle, like one who cocks his head in thought; paused a moment; then lifted his head again and nodded slightly, as though the thought were now complete. A smooth circular hole had been punched in the front window, and another in the wall behind, and between them she lay with a hole the same size in her temple, already dead.
>
> (*The Fortunate Fall*, 259)

Although Keishi argues that she has survived this exchange – uploading her mind to the Net before the bullet killed her body – Maya does not believe that survival on the Net is true survival. Carter suggests that their failure to attend to material, embodied reality is what has put Maya and Keiji at risk. During the time that Maya and Keiji were together, Keiji worked to hide their presence as lesbians from representations in the Net, believing this would keep them safe from detection. However, as someone who spends most of her time on the Net, Keiji has seemingly forgotten that they live in the material world, and they are discovered: "They must have followed me in reality, that's all I can figure. I'd hidden you from the Net so well I thought they'd never find you – after all, who thinks of *Weavers* wearing out actual shoe leather, and all that Sam Spade kind of shit?" (*The Fortunate Fall*, 271).

What I find most interesting about *The Fortunate Fall* is the connections it draws between representation, subject formation, and ideological hegemony. Technological surveillance and control have created a world of utter repression and utter stability. There is no space for the articulation of reverse discourse in this world: the Weavers monitor and

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

control discursive representations on the Net, and the Postcops appraise and restrain performative representations in the material world. The body modification of sockets – that allow Maya to work as a camera, and allow her viewers to access her feelings and experiences over the Net – mean that the mind as well as the body can be disciplined into models that are deemed appropriate. Suppressor chips ensure that even one's thoughts and bodily desires can be examined and molded by hegemonic ideology. The novel explicitly argues that controlling representations allows one to control the bodies and subjects who will materialize in the social world.[42] Voskresenye believes that it is necessary to make public representations of things in order for the things to be real. Something that cannot exist in discourse cannot exist at all. He believes that the censorship exercised by the Weavers is "being used to enforce an official vision of humanity" (*The Fortunate Fall*, 236). Voskresenye broadcasts Maya's experience of de-suppression as the memories and desires repressed by the chip return, arguing that the discursive representation of Maya's lesbianism will make space for lesbian identities to be lived in the material world: "Because of what you did today, there may yet come a time when they no longer have to hide" (*The Fortunate Fall*, 261). The story of Maya and Keiji suggests that discursive suppression is effective in controlling subjectivities. Maya describes their relationship as "roach love, furtive and opportunistic, scattering at the touch of light" (*The Fortunate Fall*, 255) and Keishi justifies the invasion of her privacy via the broadcast by arguing, "Maya, there had to be a world for us to live in. You know what happened last time – how it wore us down, how we could only live by hiding" (*The Fortunate Fall*, 277). This notion that by repressing representations of a subjectivity its material expression can also be curtailed has its

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

antecedents in the history of repression of gays and lesbians in our material world. In her review of the laws against homosexuality, Jane Ussher recounts the resistance to naming lesbianism in discursive practice, even in the legal discourse of prosecutions of lesbian behavior. Following Jeffrey Weeks, she links this resistance to a fear that naming of lesbian activity in discourse would produce lesbianism in women who would otherwise have never considered an alternative to heterosexuality.[43]

Voskresenye suggests that discursive representations are overwhelmingly important in a social context in which information technology mediates social interactions. Maya asks him why the horrors of the Nazi holocaust are remembered while the far larger casualties of Calinshchina are forgotten. He believes that a change in the technological context of representation is the key to understanding the difference:

> 'We are like men forced to walk about in darkness,' he continued, 'except in one chamber where our eyes are uncovered. If the color blue were not found in that chamber, we would never know that it existed; and if in the chamber all men were well-fed, we might forget that there is hunger in the world. The chamber would impress itself upon us so forcefully that nothing else seemed real. And so it is. Telepresence is a chamber in which a new sense, more important than sight, is uncovered. What happens outside the chamber barely exists. And so you see, if what we call reality is to persist, *everything* must be brought into that chamber.'
>
> (*The Fortunate Fall*, 231)

Voskresenye's speech links Carter's novel to critiques of the power of information technology to reduce the material world to an abstraction of data. The more that communications technology mediates our social interactions, the more that our constructions of social reality will be filtered through the representations provided via the technology. Critics of information culture have already suggested – as does Voskresenye – that the social community of the Internet is not representative of the entire range of

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

human behaviours and identities. Voskresenye argues that "the Net *should* be the most democratic form of communication that the world has ever known. It *should* replace the poor bumbling of human compassion with perfect electronic sympathy – instant, universal understanding, available to everyone" (*The Fortunate Fall*, 236). In the novel, the reality turns out to be that the Net is used to impose a narrow interpretation of human normalcy on a diverse population. In fact, Keishi suggests that the reason that the human soul cannot be uploaded into the Net in the Fusion[44] is because censorship of the Net excludes the full range of information that is humanity: in Africa, a Net without Weavers, souls can be uploaded (*The Fortunate Fall*, 68). Allowable representations control how (much of) the subject materializes.

Voskresenye believes that he is restoring sin to the Net, but that sin – the full range of human behaviors and desires – is a necessary part of social reality. Voskresenye believes that the distance between preventing exploitative representations and repressing those whose values differ from our own is too short:

> But observe how easy a descent it is, Maya Tatyanichna. First, viruses that control minds; certainly we don't want those. Then, feelings so intense they might cause damage to the audience. Then, things which simply disturb people. Finally, anything which might be a bad influence – for after all, if you control the world-soul, anything that you exclude does not exist.
> (*The Fortunate Fall*, 234)

He realizes that his actions will destroy the stability of the current social configuration, and that the return to chaos will be a negative thing in many ways. However, he argues that social stability is not worth the cost of social conformity. Diversity must be allowed, even though it generates conflict: "I would not permit a Utopia built on the backs of the one percent, of the few remaining dissidents, even those who no longer know what they are"

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

(*The Fortunate Fall*, 244). The title of the novel refers to the Christian myth of expulsion from the Garden of Eden, the fall into knowledge of good and evil. This fall is considered fortunate because it is also the fall into free will: if both good and evil exist, humans have the freedom to choose an ethics. In Carter's novel, the fortunate fall is also the fall into the body, the fall from the impossible cyberspace ideal of disembodied existence into the material reality of the flesh. As with the fall into knowledge, the fall into the body produces the space of ethics. As I have argued throughout this chapter, material reality provides an ethical ground for our decisions while the abstractions of cyberspace allow us to detach our actions from their social context and thereby obscure their connection to ethical consequences. Voskresenye admits that in his action, he has been guilty of the same evil as motivated the Guardians in their experiments at Calinshcina, the willingness to sacrifice concrete individuals to abstract ideas: "that is what it *means* to be a Guardian: to think that individual rights are a dangerous folly, and compassion merely sentiment. The greater good is everything – and a greater good not to be measured empirically, but defined ideologically" (*The Fortunate Fall*, 244).

Thus, although each of these cyberpunk novels has explored the appeal of Cartesian mind/body dualism, in the end each affirms that the body is an integral component of subjectivity. Disembodied consciousnesses lack a connection to material reality, and material reality is the space of ethics. In juxtaposing these novels with contemporary critiques of information age culture, I have argued that the novels articulate the same anxieties and dangers that permeate these critiques of contemporary cyberculture. A critical analysis of cyberpunk suggests that the genre can be read as participating in the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

critique of contemporary information age culture, providing concrete examples of the risks inherent to life in the Information Age: cyberspace isolates the individual from connections to other people; repressing or denying the body with technology does not sever the connection between body and subject; and the social world is distorted if our understanding of it is based solely on what is perceived through information technology. The world as it appears in cyberspace is not the complete social world, and cyberpunk cannot offer us a complete cognitive map to this social world; it is necessary to retain the perspective of embodied material reality because, as Mark Slouka puts it in his critique of cyber-culture enthusiasts, "the world provides context, and without context, ethical behavior is impossible" (*War of the Worlds*, 13). However, cyberpunk can and does offer a map that can assist us in understanding how distorted the perspective from cyberspace is. Access to information technology is not universally available, but requires a material investment;[45] geographical distinctions further limit an individual's connection to information networks;[46] and women are under-represented among those who use information technologies.[47]

Cyberpunk also offers cognitive maps of emerging social formations, and it can intervene positively in the construction of identity performed within these communities. For example, Cadigan's novel portrays a female character, Sam, as part of the technologically astute community of hackers. Such a presentation offers a subject position for female readers to identity with that emphasizes technological ability. Such representations offer a resistance to the current representations of information technology which genders the technology as male, suggesting that male users control and program it

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

while female users merely treat it as an appliance. Mark Brosnan's work, *Technophobia*, suggests that gendered responses to information technology are related to discursive representations of technology users. One of the criteria he analyses in his discussion of the causes of technophobia is the measure of perceptual confidence that subjects experience regarding whether they will succeed in the task at hand. Brosnan indicates that one of the things that creates a high degree of self-efficacy is observing the success of others who are perceived to be similar to the self. Brosnan theorizes that since most discursive representations of computer users are male, male subjects inevitably bring to the engagement a higher level of self-efficacy; increased levels of self-efficacy increase performative success in a self-fulfilling prophecy (*Technophobia*, 68). Representations in cyberpunk – such as Cadigan's character of Sam – can contribute to increased female efficacy in female subjects' engagements with technology.

Cyberpunk representations of the body relate to my thesis that science fiction texts intervene in the construction of social subjectivities and the hegemonic articulation of ideology in other ways as well. As I have argued in this chapter, although the cyberpunk sub-genre has a reputation of repressing and denying the body, a close reading of these three texts does not support this position. I have chosen to read *Neuromancer*, *Synners*, and *The Fortunate Fall* in this chapter because each is a case in point for the discursive construction of the sub-genre: Gibson's text as the 'first' cyberpunk narrative; Cadigan's as the feminist 'response' to cyberpunk; and Carter's as – in my estimation – a self-conscious refutation of cyberpunk-as-subversion arguments. In this chapter, I have pointed out the ways in which these cyberpunk novels offer a critique that coincides with that made by

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

social critiques of information technology culture. Stone contends that the context of cyberpunk fiction has contributed to creating a sense of community for those who work in virtual reality technologies; that is, that representations in the novels are self-consciously internalized and enacted by such subjects. Her observation suggests that one of the risks attendant to attempts to intervene in the social construction of reality through the discourse of fiction is that aspects of the work – like the abstractions of cyberspace – can be taken out of context. I believe that this is what has happened in the reading of Gibson's novel by those researchers who – as Stone argues – have formed a sense of community based on the novel. While contempt for the meat can be found in cyberpunk discourse, this perspective is limited to certain characters in the novels and a reading of it within the context of each novel suggests that this perspective is not endorsed.

In my reading of these novels, I have attempted to return the repressed body to the received understanding of these texts. I believe that such a reading can intervene in the identifications that reading subjects are making with characters in the novels. The novels themselves comment on one another and suggest that SF writers, too, are offering supplements and corrections to earlier representations and readings. Cadigan's novel represents the importance of the material body much more forcefully than does Gibson's, and her novel can in some ways be considered a refutation of Case's fantasy of bodily transcendence. Carter, in turn, forces readers to acknowledge that disciplinary forces of social control are at work in the cyber-world as much as they are in the material world, refuting fantasies that suggest that one can escape one's social position by creating a new one in cyberspace. By drawing attention to the importance of the body in each of these

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

texts and demonstrating how it remains an integral component of subjectivity in them, I hope to draw attention to the continued importance of embodied existence in our contemporary world.

As I suggested in my previous chapter, I believe that the line between science fictional representations and non-fictional social projections is blurring. In his analysis of contemporary culture, Christopher Dewdney argues that we are living in a time of "transition between the human and posthuman eras" (*Last Flesh*, 2) and he indicates that he entitled the book *Last Flesh* because we may be the last generation to be limited to an embodied existence. Like Lee Silver's work *Remaking Eden* that I discussed in the previous chapter, Dewdney's blurs the lines between fiction and social commentary.[48] *Last Flesh* is filled with the imagined lives of post-human citizens as they check on their children via telepresence robots (109-111), change their biological sex or enhance their genitals (164-166). Dewdney discusses the work of Hans Moravec, the director of the Mobile Robot Facility at Carnegie Mellon, who argues in *Mind Children* that there are no insurmountable scientific obstacles to uploading human consciousness into computer systems. Once again blurring the lines between science fiction and science popularizing, Dewdney follows this discussion with an imaginative description of experiencing the uploading process (*Last Flesh*, 172-174). Following this description, Dewdney suggests that "at this time we cannot know if we are dependent upon embodiment or not. Disembodied consciousness might be insufficient to maintain sanity. Or it might be a liberation of sorts ... and we will fly further and faster on our wings of thought than we had ever dreamed possible. We may well find out" (*Last Flesh*, 175).

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

While Dewdney's rhetoric offers the possibility that disembodied consciousness may not be a 'sane' way of being in the world, his representational trope of flying faster and further than we thought possible invokes cyberpunk representations of the freedom and exaltation of life in the matrix. As I have detailed above, identifying the subject with a disembodied consciousness and treating the world of cyberspace as more meaningful than the material world entails reductions that obfuscate moral facets of our social being. Returning the repressed body to a critical engagement with cyberpunk fiction suggests that we are dependent upon embodiment for our moral being. The unexpected other that emerges from my reading of cyberpunk fiction is the body itself; presumed to be irrelevant, it nonetheless returns to remind us that our problematic selves are embodied beings, engaged in a material context. It is imperative that we do not lose sight of this fact in our engagements with information technologies. The Möbius strip image of the body as part of the subject – not disposable flesh – is where we must begin, or we risk cyberspace's becoming a social space that marginalizes those who have been 'reduced' to the body by discourses in the past.

My conviction that the appeal of cyberspace is rooted in a desire to escape responsibility for ethical actions in material reality was reinforced by reading the November 1999 issue of *Shift*, a magazine targeting those "living in digital cultures." I purchased this magazine to get some sense of the degree to which cyberpunk representations are being reproduced in discourses aimed at self-identified cyberculture citizens. My reading of the magazine confirms many of the fears that cyberspace works to distance people from real community and tends to produce an attitude in which others are treated as objects rather

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

than subjects. The magazine includes an article on cyber-dildonics or cybersex,[49] describes the various feedback prostheses that can be purchased[50] to create a virtual sexual experience, and provides information about hiring an on-line partner if required.[51] The emphasis on pornography on the Internet and the materialization of a body via sexual prosthetics suggest that the body is being returned to cyberspace, not in representations that demonstrate the embodied nature of subjectivity, but only as a "meat puppet." Cyberpunk texts that emphasize the materiality of the body and the relationship between embodied reality and ethical action are a necessary supplement to such depictions. An advertisement for the video game Duke Nukem, also appearing in this issue of *Shift*, suggests that the desire to escape the ethical aspects of embodiment may be part of the appeal of cyberspace. "In real life," reads the advertisement, "Duke Nukem would be forced to attend 'sensitivity training.' Real life sucks" (*Shift*, 25).

Andrew Ross has argued that, in their engagement with technology, cultural critics need to develop "something like a hacker's knowledge, capable of penetrating existing systems of rationality that might otherwise be seen as infallible; a hacker's knowledge, capable of reskilling, and therefore of rewriting the cultural programs and reprogramming the social values that make room for new technologies" (*Strange Weather*, 100). As I have tried to show in this chapter, this hacker-life knowledge must – as my readings of these cyberpunk texts do – return the repressed body to our discursive engagements with technology and the subjectivities that are forming around its use. It is imperative to rewrite the cultural codes and reprogram the social values that have excluded the body from these discourses, and return to them a sense of ethical grounding in material reality. Finally, I

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

believe that it is important to continue to offer critical assessment of cyberpunk representation – such as the one I have provided here – to counteract those reading of the texts which tend to glorify the suppression of the body represented by characters such as Case. As Shannon McRae points out in "Coming Apart at the Seams: Sex, Text and the Virtual Body," the difference between representing something and endorsing that which is represented is sometimes lost in reception. She writes, "Gibson's paranoid vision of a world rendered nearly uninhabitable by multinational corporations, whose hegemony is enabled by means of a vast, interlinked information network, started out, like most good science fiction, as social criticism. Now it has become the model upon which various corporations, keeping up with enormous consumer demand, are carefully planning and busily constructing a brave new world" (242). Cultural critics must strive both to offer other visions of our new information technology world, and to counter such mis-readings of already existing ones.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

NOTES

[1] Mark Dery's recent (1996) study of cyberculture, *Escape Velocity*, suggests that if cyberpunk survives, it does so only in cultural practices, not in science fiction writing. While Dery's work provides some readings of cyberpunk texts in relation to the cultural practices of musicians and performance artists who characterize themselves as cyberpunk, all of the literary texts discussed are from the 1980s.
[2] Suvin asks, if cyberpunk creates a 'structure of feeling' in Raymond Williams' terms, then for whom does it do so? He suggests that the answer is affluent, first-world youth and technicians/artists of the new communication media and argues "The dilemma of how personal actions and conduct relate to social change is simultaneously inescapable and insoluble within Gibson's model. ... In sum, a viable this-worldly, collective and public, utopianism simply is not within the horizon of the cyberpunk structure of feeling" ("On Gibson and Cyberpunk SF," 358).
[3] "The Desert of the Real" in *Storming the Reality Studio*.
[4] *Terminal Identity*.
[5] "Cybernetic Deconstructions" in *Storming the Reality Studio*.
[6] The cyberpunk sensibility that suggests that individual transformations can solve social problems is similar to the perspective of genetic welfare discussed in Chapter 2.
[7] "Cyberpunk in Boystown" in *Strange Weather*.
[8] Samuel Delany also comments on this denial of the "mothers" of SF in "Some *Real* Mothers: An Interview with Samuel R. Delany by Takayuki Tatsumi." *Science Fiction Eye* 1 (March):5-11.
[9] Rosi Braidotti, "Cyberfeminism with a Difference." Available from www.let.ruu.nl/women_studies/rosi/cyberfem.htm
[10] In his more recent work, *Idoru* (1996), Gibson engages directly with the topic of virtual reality.
[11] See "Feminism for the Incurably Informed."
[12] See "Will the Real Body Please Stand Up?"
[13] A recent (November 1999) issue of *Shift*, a self-proclaimed magazine for "living in digital culture," discusses a problem with Summer, the winner of the 1998 Avatar's Conference competition, related to the design of her "more-than-girlish" bustline (35). Summer is clad in only flowers and moving butterflies, and is designed to look "like Eve before she ate the apple," according to her designers Victoria D'Onofrio and Rodolfo Galeano.
[14] The analysis of MUD (multiple user domain or dungeon) communities by Lori Kendall also supports the assessment that the opportunity to play with gender roles does not lead to an understanding that gender is always a performance. Instead, as Kendall points out, the fact that people can gender cross-dress in a MUD tends to create increased emphasis on discovering the true gender that underlies the performance. Kendall writes: "The stereotypes of masculine and feminine identity found on MUDs aren't new. Nor is the higher value placed on the 'masculine' characteristics of intelligence and aggressiveness. But the greater male presence online and the limitations of this form of textual communication create a context in which these stereotypes are relied upon to a greater degree. So the answer to the question with which I began my research is that gender, in fact, has a great deal of meaning online. Although individuals can choose their gender representation, that does not seem to be creating a context in which gender is more fluid. Rather, gender identities themselves become even more rigidly understood. The ability to change one's gender identity online does not necessarily result in an understanding that gender identity is always a mask, always something merely performed. Rather, there can be an increased focus on the 'true' identities behind the masks. Further, what I've found is that the standard expectations of masculinity and femininity are still being attached to these identities" ("MUDder," 221-222).
[15] Rosi Braidotti, "Cyberfeminism with a difference." Available at www.let.ruu.nl/women_studies/rosi/cyberfem.htm
[16] See *Life on the Screen*, p. 219-221. Turkle does use aliases for her interview subjects to hide their identities, but she does not give any indication whether or not her choice of the name Case is related to her reading of *Neuromancer*.
[17] It is also striking that the Artificial Intelligence entities that appear/evolve in these texts are the result of fusion between self and not-self. In *Neuromancer*, Wintermute is able to exceed its programming limits and expand its capacity by merging with Neuromancer. In *Synners*, the final artificial intelligence that survives is a fusion of Art E. Fish, a simulated personality, and the disembodied consciousness of Virtual

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Mark. As I discussed in the introduction, the abjection of social subjects who are unlike us is linked to the desire to construct a stable and autonomous self that can be clearly delineated from the external world. This representation suggests another hidden, feminist aspect to cyberpunk representations, one which capitalizes on Donna Haraway's myth of the cyborg as that which celebrates partial identities and confusions of boundaries. Christopher Dewdney also suggests that a fusion of consciousnesses is a utopian aspect of information technology applications. He writes "It is not out of the question that the unique, individual human being is a transitional evolutionary stage, an ultimately expendable aberration that is now poised at the brink of a precipitous slide into collective consciousness. Individual human consciousness may well turn out to have been a temporary, but necessary, detour on the road to meta-consciousness" (*Last Flesh*, 183). Despite the positive political consequences that may emerge from a metaphoric breakdown of the boundaries between self and other so that we move toward a perspective that sees all life as one flesh – such as I argued in my reading of Jones in Chapter 1 – I am less confident in reading this meta-consciousness in a positive way. Such a vision seems to me to be a reduction in what is uniquely valuable about individual humans, merging all into a bland utopia that is achieved through eliminating rather than embracing difference, much like Banks' Culture. In *War of the Worlds*, Mark Slouka argues that this tendency to move toward a "hive mind" and to erase individuality is the most pernicious consequence of cyber-culture (see p. 95-107). Slouka believes that the hive mind concept is an attack on humanist values and compares the celebratory representations of cyberists (his term) to "the aphorisms of Pol Pot in the 1970s or Hitler's more memorable pronouncements in *Mein Kampf*" (*The War of the Worlds*, 96). While Slouka does make some points that I agree with – such as the fact that a tendency toward abstraction at the expense of context can evacuate moral content – his overall argument is somewhat naïve. He seems to have no understanding of the history in which humanist values have been used to further exclusionary and repressive agendas and, throughout his work, argues for a return to humanist values as a necessary ground for ethics. For example, the criticisms that Slouka makes regarding the hive mind concept – that it is like a mob, that individuals will act without understanding – could also be applied to an understanding of the rise of ethnic nationalism in the material world of so-called humanist values. As I discussed in my reading of Banks in Chapter 2, despite its focus on individualism, humanism is rooted in a singular understanding of ethics, an ethics typically abstracted from concrete, material, individual subjects and understood as something like 'universal human nature'. Humanism does not ask in whose image this universal is constructed. I would argue that Donna Haraway's idea of the promises of monsters, of an ethics rooted in difference without domination, and in a sense of taking responsibility for the worlds we create with a "plethora of human and unhuman actors" ("The Promises of Monsters," 327) is a more positive ethic than that of humanism. Instead of putting the human at the centre of everything, a move which "come[s] down to the story line that 'man makes everything, including himself, out of the world that can only be resource and potency to his project and active agency'" ("The Promises of Monsters," 297), we should instead think of ways to work collectively with what Haraway calls the other social actors in our world, both human and non-human, while rejecting "what used to be called 'a fully human community.' That community turned out to belong only to the masters. However, promising monsters, who are always already within, can call us to account for our imagined humanity" ("The Actors are Cyborg," 25).

[18] Mark Dery cites a radio interview with Gibson that supports my reading of this text. In the interview, Gibson says that the novel is a working through of "some ideas I'd gotten from reading DH Lawrence about the dichotomy of mind and body in Judaeo-Christian culture" (interview with Terry Gross on Fresh Air, National Public Radio, August 31, 1993) cited in *Escape Velocity*, p. 248.

[19] While I agree with Foster's assessment that the consequences of inhabiting bodies are addressed by cyberpunk, I disagree with the reading of Gibson's text that he goes on to make in his article. Foster argues that the novel is about the parallels that can be seen between humans and machines in their ability to overcome the limitations of their 'programming' and restructure themselves. In the novel Wintermute overcomes the limits of how it is 'wired', which Foster links to Molly's continual reference to the way she is 'wired' to explain her choices. Foster argues that since Wintermute is able to overcome the constraints of its programming, so, too, are humans able to overcome their own constraints. I agree with this sentiment, but do not agree that Foster's reading of the novel demonstrates that Case and Molly have overcome their programming, as he suggests. He argues that Case overcomes the limitations of his self-destructive behaviour, and Molly overcomes the limitations of her feminine cultural role as meat puppet. However, Case is self-destructive *because* he can't get into cyberspace, and the tendency partially goes away when he gets his elite life back, not because he has been able to re-program himself into valuing

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

material existence. Further, he still takes drugs the night before the big run, suggesting that his destructive behaviour remains intact. Molly continues to use her body and sell her skills to the project of her employer although in the role of assassin/bodyguard rather than as meat puppet. However, she remains detached from other human beings, treating them as objects rather than as subjects, so I would argue that her basic 'programming' has not changed *that* much. In fact, she retreats from a continuing relationship with Case after the 'job' is over precisely with the excuse that it is just the way she is wired.

[20] A cyberspace cowboy is someone whose body has been modified so that his (and I mean this for this novel) brain can directly interface with a computer system (deck) that gives access to the cyberspace matrix. More on Case's body modifications below.

[21] A razorgirl is a bodyguard and/or assassin who has been modified to have blades that extend from beneath her fingernails. More on Molly's body modifications below.

[22] The Sprawl is the 'wrong side of the tracks' in an urban centre that runs from Boston to Atlanta, also referred to as BAMA, the Boston Atlanta Metropolitan Axis.

[23] And although Case is shown to refuse the virtual Linda Lee and the life he could have with her, his escape into cyberspace is linked to his desire to avoid a reality in which he has lost her to death: "Once he woke from a confused dream of Linda Lee, unable to recall who she was or what she'd ever meant to him. When he did remember, he jacked in and worked for nine straight hours" (*Neuromancer*, 59).

[24] Christopher Dewdney reports that commercial marketing of VR games has been held up by cyber-sickness. Testing has produced widespread experience of people feeling that they cannot, without physical disorientation, 'get back into' their bodies after a VR session. Until this problem is resolved, companies such as Sega and Nintendo are hesitant to bring VR products to market (*Last Flesh*, 128).

[25] As Stone notes, Gibson's vision of negotiating the three-dimensional Cartesian space of the matrix has not yet been realized. However – with the exception of direct neural interface – Gibson's descriptions are the model that current development is working to achieve.

[26] See Larry McCaffery, "An Interview with William Gibson" in *Storming the Reality Studio*, p. 280.

[27] For examples see Heim and Dewdney.

[28] Mark Slouka argues most forcefully against this tendency to cut off connections to real people in our physical vicinity in *The War of the Worlds*. While I agree with Slouka's argument that cyberspace can tend to distract us from the material problems of the late 20th century and encourage us to turn our attention elsewhere, I disagree with the larger thrust of his work. Slouka's general argument is that the blurring of boundaries between real life (RL) and virtual reality has the consequence of undermining the concept of truth. He ultimately argues that we can return to an ethical world "by resuscitating our faith in truth in general, by recognizing its importance, by rededicating ourselves to its pursuit" (*The War of the Worlds*, 149) and that respecting the distinction between real reality and virtual reality is the beginning of this work. I, too, argue that a focus on material, embodied reality is necessary for ethics, but I want to argue for a focus on the specificity of material reality, an attention to its detail that precludes the erasures and oppressions that its abstraction to data can produce. Slouka's reliance on an unproblematised notion of truth in fact reproduces some of the problems of abstraction that I associate with a cyberspace world. In refusing to recognize that the social world is a construct that may be seen differently from different perspectives, Slouka inadvertently aligns himself with the totalizing logic of certain cyberspace enthusiasts.

[29] See Allesandro Aurigi and Stephen Graham "The 'crisis' in the urban public realm" in *Cyberspace Divide*, p. 72.

[30] The idea of the body as meat emerges in cyberpunk in Case's "elite stance involv[ing] a certain relaxed contempt for the flesh. The body was meat. Case fell into the prison of his own flesh" (*Neuromancer*, 6) but the use of the term meat for the body also clearly draws on the heritage of Cartesian dualism. The body/mind separation grounds an abstraction of self as non-material, and makes all parts of the material world, including one's own body, objects to be bent to the will of this subject. As I argued in my introduction, this stance has been used to justify domination of the material world to human will. One example of this domination is in the slaughter of animals for food. The body as meat marks the continuity of the body with the animal world, while reinforcing the idea that the mind is other to and above base matter.

[31] Gina's comment is provoked by a discussion of 'charity rock' events in which rock artists used their performances to raise money for various causes such as famine, agricultural depression, etc. Gina is critical of the gap between the artists' experience and the problems they were attempting to address, arguing: "So they had these albums that were fighting this and fighting that and fighting for some other thing, but what

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

they all really fought was each other, for a place on the old hit parade. Number two with a bullet, number four with a bullet. They were all so far away from it, see, they were all so fucking *far away*. They'd say something like 'world peace' and they didn't have the first fucking idea of what the world was like. They saved the goddam whales, and they didn't even fucking *live* in the fucking *world*" (*Synners*, 198). For a cultural analysis of 1980s "charity rock" politics see Reebee Garofalo, "Understanding Mega-Events: If We Are the World, Then How Do We Change It?" p. 247-270 in *Technoculture*.

[32] In "The Psychodynamic Effects of Virtual Reality" Leslie Harris explains that the experience of being disoriented in 'real reality' is a cognitive side-effect of long sessions in simulated environments. He describes the role that past experience has in forming our perceptions; we compare current perceptions to past experience and – if possible – fill in the details and expectations from experience. Past experience makes up a series of possible worlds against which we view the actual world and our past experiences in virtual worlds are treated by the body no differently than our past experiences in 'real' life. Harris describes his own experience of time spent in simulated driving games later creating a sense of disorientation when he is confronted with the controls of a physical car. His work draws on the role of the body in learning and the way in which proficiency in a task is achieved by responses becoming intuitive – hard-coded as it were – based on past experience. In "The Challenge of Merleau-Ponty's Phenomenology of Embodiment for Cognitive Science," Hubert L. Dreyfus and Stuart E. Dreyfus explain that the embodied nature of learning has created obstacles for the development of artificial intelligence. Drawing on the same insight regarding the body's past experiences structuring current perceptions of the world, they describe bodily constraints on how we generalize learning. The architecture of the brain limits paths of inputs/outputs, creating a body-dependent order of presentation of external stimuli. Researchers have discovered that although neural nets can learn skills through the same process as brains do, they do not learn to respond in a 'human' way to the same experiences because they do not experience stimuli in the same body-dependent order of presentation. Taken together, these two articles suggest that the phenomenological experience of exceeding the body's 'limitations' that is possible in virtual space may work to create radically altered human subjectivities.

[33] The name is similar to the virtual character Arthur Fishell who was created by Atari Labs staff in the early 1980s. Alluquère Stone describes the ways in which the lab staff used the character of Fishell to work on their ideas for interactivity between computers and humans. They created a virtual presence for this 'person' primarily using email. At one point in time, he was even named pro tem director of the lab. Atari staff outside the lab group came to believe that Arthur was a 'real' person (see *The War of Desire*, p. 139-143).

[34] Bukatman writes "the subject in cyberspace is granted perspective and mobility, conditions predicated upon a lived body; a new body, perhaps, but a body nonetheless" (*Terminal Identity*, 207).

[35] See "Unstable Networks" in *Digital Delirium* for Sterling's re-assessment of the subversive potential of cyberpunk. He has retreated from his earlier enthusiasms about the "the subversive potential of the home printer and the photocopier" ("Preface to Mirrorshades," 347). Sterling now realizes that technology alone cannot solve social problems, observing "Is our technology really a panacea for our bad politics? I don't see how. We can't wave a floppy disk like a bag of garlic and expect every vampire in history to vanish" ("Unstable Networks," 36).

[36] See *The Body in Late Capitalist USA*, p. 33-35.

[37] See p. 191.

[38] See p. 34.

[39] This character seems to be an example of the type of subjectivity that can be produced in someone whose interactions with others are always mediated by technology such that he or she starts to see other people as information or objects to be manipulated, rather than as autonomous subjects: "He seemed to have been born without the gene that enables us to see souls in the world – spirit-blind, as some are colorblind. When Derzhavin looked at a Kazakh or a whale, he saw a wetdisk, an organic computer, sheathed in a husk of irrelevant flesh. The body was an unfortunate complication, and the spirit just a dream of foolish men." (*The Fortunate Fall*, 206).

[40] This is the pronoun that Carter uses to describe zirself. Zir's discussion of gender identity can be found on zir's homepage at www.chaparraltree.com. Carter prefers to use the term "epicene" which zie defines as "partaking of the characteristics of both sexes" to describe zir gender identity.

[41] Keishi offers a very good refutation of Maya's position, but one that, ultimately, is not endorsed by the novel in its support of Maya's decision. The novel is written as Maya's reflection back on events of the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

time and she never suggests that she regrets her choice. Keishi argues: "'If you take flesh as your starting point,' she said, 'you're always going to find some way that silicon falls short. But there's nothing special about flesh. Look, sex wasn't invented by some loving God who wants us all to understand each other and be happy. It was made by nature, and nature doesn't give a damn whether our hearts hook up or not, just as long as our gametes do. Why should evolution get to make all the decisions? Why can't we use something that *is* designed to bring people together? If you turn the comparison around, and start with cabling, then love in the meat starts to look pretty shabby. Love happens in the mind, in the soul – what does the union of two sweating bodies have to do with that?' (*The Fortunate Fall*, 158-159). Keishi's argument relies on mind/body dualism ("love happens in the mind"), a fragmentation of self that the novel rejects in its existence on embodiment as an essential aspect of being human.

[42] The novel even points to the role of language in shaping our value systems and constructing hierarchies. Keishi tells Maya that the tool she is given by the free African technology Net to fight the repression of homosexuality on the Net in the Fusion is the ability to speak Sapir – a computer language – as her first language. The social programming accomplished by the Russian language is removed from her subjectivity: "human language protects the mind from Sapir. That's why the Africans are so far ahead – don't you see? They don't get their Sapir from a fluency chip. They get their first brainmod at one year, and learn it as a first language. It's the lingua franca of their continent, and that makes all the difference. The first computer languages were pidgins, formed the same way any pidgin is formed, by a dominant race thrusting its words onto the grammar of a subordinate one. Then with KRIOL, the pidgin acquired native speakers. In Sapir the tables are turned – it changes human thought to fit computers, not the other way around" (*The Fortunate Fall*, 270). This quotation suggests that – unlike Cadigan — Carter believes that becoming more like machines, thinking as the computer does, is socially beneficial. I suspect that this view is linked to the idea that prejudice is irrational and machines are grounded in rationality. However, as I will argue in more detail below, I believe that reducing human subjectivity to rationality alone is socially and psychologically damaging. It would seem that Carter, too, shares this perspective to some degree given the representation of Maya's rejection of Keishi because the relationship would be one of minds only. There is also an interesting parallel between the notion of Sapir as something that can change the world beyond computing and the language Forth which was very popular in the late 1970s. Alluquère Stone describes the attitudes surrounding Forth as: "Forth wasn't simply a programming language. Rather, it was an element within a system, a building block in an associated group of elements that, taken together, represented a complete philosophy of life. This way of life, if practiced diligently, would effect a gradual but pervasive transformation not only in the life of the practitioner, but in the greater world as well" (*War of Desire*, 105).

[43] See "Framing the Sexual 'Other'" in *Body Talk*, p. 140.

[44] The Fusion is not all that clearly defined but seems to be a European-Asian economic and political merger. It is always contrasted with the other major global power, Africa.

[45] See Brian Loader, "Cyberspace Divide: Equality, agency and policy in the information society"; and Trevor Haywood "Global networks and the myth of equality: Trickle down or trickle away?" (both in *Cyberspace Divide*) and Susan Leigh Star "From Hestia to Home Page: Feminism and the Concept of Home in Cyberspace" in *Between Monsters, Goddesses and Cyborgs.*

[46] See Mike Holderness "Who are the world's information-poor?" in *Cyberspace Divide* which argues that Africa, in particular, has limited access to the World Wide Web.

[47] See Alison Adam and Eileen Green "Gender, agency, location and the new information society" for a discussion of material restrictions on women's access to information technologies, and Mark Brosnan, *Technophobia* for a discussion of the gendered social character of information technologies.

[48] Mark Slouka's *War of the Worlds* shares some of this tendency, although his analysis is largely focused on the consequences of existing technology. However, the distinction between science fiction and social critique is blurred in his work by passages such as the following: "Our home computers, to take just one example, will soon come with a face capable of responding to our expressions, understanding our gestures, even reading our lips. Its eyes will follow us around the room. We'll be able to talk with it, argue with it, flirt with it. We'll be able to program it to look like our husband or our child. Or the Holy See, I suppose. Will it have emotions? You bet. Scream at it and it will cower or cringe" (*War of the Worlds*, 8).

[49] Richard Kadrey, "reach out and touch someone" *Shift* (November 1999):44, 46). The *National Post* also recently published a column about cyber-infidelity and the problems (ethical and pragmatic) of determining if one's spouse is cheating or not by participating in cybersex encounters (Patricia Pearson, "Is that a mouse in your pants ..." *National Post*, October 11, 1999 p. D1,D2).

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

[50] Available at www.teledildonics.com.
[51] See www.ifriends.com

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Chapter 4: Material Girls in a Material World

> *The body is indeed the privileged object of power's operations: power produces the body as a determinate type, with particular features, skills, and attributes. Power is the internal condition for the constitution and activity attributed to a body-subject. It is power which produces a 'soul' or interiority as a result of a certain type of etching of the subject's body.*
>
> *Elizabeth Grosz*

Through this work, I have been examining the way in which discourses about 'appropriate' and 'inappropriate' uses of technology both authorize and prohibit the materialization of particular body-subjects through their competing representations of the body. In this chapter, I want to turn to the technology of writing itself. Marshall McLuhan has called language "the first technology by which man was able to let go of his environment in order to grasp it in a new way" (*Understanding Media*, 57). My overall argument in this project is that the discourse of popular fiction intervenes in the social construction of subjects and that it can provide a space for the social formation of subjects that runs counter to dominant ideology. This chapter provides a reading of two science fiction texts which themselves examine the processes by which reading and writing texts shape the body-subject. Both Neal Stephenson's *The Diamond Age* and Jack Womack's *Random Acts of Senseless Violence* foreground the practices of writing and subject formation: *Random Acts* is in the form of a young girl's diary, and narrates her practice of writing a new self that can cope with her changed social circumstances; *The Diamond Age* describes the interactions of a young girl with the automated *A Young Lady's Illustrated Primer*, an interactive book that responds to the girl's social circumstances and offers stories to teach her how to negotiate her social space.[1]

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

These two texts emphasize the relationship between disciplining of bodies, internalizing of cultural images, subject formation, and cultural resistance. My argument in this chapter is that the representations of subject formation as mediated through texts provided in these two novels model how cultural texts – including popular fiction – can be related to subject formation. In particular, in reading these two novels I want to demonstrate how they problematize the relationship between the ideological call and each individual's response to that call. Both novels demonstrate that the social context of the addressee of the call produces variations in his or her response to it. Such variations open the space for agency and resistance that Butler has theorized in her idea of variation on repetition, so that citations both re-produce and resist/alter the dominant ideology. The effect of a cultural representation cannot be known in advance or 'programmed' in a deterministic way; one's path through a text is contingent on the context one brings to the text. My title to this chapter points to the fact that both of these novels return to the idea that the material matters – which bodies matter matters – because it is one's position within the material structures of power that will shape one's access to cultural products, and one's response to their ideological calls. Like Madonna's material girl, my protagonists recognize that we are living in a material world, a world in which one's opportunity and freedom are limited in correlation to one's power within social structures.

Both of these novels are an example of what Robert Scholes has termed fabulation. Fabulation is "fiction that offers us a world clearly and radically discontinous from the one we know, yet returns to confront that known world in some cognitive way" ("The Roots of Science Fiction," 47). Typically, this definition is applied to the genres of SF, magic

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

realism and fantasy in terms of the way that they incorporate the fantastic – the other of realism. In calling *Random Acts* and *The Diamond Age* fabulation, I am following in the footsteps of Marleen Barr and her extension of the term into her notion of feminist fabulation. Barr describes feminist fabulation as fiction which confronts the world of patriarchy with what is radically discontinuous from it; that is, feminist views of the world. As Barr points out, rather than bring the fantastic to the realistic, many feminist novels instead show the ways that the realistic is fantastic – a partial version of the truth based on patriarchal stereotypes. In this sense, work that supplies the perspective of the previously silenced Other can be seen as a fabulation which confronts what we take to be the known world and reveals it as the world known from a particular perspective. Any fiction which reveals that the social world is a construction – and a construction that varies with social subject position – can thus be read as fabulation. Both *Random Acts* and *The Diamond Age* function in this way, demonstrating that as social circumstances change, both the body-subject and the entire world-context of that body-subject change. Both novels confront the centrist perspective – the bourgeois world of the reader in *Random Acts* and the neo-Victorian culture of the *Primer*'s creator in *The Diamond Age* – with the view from the margins.

The view from the margins in *The Diamond Age* is provided through the central character, Nell. The world of Stephenson's novel is divided into a number of enclaves or tribes which are centrally governed by the Common Economic Protocol. Nell is a young thete girl, someone who lives in the Leased Territories rather than belonging to a particular economic enclave. Nell's life is characterized by under-privilege: she spends her days

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

entertaining herself and fending off the sexual and physical abuse offered by her mother's stream of boyfriends. Nell never leaves her apartment, and her brother Harv provides what care and education she is given. The New Atlantans, a neo-Victorian culture, are one of the most powerful tribes. Nell's life intersects with the neo-Victorian tribe when her brother, Harv, steals a copy of the interactive book, *A Young Lady's Illustrated Primer,* from its creator, John Hackworth. Hackworth is unable to report this theft because he is also in possession of the book illegally. The *Primer* is a commission of Lord Finkle-McGraw, an equity lord who believes the New Atlantan culture is becoming stagnant because its citizens lack the creative spark of subversion. The *Primer* is to be his gift to his granddaughter, one he hopes will provide this missing element to her socialization. Hackworth steals a copy of the *Primer* for his daughter, Fiona, with a similar wish that it will allow Fiona to rise above her given station in life and achieve some financial equity (the enclave's marker of upper from lower class) of her own. Hackworth believes the *Primer* is required for Fiona to achieve this goal because the socialization of New Atlantans – aimed at producing stability – inhibits them from taking risks. He observes that "he'd met a few big lords ... and seen that they weren't really smarter than he. The difference lay in personality, not in native intelligence. It was too late for Hackworth to change his personality, but it wasn't too late for Fiona" (*Diamond Age*, 81).

Although Fiona does eventually get her copy of the *Primer* through other means, Harv steals the original illicit copy produced by Hackworth and gives it to Nell. Access to the *Primer* literally changes Nell's life. The idea that access to knowledge through books is one of the most important formative elements in one's life is one of the main themes of

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

the novel. The words of Confucius, the guiding philosopher behind another powerful tribe, the Celestial Kingdom, best express this idea. As Judge Fang observes when he is considering the legal disposition of the *Primer* as stolen property, "a book is different – it is not just a material possession but the pathway to an enlightened mind, and thence to a well-ordered society, as the Master stated many times" (*The Diamond Age*, 163). Through the symbol of the *Primer*, *The Diamond Age* shows that popular culture is not a deterministic monolith. The message embedded in a cultural text – the cultural wisdom of a particular hegemonic formation – is articulated differently in interaction with different readers. The *Primer* is

> a catalogue of the collective unconscious. In the old days, writers of children's books had to map these universals onto concrete symbols familiar to their audience – like Beatrix Potter mapping the Trickster on to Peter Rabbit. This is a reasonably effective way to do it, especially if the society is homogeneous and static, so that all children share similar experiences. What my team and I have done here is to abstract that process and develop systems for mapping the universals onto the unique psychological terrain of one child – even as that terrain changes over time. (*The Diamond Age*, 107)

The particular way that the *Primer* functions as an interactive technology provides an insight into the way that the same cultural representations are received, taken up, inhabited, and used differently in different social contexts. There are three copies of the original[2] *Primer* in the novel belonging to Nell, Hackworth's daughter Fiona, and Finkle-McGraw's granddaughter Elizabeth. Although each girl starts out with an identical database of cultural information, the stories that the *Primer* tells them are different because their social circumstances are different.

The *Primer* has a much more dramatic effect on Nell's life course than it does on either Elizabeth's or Fiona's. The reason that the *Primer* takes on such importance to Nell

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

is that the knowledge it embodies and passes on to her is knowledge that she would not otherwise have been able to access within her deprived social context. The *Primer*

> sees and hears everything in its vicinity. As soon as a little girl picks it up and opens the front cover for the first time, it will imprint that child's face and voice into its memory– ... And thenceforth it will see all events and persons in relation to that girl, using her as a datum from which to chart a psychological terrain, as it were. Maintenance of that terrain is one of the book's primary processes. Whenever the child uses the book, then, it will perform a sort of dynamic mapping from the database onto her particular terrain. (*The Diamond Age*, 106)

The story that the *Primer* tells Nell recounts the adventures of Princess Nell and her escape from imprisonment in the Dark Castle by her evil stepmother. Nell's harsh social circumstances give her story a darkness associated with Grimms' Fairy Tales rather than the lighter tone of contemporary children's literature. For Nell, the *Primer* becomes a tool of survival, parenting her in the absence of her neglectful mother.[3] The *Primer* reassures Nell when she becomes lost, it teaches her to prepare nutritious food for herself, and it teaches her self-defense. The *Primer* is an interactive text, so reading it falls somewhere between reading fiction and participating in virtu al reality. Although Nell never is immersed in another environment through technology, the *Primer* does tailor its stories to her questions and to what it can 'see' of her surroundings. Nell's willingness as a reader to translate between text and life is crucial to the success of the *Primer*. For example, Nell learns her self-defense skills through practicing the motions she sees modeled in the *Primer*.

The *Primer* works with the intention to shape Nell as a social subject. At the beginning, the *Primer* tells stories to Nell based on its observations of her social circumstances. The *Primer* initially offers Nell solutions to the problems she is experiencing. However, as Nell gets older, the *Primer* increasingly requires Nell to drive the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

narrative or to figure out the solution to problems on her own. The *Primer* works to shape Nell's behaviors into models that are appropriate to the set of values that form its programming. For instance, it begins the process of teaching Nell to read by insisting that she tell her dolls bedtime stories. Noticing her activity of tucking the dolls into bed, the *Primer* intervenes and announces "For some time Nell had been putting them to bed without reading to them ... but now the children were not so tiny anymore, and Nell decided that in order to bring them up properly, they must have bedtime stories" (*The Diamond Age*, 95). The *Primer* gives Nell knowledge that she would not otherwise be able to gain from her limited social experience, defining any terms in its stories that are unfamiliar to Nell and branching off into sub-stories to explain concepts when necessary. In addition to the skills that the *Primer* teaches Nell, it also teaches her self-reliance and perseverance through its pedagogical style. For example, during a story about camping in the woods, Princess Nell is provided with flint and shown that the flint can make sparks, but Nell the reader must work through the logic of starting the fire with dry leaves, blowing on the flames, etc. The *Primer* allows Nell to repeat stories as many times as she wants so she may learn from her mistakes and continue trying until she succeeds.

The primary role of the *Primer* is thus not to instill the knowledge of cultural archetypes into the young girl who reads it, but to shape her subjectivity along the lines of the values embodied in the neo-Victorian response to these archetypes which is embedded in its programming. In Nell's case, the goal of the *Primer* from the first day that she reads the story is to remove her from her current social surroundings. The story of the *Primer* remains the same from the first day Nell reads it, although nuances and details continue to

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

multiply as she gets older and more sophisticated. The story that the *Primer* tells is about how Princess Nell is able to escape from the Dark Castle, but how she must leave Harv behind because he "too big and had to stay locked up" (*The Diamond Age*, 109). The *Primer* thus prepares Nell for the day when she will leave the Leased Territories, and for the fact that Harv will not be able to follow her into her new setting. The *Primer* produces the result it predicts when Harv and Nell are forced to run away from home to escape their mother's extremely abusive current boyfriend. The children seek refuge with Brad, one of their mother's former boyfriends. However, only Nell is able to stay with him because her speech and comportment patterns – learned from the *Primer* – allow her to blend into the enclave to which Brad belongs. As the *Primer* predicted, Harv is "too big" to escape with Nell, in the sense that his social being, as the author of criminal acts, is written already, and this social being precludes him from entry into the enclave.

Given the radically different social context between Hackworth (the programmer) and Nell, the social perceptions that the *Primer* gives Nell do not always prove reliable. Although the *Primer* teaches Nell not to trust strangers through a story in which "the ractive [was] made in such a way that, once she'd made the decision to go away with the stranger, nothing she could do would prevent her from becoming a slave to the pirates" (*The Diamond Age*, 225), it is Harv who must teach her "You can't see 'em. They don't look like pirates, with the big hats and swords and all. They just look like normal people. But they're pirates on the inside, and they like to grab kids and tie 'em up" (*The Diamond Age*, 67). Similarly, when Nell and Harv run away from home, Nell is drawn to a park as a place of refuge, since Princess Nell spends a lot of time in enchanted forests. The children

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

must rely on Harv's real-world experience of their socio-economic context to understand that they will be attacked by security drones if they remain in the park, as those who own it refuse to let transients take up residence there.

Eventually, the *Primer* successfully interpellates Nell as a subject who can negotiate the world of the New Atlantans. Sponsored by Lord Finkle-McGraw – who has discovered the theft of his commission and who desires to see how his theories of its efficacy will play out in Nell's life – Nell attends a school in New Atlantis. However, it is when Nell is immersed in the New Atlantan social context that the differences between her early life experience and those of the girls born into this enclave become apparent. This difference between the representations of the *Primer* and Nell's social experience is the source of her ability, ultimately, to resist the subject position the *Primer* prepares her for, and to strike out to "seek her fortune" (*The Diamond Age*, 469). The gap between experience and representation, I will argue, is the space for the agency of the social subject to resist the call of ideology and to articulate a reverse discourse.[4]

In contrast to Nell's social trajectory from poverty to privilege, the character of Lola in *Random Acts of Senseless Violence* follows the reverse path from privilege to social exclusion. Although it is set in the near future, *Random Acts* lacks the technological elements that are expected in a SF novel.[5] As we discover from other novels within Womack's series, it is not that technological innovation is absent from this world: it is just that the experiences of Lola, the twelve-year-old protagonist, do not include access to this technology. The world in this novel shares some of the characteristics of the cyberpunk world such as a belief that governments will increasingly come to lack power as

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

corporations gain it, and that individuals will become increasingly irrelevant to the economy, which will dominate social life. Where Womack's text differs radically from cyberpunk representations in is the status of the body. Lola is not a hacker striving to escape the meat of her body. Instead, Lola's body is central to her subjectivity and to the narrative as she strives to ensure its physical safety in her increasingly violent social circumstances, and as she struggles with her "queer"[6] sexual desire. This novel clearly reveals how the irrelevance of the body is a subject position available only to the privileged. The novel narrates the changes in Lola's life and character as she moves from occupying the subject position of daughter of middle-class parents to occupying that of homeless street gang member. The picture readers receive of this world is limited to the perspective that Lola is able to provide, which entails an absence of technology and a failure to imagine the source of political power. In contrast to the hacker-heroes of many cyberpunk narratives – often teens that live away from their families in communities of hackers – Lola's concerns are not with infiltrating data stores or acquiring the latest deck. Instead, as her daily life becomes increasingly full of violence and risk, Lola's focus is on her physical survival. Her survival is not predicated on her ability to master technology but on her ability to use her body to protect herself (and eventually to act out her aggressions against the world).

The novel is written in the form of Lola's diary. The book opens in February when Lola receives the diary from her parents as a present for her 12th birthday, and ends in July when she abandons the diary – and any attempts to continue her previous social existence – to join the DCons, reputedly the most dangerous street gang. Lola names her diary

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Anne, recalling to the reader the diary of Anne Frank and the similarly abrupt and violent ending of her narrative. One of the main themes of the novel – and another connection to the story of Anne Frank – is the violent, material consequences for social subjects who are othered by oppressive political power structures, as happens to Lola and her family. *Random Acts* demonstrates in a visceral way the difference between occupying a body that matters and occupying one that does not. Theodore Schatzki argues that a change in social circumstances – a change to the disciplinary power that acts upon the body – will produce a new social subject: "Merely subjecting a body to particular conditions suffices to produce persons of new types" ("Practiced Bodies," 54). Lola's story epitomizes this argument. Lola's body and how it is positioned in the discourse of others are crucial to her identity throughout the novel and to her growing sense of isolation that eventually erupts into violence. When her family is forced to move to the "ghetto,"[7] Lola is rejected by her private school friends for inhabiting a poor body; she is later further rejected by both her friends and her sister for inhabiting a queer body; finally, she is rejected by the new friends she makes in the new neighbourhood because she inhabits a white body.

Lola's growing sense of isolation is paralleled by events in the external social world of the novel, a world that the reader is able to see only through Lola's eyes. What glimpses we do get of the larger social context suggest a world in recession that is increasingly polarized into Us versus Them categories. The news reports are filled with stories of riots in various cities, while the teenage prank of setting homeless people on fire no longer even makes the news. The government turns the army on its own inner-city citizens in Operation Domestic Storm, while Lola's fundamentalist Aunt Chrissie and her husband

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

are "buying semiautomatics because they think there'll be an uprising of the maids and gardeners" (*Random Acts*, 35). The increasing poverty of Lola's family and their need to occupy the social space of poverty fragments their perception of social reality and opens a gap in the hegemonic discourse, a discourse they previously saw as natural. Lola reports the following exchange with her mother while watching the President on the news:

> He said the nation was poised for recovery like he always said. He also said on the advice of advisors mobs of animals in the cities would be shown no mercy. 'Does he mean us?' I asked Mama. 'No sweetie he means everybody else' Mama said. We watched some more but he didn't say anything else but how great America was. 'How will they tell the difference between us and everybody else?' I asked but Mama didn't say anything like the answer should be obvious. (*Random Acts*, 120)

Lola more readily adjusts to the fact that they have moved to the new neighbourhood, and that their social position is not the same as it used to be, than does the rest of her family. Her father is increasingly absent at his new job, her mother is increasingly absent in a world of anti-depressants and anti-anxiety medications, and her sister retreats into sleep and obsessive rocking. Only Lola acknowledges their new social circumstances and engages with the people in the new neighbourhood. Her experiences of living in the neighbourhood allow her to gain the critical perspective that – other than to the still-privileged outsiders – the differences between "us" and the President's "mobs of animals in the cities" in not an obvious one. Unlike her mother, Lola no longer believes that there is a distance between her family and everyone else in the neighbourhood. The rhetoric of othering deployed from the perspective of privilege – the perspective represented by the television – can no longer perform its ideological work on Lola; its obviousnesses are no longer obvious.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Lola's mother tells her that they gave her the diary to record everything that happens to her so that she "could remember how sweet life is even when it doesn't seem like it anymore" (*Random Acts*, 9). The diary becomes for Lola a kind of autobiography in which she charts her changed social circumstances and writes herself a new self that is capable of surviving in this new context. In his study of the process of constructing narratives in autobiography, Mark Freeman has observed that Saint Augustine used his autobiography to write for himself the better self he wanted to be, and then, finally, to translate this discursively articulated self into his material self.[8] Lola's diary functions in a similar way, but instead of writing the self she wishes to become, she writes of the increasingly violent self she finds herself becoming in response to her changed social circumstances. Lola articulates her desire to avoid becoming this discursive self, and sets up an opposition between writing and acting such that her ability to express her frustration to Anne works to prevent this frustration from erupting as violence in the material world.

Lola's diary charts her attempts to remain 'the same person' she was when she lived in her old neighbourhood and her inevitable failure in this project because the social institutions and people around her insist upon interpellating her in a new way once her material circumstances have changed. Lola indicates in her writing to Anne that she initially feels out of place in the new neighbourhood, but that necessity aids in her adjustment:

> Anne where Jude lives is so awful but after a while I got used to it and it felt like a nice place. It's like our apartment now it's not as good as our old one but it's home just the same. It was weird though that you could adjust to something so quick and I wondered if I were Jude if I could ever get used to living in a place like hers. (*Random Acts*, 125)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Lola adjusts because she must. Although her parents insist that the move is only temporary, she is aware that they are lying; she comes to understand that they are lying to themselves as much as to her: "'we won't be gone that long I'm sure of it' Mama said. 'I believe you' I said. 'I'm sure of it darling oh don't worry' Mama said. Then I knew she was trying to convince herself and not me so I didn't say anything else" (*Random Acts*, 58). The changes to the material and disciplinary setting of Lola's body produce changes in her subjectivity, that sense of interior essence that is a product of culture's writing upon the body. Lola understands that she is changing and feels her 'real' self slipping away. She writes "I'm worsening when it comes to writing Anne but my energy drains too quick sometimes. ... I paid the phone bill but rent's coming due. I can't remember what I used to be like Anne it fears me" (*Random Acts*, 231). Lola has moved from the material existence of twelve- year-old private school girl, to that of a street gang member who must now worry about how to steal the rent money; it is not surprising that Lola has difficulty remembering her previous identity or that her changed material conditions have produced a new interiority. Writing the diary is Lola's attempt to articulate a self that she can still recognize, but as the material conditions become more and more demanding of her time and energy, she is less able to write to Anne.

One of the things that Lola articulates clearly in her diary is her increasing sense of isolation. Anne becomes the one friend who will listen to her and understand her need for community. Lola becomes a criminal, a social outsider, in large part in response to the ways in which she feels society has excluded her and her family, producing them as bodies that do not matter. Lola personifies Anne as a correspondent who will notice gaps in the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

conversation and who may consequently become annoyed or worried. She apologizes and explains when other demands prevent her from writing on a daily basis: "Anne I'm sorry I'm not being as diligent as I should be in writing to you every day but you know how it is with distractions like parents and sisters and school" (*Random Acts*, 26). Lola has learned from her parents the strategy of denying or minimizing problems, and she therefore feels that Anne is the only safe outlet for expressing her own anxieties. When she comes into conflict with her private school friends over her queerness, she writes to Anne, "I didn't want to talk to Boob[9] because she wouldn't understand and I didn't want to talk to Mama because I didn't know what she'd say. I wanted to talk to you Anne but Wednesday night it was hopeless" (98). Not only does Lola feel that she can't talk to her family about her own problems, but she also feels that she must try to help them solve their problems. Anne becomes the only 'person' who is available to Lola rather than making demands of her: "Sometimes I think no one in my family needs a shrink they just need me. I need somebody but outside of you I don't know who Anne" (*Random Acts*, 137). Eventually, however, simply writing to Anne is not sufficient to provide Lola with a sense of community. As she tells Anne, "nobody else hears when I word except you problem is you don't talk back" (*Random Acts*, 219).

Lola increasingly articulates the need for her diary to vent her frustrations as an antidote to acting them out in the material world. Lola's diary becomes a catalogue of all the ways in which she and her family are disadvantaged by their economic fall, and her sense of helplessness to solve any of the problems. Her sister becomes progressively

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

catatonic as the private school girls attack her for her newly perceived difference from them. Lola reports:

> After we moved here they started calling her Ghetto Girl even though we're not ghetto people we just live in a poor neighborhood. They wrote welfare mother on her desk in Geography class in black magic marker and her teacher made her wash it off. They laugh at her clothes even though they're the same clothes she was wearing before we moved here.
>
> (*Random Acts*, 165)

Lola's father is exploited at his new job as manager for a bookstore, forced to work overtime without compensation and to pay for any mistakes employees make under his supervision. This exploitation culminates in the owner's refusal to give the family the last paycheque, because the overtime required to cover for Lola's father after his death "evened out" (*Random Acts*, 216) with the amount of money owed to him. Lola vents her sense of helplessness to prevent or fix her family's suffering as rage in her diary. She writes "So I'm just miserable Anne and I'm so mad but there's too many people to be mad at. Sometimes I think I'm going to go post office like everyone else" (*Random Acts*, 111).

Lola contains her desire to "go post office" by using the diary and her sense of Anne as sympathetic addressee to control her feelings. However, as Lola comes to feel increasingly socially isolated, the diary proves less and less efficacious for containing her rage. After she is forced to fight with another girl to prove her membership in the neighbourhood gang, she tells Anne "when I think about what she did I get so mad I can't even think. That's not good because one thing I've always prided myself on is that it used to be I can think when everyone else is going crazy. It's getting harder and harder though. I just feel even more alone than before" (*Random Acts*, 144). Increasingly, Lola does not have the distance to reflect on her options in the diary before choosing a course of action. The

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

immediacy of violence and danger in her new surroundings force her to react rather than think. Recounting a confrontation between gang members she says "I couldn't believe how violent they got so quick it was scary" (*Random Acts*, 142) and reflecting upon her own attack on a man who grabs her friend Iz on the street, she worries about her lack of concern in attacking another person:

> Today I suddenly felt bad about hitting that guy like I did when he jumped out and put a hold on Iz. Anne what's the matter with me why didn't I think of it before now? Sure he could have hurt her and when I think about it I know I'd do it again if I had to but why did it take so long to rack me like this? It wasn't like he wasn't human or anything. I could have killed him and it took me till today to care. (*Random Acts*, 180)

Initially, the violence in Lola's diary is metaphorical and used to express her feelings in a controlled manner. She explicitly links the process of writing to her containment of acting: "I have to write and tell you what happened today because I feel like I'm ready to explode if I don't" (*Random Acts*, 91). However, as Lola becomes increasingly isolated from her original social circumstances and increasingly absorbed in the day-to-day life of her ghetto neighbourhood, the diary is no longer sufficient to contain her anger. The street language that she begins to use instead of her original prose suggests this need for action. The street language displays a pattern of verbing[10] most nouns, producing a sparse prose style that emphasizes immediate action.[11]

The breaking point for Lola comes when she feels that her new friends in the street gang have rejected her. Lola has consoled herself with the thought that, although she is cut off from her previous social existence, her connection to these new friends ensures a continuing social space for her. However, two incidents challenge this belief and sever Lola's last connection to a larger social network. In the first, Lola calls Iz and asks her to

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

come to the hospital when Lola's mother collapses. Another friend, Jude, who has been a competitor with Lola for Iz's affections, arrives instead. Jude tells Lola that she is making too many demands on Iz and that Iz needs to put herself and her own people ahead of Lola. Lola believes that Jude and Iz are rejecting her because she is "girl exclusive," while both Jude and Iz sleep with boys as well as girls.[12] Jude informs Lola that it is her race rather than her sexual preference that forms the basis for their rejection of her: "'Girl that's not what's meant' she said. 'We're tribal. You're not. Her flinging with you's a catkiller nada more. Am I incoming or not?'" (*Random Acts*, 238). After this incident, Lola recounts her sense of isolation to Anne:

> I'm unsoulled Anne I'm racked total now constant. I never felt so lone bereft lifelong. It's an evil year when everybody skips me first my Brearley friends then Daddy Boob and now Mama and Iz gone gone the same day. Rethinking what's already downgone my aching breaks me open like I'm bleeding everywhere an allover visit from granny. We lived right one time Anne and then it all popped there's no knowing why there's not. What did I do to bring down this what. When I solo now I feel constant set to blow like I could bloody everbody I see unreasoned I know but that's that. I don't see how it's handleable but everbody bypasses somehow they say but it's hard to think I will there's too much I hate now. What did I do Anne what did I do. (*Random Acts*, 240)

Cut off from everyone, Lola feels anger that is not "handleable," anger that can no longer be contained in her diary. The final break for Lola comes when she is separated from Iz and Jude in a riot. Jude calls for rescue from some influential sexual clients, and a limousine comes to save her and Iz. Lola watches the limousine run over people in its path as it leaves the scene and later accuses Iz, "You'd driven over me too if I'd been in front of you" (*Random Acts*, 250). Lola's escalating desperation is reflected in her prose style which

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

moves from relatively correct grammar in the earlier diary entries to a spill of run-on sentences, comma splices, and fused sentences as the book progresses.

After this break with Iz, Lola moves to break with the one 'person' left in her life, Anne. Her narrative suggests that, in her desire to avoid being rejected by this final 'person', Lola chooses to reject Anne before Anne can reject her. Lola writes herself out of her book, having completed the discursive articulation of her new, street self and therefore moving on to its material existence outside of the text. Now alone and "unsoulled," Lola decides to take material action against someone who has wronged her and helped to produce her as this abject subject. She describes her rage to Anne, not as a strategy for containing it, but in order to share her plan for acting it out with her friend. Lola again experiences the sense that she can no longer recognize the self she has become, telling Anne "When I eye myself mirrored I don't see me anymore it's like I got replaced and didn't know it but I'm still here underneath I'm still here" (*Random Acts*, 241). She translates her violence from discourse into action by attacking Mister Mossbacher, the owner of the bookstore where her father worked, and beating him to death with a baseball bat.

Lola is unable to perceive the larger power structures at work that have produced both Mister Mossbacher and Lola in their respective subject positions, but Womack suggests a social world in which those who hold real power are beyond the reach of abjected individuals like Lola.[13] Mister Mossbacher is within Lola's sphere of influence, but killing him does not do anything to change the institutional structures that disempowered Lola and her family. After attacking Mister Mossbacher, Lola gets a glimpse

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

of this larger, determining structure when she notes "It weirded me sudden that Mister Mossbacher owned a store but housed in a building like ours" (*Random Acts*, 252) but Lola is too far gone in her rage to care. Mister Mossbacher does not even know who she is or why she kills him. After crossing this line from discourse into action, Lola realizes that she can no longer return to being the old self who began to write the diary. Her final entry is her good-bye to her friend, Anne, as she abandons her efforts to construct a self through narration and goes to join the DCons gang. Lola's final diary entry – a mere six months after the diary began – concludes: "Can't cut me now. Can't fuck me now. Can't hurt me now. No more. No more. Night night Anne. Night night. I'm with the DCons now" (*Random Acts*, 256).

Writing on the role of victimized characters in postmodern narrative, Mark Ledbetter argues:

> Victims in an ethic of reading and writing are those persons desperate to be heard and seen (note passive tense) and whose alternative to a literal disappearance from the human story is to commit desperate acts of violence to themselves, even to those they love, in order to create a world that, while not of their choosing, is at least of their making.
>
> (*Victims and Postmodern Narrative*, 22-23)

Womack's portrayal of Lola exemplifies this thesis. Lola chooses to destroy the remnants of her old social world – living with her family, trying to make friends in the neighbourhood – by crossing the line and joining the DCons rather than to wait for these things to be stripped from her by outside forces. The violence that Lola offers to the world through her attack on Mister Mossbacher is a reflection of the violence Lola believes the world has offered to her as it gradually stripped her of all human connection. Her defiant final diary entry "Can't fuck me now. Can't hurt me now" suggests that, ultimately, she is

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

more victimized that victimizing. In the final analysis, Womack's title is ironic: the acts of violence are neither random nor senseless. Instead, acts of violence are deployed within a social context in which one cannot reach the true author of one's abjection and so one attacks those within reach, targets who perceive the act as random and senseless. Lola's diary is her resistance to this characterization of her violence, insisting upon the rationality of her target and the necessity of her act. She offers the diary as a counter to the distortions of official narratives, claiming "I started penning cause you had to know what happened today it's what they'll never tell and memories don't flypaper everything" (*Random Acts*, 249).

Both *Random Acts* and *The Diamond Age* suggest that culture, not nature, forms the social subject and both posit the technology of reading and writing as central to this social shaping. *The Diamond Age* opens with an epigraph from Confucius which reads "By nature, men are nearly alike; by practice, they get to be wide apart." This insight structures the novel and Stephenson's representation of the role of the *Primer* in shaping social subjects. The *Primer* is created because of Finkle-McGraw and Hackworth's belief that culture creates the difference between people who will become exceptional and those who will remain marginal: "Finkle-McGraw began to develop an opinion that was to shape his political views in later years, namely, that while people were not *genetically* different, they were *culturally* as different as they could possibly be, and that some cultures were simply better than others. This was not a subjective value judgment, merely an observation that some cultures thrived and expanded while others failed" (*The Diamond Age*, 20-21). Miss

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Matheson, the head of the neo-Victorian girls' school that Nell attends, explains to Nell that superior culture is the foundation of the New Atlantan society:

> Now, there was a time when we believed that what a human mind could accomplish was determined by genetic factors. Piffle, of course, but it looked convincing for many years, because distinctions between tribes were so evident. Now we understand that it's all cultural. That, after all, is what a culture is – a group of people who share in common certain acquired traits. (*The Diamond Age*, 321)

Finkle-McGraw and Hackworth believe that the ideology embedded in the *Primer* will produce its reader as a social subject who embodies all that is strong about neo-Victorian values while at the same time contributing an element of independence – of the subversive – that will produce the reader as a creative and innovative thinker who can expand on the culture of her tribe. The title of the *Primer* brings to mind Victorian conduct books, interpellation machines that are designed to produce the same result in each reader. The interactive quality of the *Primer* – its ability to perceive and respond to the environment of its reader – results in the *Primer* being a different text that forms a different subject for each reader. Finkle-McGraw offers his view on this relationship between text and context when he observes Nell, Fiona and Elizabeth playing together:

> I will expose myself to the risk of humiliation by predicting that Elizabeth reaches the wall first; that Nell finds the secret way through; but that your daughter is the first one to venture through it. ... Elizabeth is a Duke's granddaughter, accustomed to having her way, and has no natural reticence; she surges to the fore and claims the goal as her birthright. ... Nell stands above the fray and thinks. ... To the other girls, the wall is a decorative feature, no? A pretty thing to run to and explore. But not to Nell. Nell knows what a wall is. It is a knowledge that went into her early, knowledge she doesn't have to think about. Nell is more interested in gates than in walls. (*The Diamond Age*, 289)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

While each of the girls has been taught to explore her environment by the *Primer*, their various social experiences beyond the text have produced them as radically different social subjects in their method of engaging with the world.

Elizabeth learns from the *Primer* to question authority and the given, but her protected social circumstances do not provide her with a goal toward which to direct her energy. Elizabeth eventually runs away from the New Atlantan tribe and joins CryptNet, a tribe that embodies anarchy and secrecy, but which has no social goal on which to focus its subversive energies. Fiona treats the *Primer* as a fantasy space, a realm in which her father – who gave her the *Primer* just before leaving for a 10-year secret mission – is not absent. To Fiona, the *Primer* is an alternative to her material existence and an escape from its vicissitudes. Fiona eventually leaves the New Atlantan tribe and joins the Dramatis Personae, a troupe of actors whose style purposefully blurs the lines between acting and living. It is only Nell, for whom the *Primer* has provided a means to change her given social circumstances and create a space for herself in a different social world, who treats the *Primer* seriously, as a tool of social engineering.[14] Nell eventually learns from the *Primer* how to use discourse as a tool to shape worlds of her own design, both in her work of writing fantasy scenarios for Madame Ping's brothel, and in her eventual leadership role for the new tribe of citizens produced by the second edition of the *Primer*. This second edition of the *Primer* is produced en masse – 250,000 copies – to serve as the primary education tool for a group of refugee Asian girls who have been saved from death after being abandoned by their parents due to famine and their gender. The second edition of the *Primer* uses a voice generator rather than ractors to speak to the girls. By the end of the novel, the other

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

tribes are forced to acknowledge that these girls "constitute a new ethnic group of sorts, and that Nell was their undisputed leader" (*The Diamond Age*, 489). The extremely isolated social experience these girls had while growing up means that the *Primer* has been the only influence on their social constitution. The Asian girls therefore do not make any distinction between their loyalty to Princess Nell in the story, and their loyalty to Nell as leader in the material world. This unique cultural context has produced a new social subject position.

Random Acts also suggests that it is culture, not nature, which produces social being. This theme is present in *Random Acts* primarily through the narration of Lola's transformation into a killer through her experience of social exclusion. Additionally, *Random Acts* suggests that the difference between the Brearley girls and the street gang girls is access to education, not superior intelligence. When she visits Jude's home in an abandoned building, Lola notices a certificate on the wall that says "Outstanding Student Sixth Grade Judy Glastonbury" (*Random Acts*, 124). Lola also learns that Jude no longer goes to school because she had to run away from home to escape her rapist father. At the beginning of her diary, Lola announces "Boob and I love school" (*Random Acts*, 12), but after her experiences of ostracism by her classmates, Lola tells Anne "I hate it that it's school again tomorrow and that's sad because I used to love school so much" (*Random Acts*, 148). The influence of culture in producing the social subject is largely seen to be the effect of the way in which one is positioned in the representations of others, and treated materially as the subject one appears to be in such discourses. Both the teachers and the students start to treat Lola and her sister differently after they move. It is this sense of how

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

others view her that contributes to Lola's increased hatred of school, and therefore to her social production as a delinquent. Lola tells Anne "I wondered why I was even bothering [to go to class], since no one would talk to me once I got there and I was being treated like I was dysfunctional or a challenged child or something" (*Random Acts*, 110).

Lola is struggling with the changes brought about by her family's economic downfall at the same time as she is dealing with her own developing sexuality. Lola continually fears that the reason that she is different from everyone else, the reason that she goes "post office," is because she is queer. Womack, however, makes it clear that it is not Lola's sexual desire that sets her apart from everyone else, but that it is her social abjection – in part because of this desire – that produces her as a criminal subject. Lola's struggle to comes to terms with her queerness parallels her attempts to think through the social abjection of ghetto subjects. Initially, although Lola feels sexual desire for her friend Katherine and they kiss, both insist that they "just kissed because we wanted to" (*Random Acts*, 87) and not because they were queer. Lola understands that the position of queer is a socially abjected position and so she insists that her sexual desire for girls must be something else, because she does not perceive it to be pernicious in the way she understands queer is supposed to be. Later, Lola comes to acknowledge her desire to herself, but insists upon keeping it hidden for fear of social rejection. Although she believes Jude and Iz have "been queer together sometimes," she tells Anne "I didn't say anything else because I didn't want Iz to think I was a queer if she's not" (*Random Acts*, 134). Finally, after a sexual experience with Iz, Lola begins to reject the negative construction of queerness because it doesn't fit her experience:

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

> Anne it was so nice just lying in bed with Iz holding and petting each other like kittens. If I closed my eyes it was like I was touching myself but I wasn't I was touching Iz which is a weird feeling but good. Maybe I am queer Anne but if I am it's not awful that's all. (*Random Acts*, 185)

Lola continues to worry that the difference of her queerness is the source of her social isolation, writing "There's nothing wrong with me there isn't but everyone else thinks so when they know even if they don't know" (*Random Acts*, 204). Lola recognizes that other people think there is something wrong with her desire – "everyone else thinks so when they know" – but argues that this judgement is based on a misperception of what that desire actually is – "even if they don't know." Finally, Lola insists to Jude "Nada's wrong with me cause I girl exclusive" (*Random Acts*, 238).

Jude's response to Lola – that it is because of her race rather than her sexual orientation that she is positioned as an outsider – ties in to the parallel between discursive constructions of queerness and discursive constructions of ghetto subjects. Lola responds to Jude "Maybe it's true that what's blooded tops all but if so it's a worse world than I ever specked Anne that limits who's close overmuch and divides and conquers just like the big boys want. Love's love whoever's loving Anne it always seemed to me" (*Random Acts*, 238). This response functions equally as a condemnation of racism and of homophobia. It is Lola's love for Iz that helps her to understand that the pejorative construction of ghetto subjects is as false to the real material existence of people living in the ghetto, as the pejorative construction of queer subjects is false to Lola's experience of sexual desire for Iz. Lola reflects on the reasons why her friends at Brearley will no longer talk to her and decides "It couldn't be just because we had to move up here but maybe so, I've heard them talk about public school girls like Iz before and it's always like they were just deadhead

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

trash. Maybe that's what they think I am now" (*Random Acts*, 113). While telling Anne about a conversation between her right-wing aunt and her mother, Lola begins to deconstruct the discursive boundary between her neighbours as ghetto people and her family as people who just live in a poor neighbourhood: "Chrissie told her that if we're murdered in our beds Mama has no one to blame but herself since she insists on keeping us here surrounded by what Chrissie calls those people. Iz is those people and I love Iz she's my best friend" (*Random Acts*, 182). Once she experiences poverty, Lola understands the falsity of representations of poor people and their reasons for living as they do. The absurdity of Lola's conflict with one of her teachers over her appearance suggests the breadth of the gap between experience and representation: "Today Miss Wisegarver asked me why I'd stopped dressing up for class and wearing jeans and khakis instead. I told her we'd had to cut back on our dry cleaning which is the truth. She shook her head and said that anyone who really cared about how they looked could always find the money for dry cleaning if they really wanted to" (*Random Acts*, 112). Lola's next comment in her diary recalls the scarcity of food in the house, indicating that Lola is able to reject the teacher's statement, seeing it as a biased perspective rather than as the 'truth'.

These examples of homophobia and racism suggest that one of the ways in which the social produces its subjects is through abjection, and that this process of exclusion is responsible for the very result it fears. Both *The Diamond Age* and *Random Acts* portray a social world in which group loyalties are the most important determinant of fate. It is not individual ability that shapes one's social existence, but social community. This emphasis on the importance of community can be linked to the critique of liberal humanism that I

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

made in Chapter 2 in my discussion of Banks. Liberal humanism puts the unique individual and his (possibly her) freedoms at the centre of its moral program. This emphasis on individual freedom entails a corollary emphasis on personal responsibility. While the individual is free to pursue whatever might suit his fancy – with the proviso that he not curtail the freedom of others – he is also free to fail, and this failure to thrive will be deemed a consequence of the subject's own inadequacy. Liberal humanism assumes a level social playing field, and this is patently not an accurate description of our social reality. Further, in its emphasis on personal freedom over community, liberal humanism reinforces a social order which obscures the distribution of power by institutional structures and which allows successful individuals within it to believe that their success is a 'natural' expression of their personal superiority. In short, liberal humanists take themselves to be 'self-made men' and they either deny the existence of their abjected others, or they posit this abjection as the fault of the 'naturally' inferior abjected subject. As I will argue in more detail below, in opposition to this perspective I argue that the success of the social subject is not an expression of personal merit or individual will, but is instead a measure of the degree to which that subject occupies a socially validated subject position. The community will support or abject the subject based on where that subject falls on the map of the culturally intelligible, and how the subject is interpellated by this social community will produce a corresponding interiority.

The key difference between Nell and Lola is that Nell is able to move into a community that will protect and value her, while Lola loses the various communities in her

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

life (private school, family, neighbourhood friends) as the story progresses. Nell's teacher Miss Matheson tells her

> It's a wonderful thing to be clever, and you should never think otherwise, and you should never stop being that way. But what you learn, as you get older, is that there are a few billion other people in the world all trying to be clever at the same time, and whatever you do with your life will certainly be lost – swallowed up in the ocean – unless you are doing it along with like-minded people who will remember your contributions and carry them forward. That is why the world is divided into tribes.
>
> (*The Diamond Age*, 321)

It is Lola's lack of any tribe, any community, that produces her as a "mindlost" (*Random Acts*, 252), abjected subject able to offer violence only. Lola continually insists that she fails to recognize herself in this angry person, arguing that she has been produced this way from the outside in rather than from the inside out. After killing Mister Mossbacher, she tells Anne "what got me most was that my hands looked like somebody else's it's true when that's said" (*Random Acts*, 252). Lola's diary can be read as a kind of autobiography. As Mark Freeman has theorized about narrative voice in autobiography, "the narrator, rather than being the sovereign origin of what gets said, is instead a kind of passage through which those discourses presently in circulation speak" (*Rewriting the Self*, 198). What is being spoken through Lola's voice is the way in which that the gap between (individual) experience and (social) representation can produce an abject social subject. Abject subjects are often silenced subjects, ones whose voices cannot be heard in ideological debate because they do not speak from a position of legitimated power. Lola's story warns of the danger of such silencing, and how such subjects may become forced to turn to actions when their words are ignored.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Most social interpellation does not work with the violent force suggested by Lola's experience and therefore does not produce such violent resistance. The *Primer* provides a more appropriate model for how a great deal of social shaping functions in its method of encouraging the reader to shape herself. Nikolas Rose has theorized that democratic societies rely on discourses that encourage social subjects to shape themselves in socially advantageous ways as a method of ensuring social stability without overt repression. Rose suggests that

> Public authorities act on them [private spaces of life] not simply through law, through establishing an educational apparatus, a social work system, and so forth, but also by altering the financial or cultural environment within which organizations and persons make their decisions, and by encouraging them to think and calculate in certain ways. 'Private' authorities act upon them, professionals and experts not only flourishing within the apparatus of state but also promulgating their visions of how to identify and solve problems through the sale of their expertise on the market, and through the dissemination of their messages through the industry of mass communication and popular entertainment. Liberal democracies increasingly depend on these indirect mechanisms through which the conducts, desires, and decisions of independent organizations and citizens may be aligned with the aspirations and objectives of government not through the imposition of political determined standards, but through free choice and rational persuasion. (*Inventing Our Selves*, 122)

Cultural ideological apparatuses, such as popular fiction, work to encourage their readers to identify with particular types of characters and particular types of choices and hence produce social subjects that correspond to the values promoted by that fiction. This idea corresponds with Collins' reading of the multiplicity of ideological calls found within popular culture, and the work of various genres to reproduce the subjects who are their readers. Rose's work focuses on the power of the 'psy' disciplines – psychiatry, psychology, and their various popularizations – to encourage the subject to perform the work of

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

monitoring and disciplining the self, their ability to make the goals of governance appear to be compatible with the goals of the individual. Rose suggests "the power of social psychology is to enable [the ideals of democracy] to be made congruent with *specific* programs for managing particular problematic areas of social life" (*Inventing Our Selves*, 118). As is suggested by my discussion, above, of how the *Primer* works, it functions as Rose argues the 'psy' disciplines do. The *Primer* teaches Nell appropriate courses of action by narrating the consequences of poor choices. Further, it encourages Nell to monitor her own behaviour, to "stand above the fray and think" as Finkle-McGraw puts it, through its interactive operation which requires Nell to make choices in order to move the story forward.

As a social interpellation machine, the *Primer* should be flawless. Although the novel only shows us Nell's *Primer* in action, we can assume that the other first edition copies function in the same way, as they are constructed from the same code. The *Primer* not only includes a database of appropriate cultural knowledge, but it tailors its use of that knowledge to the situation at hand. Further, it writes the girl who reads it as the protagonist of the story, encouraging a blurring of boundaries between discursive self and material self. Finally, the *Primer* functions as an interactive medium, teaching the reader skills she can apply to the material situation at hand, and requiring her mediation to continue the story. Given all the strengths the *Primer* demonstrates as a tool of social subject formation, why is it not successful in producing identical subjects from each of the three girls who read it? The answer, I suggest, lies in the fact that the social context for each girl's experience of reading is radically different. It is this gap between discursive

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

representation and personal experience that suggests both the limitations of texts in their function of disseminating ideology, and the possibility of a space for agency in their reception. I will argue in the remainder of this chapter that the gap between representation and experience, as represented in both *The Diamond Age* and *Random Acts*, offers a possible space for social subjects to resist cultural interpellation and offer their own reverse discourse responses to the calls of ideology.

Nell learns the lesson about the difference between representation and experience early in her life through the *Primer*'s story of the evil Baron Burt. Baron Burt – a character based on Nell's mother's boyfriend Burt – emerges in the story in response to Burt's physical abuse of Nell and Harv. In the story, the character of Dinosaur, based on one of Nell's dolls, plans to kill Baron Burt with a long, sharpened pole after Princess Nell and Harv have tricked Burt into drinking too much so he passes out. In the material world, Burt also drinks until he passes out. Rather than run away, as the *Primer* suggests, Nell decides to imitate the character of Dinosaur. In her previous readings of the *Primer*, she had been able to learn by imitating characters other than Princess Nell in the story, gaining the skills possessed by these characters through this imitation. Nell creates a long screwdriver in the matter compiler,[15] and attacks Burt while he sleeps. Her attack only awakens and enrages Burt and the children must run away from home in order to escape him.

Nell reflects upon this incident when she is older, and comments to her new guardian, "'I have been angry at my *Primer* ever since that night,' Nell said. ... 'I cannot help but feel that it misled me. It made me suppose that killing Burt would be a simple matter,

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

and that it would improve my life; when I tried to put these ideas into practice...'" (*The Diamond Age*, 281, ellipses in original). The Constable responds:

> Now, as to the fact that killing people is a more complicated business in practice than in theory, I will certainly concede your point. But I think it is not likely to be the only instance in which real life turns out to be more complicated than what you have seen in the book. This is the Lesson of the Screwdriver, and you would do well to remember it. All it amounts to is that you must be ready to learn from sources other than your magic book.
> (*The Diamond Age*, 281-282)

Nell takes the Lesson of the Screwdriver to heart, and begins to apply the critical reading skills she has learned from her interaction with the *Primer* to her reading of the social world. The crucial lesson that Nell learns from this conversation is to question representations rather than to take them as a straightforward reflection of reality. The Constable teaches her to understand this difference as that between education and intelligence. Nell comes to realize that while the *Primer* can educate her, she needs to reflect on her experiences both within the *Primer* and within the material world in order to derive any intelligence from them. The Constable tells her that "the difference between stupid and intelligent people – and this is true whether or not they are well-educated – is that intelligent people can handle subtlety. They are not baffled by ambiguous or even contradictory situations – in fact, they expect them and are apt to become suspicious when things seem overly straightforward" (*The Diamond Age*, 283).

After this exchange, Nell begins to find more subtlety and ambiguity in the experiences of Princess Nell in the *Primer*. As Nell nears the end of the story, all of the tales in the *Primer* have to do with the Turing machines. Each of the various castles that Princess Nell encounters in her journeys has a social organization that is controlled by a

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Turing machine. The *Primer* teaches Nell how Turing machines work and how to change their programming by requiring her to solve various problems at each of the castles, problems related to Turing machine malfunction. The *Primer* has learned from Nell's conversation with the Constable, and Nell discovers that "in recent years the *Primer* had become much subtler than it used to be, full of hidden traps, and she could no longer make comfortable and easy assumptions" (*The Diamond Age*, 346). Through her experiences with Turing-machine-constructed social worlds within the *Primer*, Nell learns to view the various tribes that make up the material world as additional examples of Turing machines. As with the castles in the *Primer*, Nell is able to understand social structures as the outcome of the systematic application of rules; that is, as arbitrary albeit orderly constructions. Her position as an outsider who has experienced life in contexts other than the neo-Victorian one allows her to understand neo-Victorian values as one programming choice among many rather than as natural or right.

More importantly, Nell's ability to perceive the material world as another Turing machine provides her with the insight that the social order is not only constructed, but it is also subject to change. Once she understands the neo-Victorian society as a institutional structure programmed to work within a defined set of rules, she realizes that one can control the outcome of the 'program' by understanding its parameters: "She had the neo-Victorians all figured out now. The society had miraculously transmutated into an orderly system, like the simple computers they programmed in the school. Now that Nell knew all of the rules, she could make it do anything she wanted" (*The Diamond Age*, 323). With this knowledge, Nell feels free to leave the protected enclave of neo-Victorians and venture into

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

the larger world. Nell gains agency from her understanding of the social world as both a construction – rather than a natural given – and as a program that must continually run to reproduce itself – which is therefore subject to change. As Nell moves within more varied contexts in the social world, she comes to question the representations of the *Primer* itself and its neo-Victorian sensibility that members of the aristocracy are inevitably superior in quality to ordinary citizens. The *Primer* writes "She also bought a plain, unmarked saddle so that she could pass for a commoner if need be – though Princess Nell had become so beautiful over the years and had developed such a fine bearing that few people would mistake her for a commoner now, even if she were dressed in rags and walking barefoot" (*The Diamond Age*, 386).[16] Nell reflects upon this passage, observing "Princesses were not genetically different from commoners" (*The Diamond Age*, 386). Her reflections on this gap between representation and experience allow Nell to begin to understand how the program of ideology constructs not only the material world, but also the individual subjects within it, with their particular features, skills, attributes and social standing.

Lola also reflects on the gap between representation and experience. As I argued above, her struggle for identity and community is related to the gap she perceives between her experiences of friendship with Iz and Jude and her lesbian desire, and the pejorative representations of ghetto people and queers. Unlike Nell, Lola does not gain a sense of efficacy and agency through perceiving this gap. Lola's perception of the gap between representation and experience is also articulated in the novel through her response to information conveyed by the television media. While living in her original neighbourhood, Lola suspects that the television people are "fudging" (*Random Acts*, 18) when they say that everything is fine, based on her experience of her parents' habit of

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

minimizing problems to the children. Lola perceives a connection of reality avoidance in both her parents and the television images: "On TV tonight they showed the President meeting with the cabinet. I looked at his face and it looks like Mama's, I don't mean they look anything at all alike. I mean sometimes there just isn't anything there and I think he's on Xanax too" (*Random Acts*, 26). Both Lola and her sister are able to decode the overt statements made on the media and translate them into their 'real' meaning: "They said no one was killed today. 'Nobody important was killed today' Boob said and smiled" (*Random Acts*, 39). However, so long as they remain in their original neighbourhood, Lola believes that the television news will report the events, albeit in a distorted manner. She retains a degree of trust that the media reflect the reality of the material world.

Once the family moves to the new, poor neighbourhood, Lola discovers that the gap between representation and experience is far larger than the "fudging" that she had assumed. She begins to understand that the media is not simply minimizing the problem in the way that her parents do; instead, she realizes, the media is presenting an edited version of the material world in which some subjects matter (and appear), while others do not (and are absent). Once she lives in the neighbourhoods that are being classified as the 'domestic problem' against which the government must act, she recognizes the extent of the gap: "We stopped at 137th Street. 'Eye that way' Iz said. About ten blocks up there was a lot of black smoke and police cars and fire engines with their lights flashing. There hadn't been anything about more riots on TV so I thought it must have just started. 'Going down like this a week now' Iz said" (*Random Acts*, 106). After this experience, Lola learns to distrust the representations on the television and realize that "there's probably a lot going

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

on that they're not saying anything about" (*Random Acts*, 108). Although Lola does not reflect upon her experiences to theorize about the power structures that inform the media's choices, Womack provides opportunity for his reader to do so. Shortly after seeing the riot on the street, Lola reports on the contents of the evening news: "On the local TV tonight they didn't say anything about the riots right up the street. They interviewed a radio guy who said the homeless should be killed and the newswoman said really killed? And the radio guy said really killed. Then it showed the dog show" (*Random Acts*, 108).

Lola's relationship to television images provides a critique to postmodern analyses of media culture, such as Baudrillard's, which suggest that people are no longer able to perceive the difference between representation and reality. Lola's diary indicates that this world of the hyper-real is a world inhabited only by those subjects living in privileged circumstances. When she lived in the middle-class neighbourhood, the television images of the riots did have the quality of hyper-reality for Lola. However, once she is physically present, embodied in the moment on the street, the difference between the real and its representation becomes immediately apparent to Lola. The television reports that "the Army was controlling minor disturbances in troubled zones and everything was fine" (*Random Acts*, 163); Lola compares this to her experience of standing on the street corner watching "about ten dozen Army trucks and humvees and cars coming down 125th Street from the east. They turned onto Broadway and headed north to where the riots were. It looked like an invasion Anne I've never seen anything like it" (*Random Acts*, 116). It is not so much that the gap between representation and reality disappears, as that the standards by which something should be represented change with social context. When Lola's father

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

is still alive and her sister is angry about the way Mister Mossbacher is treating him, she announces "'Daddy should hit him on the head with a shovel and bash his brains in" (*Random Acts*, 96). Lola responds, "It's not cartoons" (*Random Acts*, 96), and explains that their father must tolerate the abusive behaviour because he needs to keep his job. At this point, Lola is still trying to connect with a larger social community and therefore respects its rules of conduct, the difference between reality and cartoons.

By the end of the novel, Lola has chosen to "bash his brains in" because she no longer feels connected to the social community in which such behaviour is inappropriate. Lola still perceives the difference between real life and cartoons, but her construction of the social world has changed such that violence is the only appropriate response to Mister Mossbacher. A new context produces both a new body-subject, and a new social world as that world is perceived/constructed by the subject. A similar transformation of self and world through changed context is discussed by Mark Freeman in his work *Rewriting the Self*. Freeman examines the autobiography of Jill Kerr Conway and her description of her move from life in rural Australia to life as a professor of history.[17] Freeman argues that a new self is created for Conway through her reflection upon her childhood past in the bush with the new insights about appropriation of land from aboriginals that she has gained from her new context within the university. Once she reflects upon this new hermeneutic context, Conway remakes her constructions of both the world and the self. Conway is forced to reevaluate her previous constructions of the land as empty before her family's arrival, and her previous pride in their homesteading. The new self that emerges from these reflections no longer wishes to return to the bush. My argument about Lola is similar to Freeman's

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

about Conway. Once Lola's experiences construct for her a new self, one that is socially abject, she constructs a new world, one which deserves her hatred. As Lola puts it, "He needs the fear put in him Anne and I need to let it out" (*Random Acts*, 250). For this new self, the act of bashing someone's brains in no longer belongs solely to the realm of cartoons.

Lola lacks access to a larger perspective that would allow her to perceive the inequitable power distribution that constructs the social world and its values. In part, Lola is unable to grasp this larger view because of her age, which is twelve. Additionally, however, Lola's experience is limited to what she is able to see in the two social contexts in which she has lived. Although she clearly perceives the differences between them, these experiences are not sufficient to allow her to deconstruct the values of either arrangement. The *Primer* is what allows Nell to learn about things outside of her day-to-day experience and thus gain a critical perspective on her experiences. At the same time, the gap between her experience and the *Primer* allows her to gain a critical perspective on the *Primer*'s advice. The space for agency and resistance comes from this doubling of perspective; books are what allow us to step outside the confines of our material existence, and see our social arrangements as contingent and cultural choices rather than as necessary and natural givens. Nell is able to gain agency through her reading because the *Primer* responds and speaks to Nell's social context. In contrast, Lola is frustrated by the requirement to read *Silas Marner* and *Tess of the D'Urbervilles* precisely because they have so little to do with her social context and cannot help her to negotiate her moral crises. Lola longs for books that will speak more clearly to her social situation, telling Anne "I wish we had other books to

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

read in school. I read *Life Among the Savages* by Shirley Jackson again tonight. I've read it a dozen times before, I love it so much" (*Random Acts*, 16). She cannot move from education to intelligence because there is no one to help her mediate the difference between the book and the world. Given that Lola's daily life requires her to develop skill in avoiding situations in which she may be raped, she finds it difficult to find relevance in Tess' moral crisis about Angel: "the book's even more boring than *Silas Marner* and a whole lot more annoying because Tess is such a wimp so far. I knew Angel would act like he did right from the start he's such a loser. She should have just gone somewhere off by herself where no one knew her and start over again I think but I guess it would have been hard" (*Random Acts*, 115). Lola's experience with reading literature suggests that, in the final analysis, books are not sufficient on their own to develop critical consciousness.[18] It is important to have a community of readers to discuss the representations in books, reflect on them, and challenge them if there is a gap between their representations and the readers' experiences. Lola's experiences suggest that if the technology of reading and writing is to be put to use as a tool to resist dominant ideology, a collective effort is required.

Both *Random Acts of Senseless Violence* and *The Diamond Age* articulate the integral connection between the self and the social, the reciprocal relationship of construction between them. My reading of these two texts has focused on the ways in which the social constructs the self for Nell and Lola; however, the reciprocity of the connection between self and social suggests that our selves can act on the construction of social reality, as well. Mark Freeman asks:

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

> If in fact both lives and the stories people tell about them are 'socially constructed' and if more generally one cannot ever really step beyond the discursive order inherent in one's own culture, how does one ever manage to go on to do something new and different? How does one ever manage to become conscious enough of the discursive order of one's culture to make transgression and critique possible? How, in short, does one undergo the transformation from a kind of object, prey to the constrictive forces of society and culture, to a willful subject, able both to put into question those narratives assumed to be given and to transform in turn the sociocultural surround itself? (*Rewriting the Self*, 23)

Freeman suggests that writing autobiography, constructing narratives of interpretation and understanding about the self, is the tool of this transformation. He argues that through such writing, one become conscious of the degree to and way in which the self has been externally constructed; this realization allows one to perceive and use those spaces for freedom that do exist. I would add that the practice of reading and interpreting fiction can function in a similar way. Through constructing readings of a text and coming to an understanding of why the characters become the people they do and make the choices they make, the reader is forced to reflect on those external forces which have determined the character. Through identification with such characters, the reader can come to understand the role played by external construction in his or her own life.

Every reading is also a rewriting. In our responses to the fiction we read, our evaluations of it as believable or ridiculous, insightful or useless, we make connections between the world of the text and our own social world. The *Primer*'s automation collapses the role of text and reader: it contains a database of cultural knowledge and invokes specific elements from this database in response to the context it sees around it. In our contemporary world of passive books, it is the agency of the reader that makes these choices, that selects from the available cultural texts and rewrites their tropes according to

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

the experience of the reading self. Writing self is also writing world, in the sense that by writing the story of how one came to be this particular self, one writes one's understanding of the social rules that structure the world in which one circulates.[19] In *Random Acts*, Lola has the sense that she becomes another self, one whom she does not recognize; she attributes the cause of this change to social exclusion, and to Mister Mossbacher who caused her father's death. Although Womack suggests that Lola's construction of the social world misses the true source of power, we can still understand Lola's construction of herself to be a construction of the world as she now sees it.

In Nell's case, as she reaches the end of the *Primer*, she comes to understand that the *Primer* has been a socially constructed world. In the final chapter of the *Primer*, King Coyote, the creator of the Turing machine castles of the Land Beyond, hands the kingdom over to Nell. Once she has been able to deconstruct the way in which the world has been constructed, she gains the power and the responsibility to "make new worlds for other people to explore and conquer" (*The Diamond Age*, 445). Stephenson suggests that the knowledge of world construction that Nell has learned moves from the *Primer* to the material world with Nell's role in the Fist[20] uprising at the end of the novel. Nell moves from being a leader, a Princess, in the discursive world to being one in the material world as she and her Mouse Army assist in the evacuation of refugees after the Fist attack. The argument of the novel has been that culture forms tribes; Nell is the leader of the new tribe of Asian girls, formed by the unique culture of the *Primer*.

It is important to remember, however, that Nell is able to move from her discursive identity to a material one because she has the support of a community – the Mouse Army –

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

in this move. Her newly articulated self is not simply a private fantasy or psychosis, but it is an identity which is culturally intelligible to the Mouse Army. As well, I am not suggesting that books alone make the subject, although they have in the very isolated case of the Mouse Army, a community of girls who have had no cultural experiences outside of the *Primer*. The necessity of this community support is evidenced by the fact that Nell is able to use the *Primer* as a tool for social change, while Fiona – who lacks a community of readers to share her story – uses it only for escapism. The parallel between making worlds in the *Primer* and making changes to the material world is located in Nell's insight that each function like Turing machines; they have a defined set of rules that can be used to produce predictable results. Nell's ability to effect change in the material world is predicated on the fact that her insight allows her to understand and manipulate its rules.

Both Nell and Lola move from discursively articulated identities – as the leader Princess Nell and as the violent Crazy Lola – to enacting these identities in the material world. Their ability to move between text and material existence suggests that readers of these novels can also take the knowledge gained from reflecting upon them, and apply this knowledge to the material context of their lives. Additionally, Princess Nell remakes world through the power of books: her knowledge of nanotechnology and Turing machines is embedded in copies of books that she finds in libraries within the *Primer*. When King Coyote passes on the task of world making to Nell, her first initiatives are to make copies of all these books for all of the girls in the Mouse Army and to begin her autobiography. Nell understands the power of discourse to shape her subjects and works to produce the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

books that will help her in her task: "The Land Beyond had vanished, and Princess Nell wanted to make it anew" (*The Diamond Age*, 462).

However, as I suggested in my discussion of Lola's alienating experience in reading for her English class, books alone are not enough to shape social subjects and thereby the social world. The representations in the books must be linked to experiences in the real world, or their readers will not perceive them to be relevant. As I have argued above, textual representations do not have to 'match' real world experience exactly; in fact, the gap between representation and experiences is the space where agency can emerge and change can be theorized. However, the discursive representations must have some link back to material community in order to move beyond the text. I have suggested, above, that a community of readers who can share one's perception of the gap between representation and experience is one of the ways in which community context can be created. Lola has no one other than Anne to share her perception that she is not "Crazy Lola" and she therefore fails to resist the social structures that would interpellate her as abject. Community endorsement is required for one's self-representations to have any efficacy, a perspective that belies the liberal humanist faith in individual achievement. Individual freedom of choice is only meaningful for subjects who have an adequate range of tolerable choices.

Nell is successful at discursively articulating a self which eventually translates into giving her more power in the material world than she had originally. Lola, on the other hand, feels that her true self is being stripped away from her and the new self she discursively articulates is a product of outside forces, beyond her control. Why do these two girls have such different experiences? The answer, as I suggested above, lies in the fact

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

that the social community acknowledges Nell's representation of herself as Princess Nell, while Lola's representations of herself are not socially validated. In short, Nell is able to become a body that matters, while Lola can not. Judith Butler has theorized about the link between intelligibility and survival, and the difference in the two girls' fates is an apt demonstration of this. Nell is acknowledged as Princess Nell when Queen Victoria II addresses her as an equal. Stephenson's text mirrors Butler's insight that social representations need to compel communal belief in order to be effective.[21] Victoria's ambassador to Nell notices that Nell is somewhat taken aback when she is addressed as Your Majesty, and reflects, "until she had been recognized in this fashion by Victoria, she had never fully realized her position" (*The Diamond Age*, 492). The communal belief – that of both her own subjects and of the leaders of other tribes – in Nell's authority to be Princess Nell means that she can successfully become the self she describes. Lola's attempts to articulate herself, on the other hand, are characterized by efforts to deny the representations of others: she is not a queer or, if she is, it is not a bad thing; she is not a ghetto person; she is not crazy. Lola is never able to move beyond this negative rejection of her place in the discourse of others to a positive articulation of her own construction of self.

Both Nell and Lola are examples of subjects who use the power of discourse for social critique. Sidonie Smith, writing on women's autobiography, has argued:

> Writing her experiential history of the body, the autobiographical subject engages in a process of critical self-consciousness through which she comes to an awareness of the relationship of her specific body to the cultural 'body' and to the body politic. That change in consciousness prompts cultural critique. (*Subjectivity, Identity and the Body*, 131)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Both Lola and Nell bring this critical consciousness and cultural critique to their reading/writing practices, Lola in her rejection of the pejorative construction of queer, and Nell in her questioning of Victorian values and aristocratic privilege. I have argued in this chapter that the ability to enact such a cultural critique, to reflect upon the relationship of one's specific body to the body politic, lies in the gap between representation and experience. Perception of this gap opens a space for agency, providing the possibility of questioning the given narratives and the socio-cultural order on which they are founded. Smith, like Freeman, theorizes about the practice of autobiography and relates this power to resist interpellation specifically to the practice of writing. I suggest that the practices of writing and reading are similar in this regard, and that reading a text critically opens a similar space in which one can reflect upon cultural interpellations and perform cultural critique.

My reading of these two novels suggests some of the problems with using fiction as a tool for social critique and social change. Just as the *Primer* cannot ensure that each reader will be produced as the same subject through her engagement with its contents, no novel can predetermine the path that the reader will take through it. As I argued in Chapter 3 about Case in *Neuromancer*, readers can form any number of identifications with texts, and characterizations intended as social critique may instead function as role models. In attempting to understand the ideological effects of a text, or in attempting to intervene in the dominant construction of ideology through our textual representations, we must pay attention to both the text itself and to the context within which it is read. A text will not perform the same ideological work for all readers. Just as the body must be conceived of as

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

a Mōbius strip, a blending between inner and outer, self and social in which it is impossible to determine where one ends and the other begins, so, too, must the practice of reading be understood as an inextricable blending of the ideological constructions of the text and the personal subjectivity of the reader. As Teresa de Lauretis has argued, "the self-representations and constructions of identity – imaginary and symbolic, subjective and social – that one brings to the viewing of a film and any other representation or 'ready-made fantasy' not only overdetermines but also restricts one's path through its multiple significations" (*Technology of Gender*, 148).

Nell's ability to remake herself into a social subject able to rise above her disadvantaged birth suggests that fiction can function as a technology to remake our selves. Through remaking our selves, we can work to remake the social structure of the world, to challenge the hegemonic ideological configuration. However, Lola's failure to remake herself suggests the limitations of such a project. The success that reverse discourses – either discursive or performative – will have in challenging the dominant discourse is contingent upon their ability to compel belief in a wider community of social subjects. Attempts to challenge the dominant ideology's construction of the self and the social must work within the gaps of discourses already in circulation. Reverse discourse practice is limited by the discursive-material context in which it is done. As Nikolas Rose argues:

> It is not into anything that persons may be assembled at any one time and place, and the vectors that are folded, have limits that are not ontological but historical. What is infolded is composed of anything that can acquire the status of authority within a particular assemblage.
> (*Inventing Our Selves*, 189)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Achieving this status of authority is essential to performing speech acts which are successful in challenging dominant ideology. The need to speak from a position of authority in order to be successful in one's attempts to intervene in the ideological construction of the social might, at first glance, appear to challenge the idea that popular culture texts can effectively intervene in ideological debate.

Judith Butler considers this issue of speaking from authority in her analysis of the attempts of victims of hate-speech to answer their detractors by recovering and reusing the words spoken in hatred. Butler asks: "If the performative must compel collective recognition in order to work, must it compel only those kinds of recognition that are *already* institutionalized, or can it also compel a critical perspective on existing institutions?" (*Excitable Speech*, 158). Her answer is that subjects who speak from a position that is not authorized can compel a critical perspective on existing institutions, not by using the words of hatred, but by using the authorized speech that those in authority use to describe themselves. The articulation of terms such as "freedom," "justice," or "natural right" by those subjects demarcated as excluded from them opens up to public scrutiny and debate the categories of authorization themselves. Butler's strategy is similar to Rosemary Hennessy's description of ideological struggle. Hennessy writes:

> the objective of ideological struggle is not to reject the entire ideological formation, but to reconfigure it, to sift through its elements and see which ones can serve to maintain the interests of a new ruling group ... it is both a process of contesting the articulating principle within a hegemonic formation and a process of disarticulating discourses from one frame of intelligibility in order to rearticulate them in another.
>
> (*Materialist Feminism*, 76)

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Hennessy's notion of the process of disarticulating and rearticulating discursive elements addresses the issue of socio-historical context in attempts to rewrite the self. Our reverse discourses must be assembled within the historical limits of discursive authority.

SF texts can function in a way that is similar to that described by Butler. Their relationship to 'real' science is something akin to speaking without authority. However, I would argue that, in so speaking, they offer a critical perspective on the discourse of authorized speakers. As I argued in Chapters 2 and 3, SF texts can offer insight into the social consequences of new technologies such as genetic engineering and virtual reality. SF texts appropriate the authority of the scientific speaker to comment on the social implications of these technologies, and attempt to intervene in the types of subjectivities that are forming through human interactions with technology. Science fiction is the unexpected other to the official discourse. It restores – albeit imaginatively – a construction of material, social reality to the technological context. In so doing, it offers us ways to engage with these technologies imaginatively and to choose the types of selves and the type of social that we will allow such technologies to create. SF texts produce problematic selves, as well. In my reading of *The Diamond Age*, I demonstrated that what the *Primer* shows us is that one's path through a text depends upon one's previous constructions of subjectivity and one's material conditions. The technology of reading and writing – like the technologies of genetic engineering or information that I discussed in previous chapters – is ultimately neither subversive or conservative in itself. The end result of any technology is a product of how the technology is used: according to which values and to produce what ends. SF can reshape subjectivities, but neither the author nor the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

critic has any guarantee that it will do so in desirable or intended ways. The problematic selves are the ones produced through our individualized paths through the texts. The writing of reverse discourses is a tool for social and subjective change but – like any other technology – its effects cannot be known in advance, nor ultimately, controlled by the original producer.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

NOTES

[1] It is interesting to note that both of these texts about adolescent girls are written by male authors. It is beyond the scope of the current project to engage with this issue. However, I will note that the age of the protagonists fits with the pattern within some SF by male authors that I discussed in Chapter 3; that is, female characters are usually either dangerous, sexy women or young girls.
[2] There is also a second 'edition' of the *Primer* produced in the novel that differs from the original *Primer* in that it does not use live ractors (interactive, virtual reality actors) to produce the speech coming from the book. This second edition of the *Primer* is distributed to 250,000 Asian girls. These girls have been rescued from death (by exposure) after they are abandoned as infants (because of their gender) by their parents. I will discuss this second edition of the *Primer* in more detail below.
[3] The ractor, Miranda, who does most of the speaking parts for the copy of the *Primer* used by Nell comes to feel as if she is raising Nell through the *Primer*. Although Miranda cannot speak lines other than those provided by the *Primer*'s script, she believes that she can influence the effect that the text will have on Nell through her delivery of them. Miranda becomes so attached to Nell and concerned with continuing her parenting that she sacrifices her own career as a ractor in order to take the *Primer* jobs over other jobs. Miranda changes her work schedule to ensure that she is available during the hours when Nell is most likely to use the *Primer*.
[4] I will return to this idea of agency and resistance in relation to both novels at a later point in this chapter after an initial discussion of *Random Acts*.
[5] This novel fits within a science fictional framework, in part, because it is part of a series of novels by Womack set in this imagined future. *Random Acts* is the last novel written in this series, although it is set in the earliest time period. The other novels in the series are more typical of the SF genre.
[6] The term "queer" is used by Lola throughout the text in her efforts to understand her identity as a sexual being. Lola both reports "queer" as the pejorative term used by her peers in their rejection of her, and uses the term as a self-descriptor in her attempts to articulate her feelings in her diary. The gap between representation and experience, which I will discuss further below, is crucial to Lola's attempts to work through what it means to be queer. She lacks another term to describe her desire, and so must struggle to reconcile her recognition that the term is used pejoratively by her peers, with her own sense of love and desire. I will discuss Lola's queerness in more detail, below.
[7] The "ghetto" is how Lola's old friends, her private school teachers, and her right-wing aunt refer to their new neighbourhood.
[8] See *Rewriting the Self*, p. 42-49.
[9] Boob is the family nickname for Lola's nine-year-old sister, Cheryl. Lola's family nickname is Booz.
[10] The choice to use "verb" as a verb is an example of exactly the type of language use that Womack develops for his characters.
[11] Some examples of slang that emphasizes action in the text are: "it's handleable," "blade you," "lipstill" (all from p. 106); "bedding with us," "churching," "fastfoot" (all from p. 118); and "truth me" (p. 133).
[12] Given the age of the characters, 'boys and girls' seems more appropriate than 'men and women'. However, although the incidents are not described in the novel, there is a suggestion that Jude sleeps with men, pretending to be 10 years older than she is. Jude trades sex acts for material goods, and it is her sexual connections that provide the limousine that rescues Jude and Iz from the riot.
[13] A wonderful image of the fact that real power lies beyond the reach of revenge of the dispossessed is given in the description of individuals trying to attack the helicopters that are removing important people from the reach of the rioting crowd: "Copters flew over and people threw rocks and bricks in the air but they didn't hit the copters, only the people who threw them" (*Random Acts*, 177). As well, the image of the limousine that rescues Jude and Iz indiscriminately driving over rioters who block its escape also fits within this pattern.
[14] Note that Hackworth, who designs the *Primer*, is a software engineer and is frequently referred to simply as an engineer. Ultimately, he is referred to as The Alchemist, suggesting the power of discourse to change social status, to turn dross into gold through appropriate discursive positioning.
[15] The matter compiler or M.C. is one of the main technologies in *The Diamond Age*. The M.C. creates any desired object from its constituent atomic parts based on software plans written by engineers like Hackworth. The M.C. technology is related to nanotechnology, the other main technology in the novel.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

[16] The changed typeface is a convention used in Stephenson's text to demarcate those passages that are 'read' from the *Primer* from the rest of the text.
[17] See p. 192-222.
[18] The fate of the Asian girls – called alternately the Mouse Army and the Disenchanted Army in the text – would also support this perspective. The characters who rescue the girls from death believe that they have failed to raise them properly because resources required that they be raised primarily by the books. Dr. X, the person responsible for the plan to save them, initially states that it was a mistake to do so. He corrects himself by explaining, "It would be more correct to say that, although it was virtuous to save them, it was mistaken to believe that they could be raised properly. We lacked the resources to raise them individually and so we raised them with books. But the only proper way to raise a child is within a family. The Master could have told us as much, had we listened to his words" (*The Diamond Age*, 455).
[19] Freeman's text comes to a similar conclusion about writing the self as work to change the world, which he argues on p. 223-231.
[20] The Fists are a group of young men from the Celestial Kingdom who are motivated by racism to attack and subjugate the Leased Territories.
[21] See *Excitable Speech*, especially pages 127-163 for a further elaboration of this idea. Butler's basic argument, drawing on Austin, is that some representations can function as illocutionary speech acts – that is, they can enact what they state simply in the statement – while other speech acts fail to be successful as illocution. The difference lies in whether or not the person performing the speech resides within a position of authority. The part of her argument that I am interested in here is that, regardless of the position of the speaker, speech acts as self representation are only successful at socially constituting the subject as represented if they compel the belief of the community. In other words, social existence is always interpersonal.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Conclusion: Towards a Critical Posthumanism

> *Over the year and a half since my amputation, I have come to learn that it's ridiculous (if not positively retrograde) to accept myself 'as I am'. I have found I can 'make myself over', reinvent myself as a 'harder' and, perhaps, even 'younger' body. In fact, right now I am contemplating plastic surgery: getting my eyelids done, perhaps removing the crease that runs downward from the side of my mouth and makes me look less happy than I really am. This then, is the power available to the 'polymorphously perverse' cyborg woman - though hardly what Donna Haraway had in mind when she wrote her ironic manifesto.*
>
> *Vivian Sobchack*

This quotation from Vivian Sobchack addresses the issues that have been central to this project: the identity of body as both self and as something that can be molded by the agency of self; the intersection of embodiment, technology, and subjectivity; and the function of identification in our desire to inhabit technologically perfect cyborg bodies. The quotation above comes from an article in which Sobchack discusses how her prosthetic leg has changed her relationship to the rest of her body, creating a desire to form the rest of the flesh into the perfect image that the titanium appendage offers. She goes on to argue – as I have argued – that it is important to resist the seductions of the cyborg body, that infinitely malleable and indestructible tool, and to retain an awareness of our embodied mortality. My analysis has been about both the seduction of the cyborg, the attainment of the perfect body through technology, and the nightmare of cyborg existence, the social consequences that emerge when we perceive the body to be irrelevant to subjectivity or – more blatantly – we perceive those bodies which do not attain cyborg perfection to be simply irrelevant. Finally, it has been about problematic selves and unexpected others: the social subjects we may encounter and produce through our engagements with body-altering technology in the material world.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

In this project, I have argued that textual representations matter, and that they matter because they influence material practice. One of the motifs that has emerged from my discussion of engagements with the body technology is what I call the production of posthumanism. By this, I mean that discursive representations of the changes made to the body by technology – both within and beyond the SF genre – position themselves as narratives of the 'next stage' in human development. In short, these narratives are concerned with producing the posthuman subject, and the ideological struggles over meaning that they engage in are those working to define this subject. As I argued above, I have chosen to look at science fiction texts in this project because I believe that the boundary between science fiction and social analysis is blurring in many representations of the body and technology. I outlined examples of this such as Lee Silver's[1] zealous anticipation of the wonders to come in the age of new genetic forms, or Christopher Dewdney's[2] celebration of our immanent transcendence of the flesh.

The posthuman does not exist in the realm of science fiction solely. In this first section of my conclusion, I will consider the material practice of a group of contemporary humans who are actively working toward the goal of becoming posthuman. By examining their self-representations and the political investments that these representations suggest, I will outline the limitations of the concept of posthumanism as it is currently configured. These people who are working to bring about the posthumanist subject call themselves transhumans (pointing to their understanding of themselves as intermediate subjects occupying a place between 'mundane' humans and the coming posthumans) or extropians. 'Extropian' is a name based on its root "extropy" which is defined as "the extent of a

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

system's intelligence, information, order, vitality, and capacity for improvement" ("Extropian Principles").[3] Extropians see themselves as actively working to increase the extropy of the human organism because they "see humanity as a transitory stage in the evolutionary development of intelligence" ("Extropian Principles"). They work to achieve this goal through modification of their minds and bodies using the technologies[4] of mind-uploading, nanotechnology, neuroscience, robotics, smart drugs, cognitive science and genetics. Extropian goals and philosophy are stated succinctly by their belief in BEST DO IT SO: Boundless Expansion, Self-Transformation, Dynamic Optimism, Intelligent Technology, and Spontaneous Order.[5]

Max More, one of the leading figures within the extropian movement, has recorded the seven extropian principles in a document named "The Extropian Principles Version 3.0: A Transhumanist Declaration." I quote this title in full because I think it points to two interesting characteristics of extropian culture. The first is the degree to which extropians have refigured themselves in the image of computers; the document is a new release of the 'software' (version 3.0), the program that will create the posthuman subject. As I discussed in Chapter 3, one of the dangers of constructing our selves in the image of computers is that we can come to see others as inferior or obsolete equipment, as old versions that must be removed to make room for the new. I believe that this attitude towards humans as expendable commodities is characteristic of the extropian view, as I will outline in more detail below. Second, More's title points to a heritage of liberal humanism in its use of the word "declaration" which calls to mind other historical declarations of rights. My reading of extropian discourse is that their style of posthumanism is in fact a

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

covert return to liberal humanism, an argument I will elaborate as I review their seven principles.

The first principle is Perpetual Progress, which More describes as a rejection of "traditional, biological, genetic, and intellectual constraints on our progress and possibility." This lead to the second principle of Self-Transformation, a program of personal improvement using body- and mind-modification technologies as discussed above. Through self-transformation, the extropian seeks to rise above the "animalistic urges and emotions" that evolution has inconveniently "left us with." The third principle of Practical Optimism points to the heritage of liberal humanism in More's argument that extropians "take personal responsibility by taking charge and creating the conditions for success." Like the self-made men of liberal humanism, extropians efface the operation of social structures to position social subjects in different relations of power. This omission is particularly glaring in the context of the next principle, Intelligent Technology, which again highlights the importance of body modification to achieving posthuman status. The extropians offer no comment on the effect that relative access to such technology will have in determining who will become appropriately posthuman. Open Society, the following principle, again connects extropianism to liberal humanism in its emphasis on the freedom of the individual as providing the best ground for a stable social order. The sixth principle, Self-Direction, reveals the extropian desire for minimal government, another liberal humanism link; More explains that this principle emerges from the extropian belief that "taking charge of ourselves requires us to choose from among our competing desires and subpersonalities." Extropians argue that government sanctions against technology and

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

self-experimentation restrict their freedom to choose. As I mentioned in my critique of liberal humanism in Chapter 4, freedom of choice is meaningful only when there are a range of valid options from which to choose. The extropian focus on government regulation as that which unjustly restricts their ability to experiment upon themselves in pursuit of their goals again suggests their incomplete vision of social reality; material obstacles are not mentioned. The final principle, Rational Thinking, is another link between extropian philosophy and liberal humanism. Both ideologies posit 'man's agency' at their centre, reducing the rest of the work to material object, available to be worked upon by his active will. More writes, "we hold that we can know reality, and that through science the human mind can progressively overcome its cognitive and sensory biases to discover the world as it really is." This statement repudiates any understanding of the social world as a construction and, more importantly, as a construction from a particular point of view.

This final value, that of Rational Thinking, suggests a connection between extropian ideas and Cartesian mind/body dualism. In Chapter 2, I argued that mind/body dualism could be linked to liberal humanism in the sense that both ways of thinking are grounded in the belief in some kind of transcendent, eternal human nature or spirit that exists beyond the particular material circumstances of individual subjects. By separating mind from body, Cartesian dualism constructs a subject that is based on the repudiation of those parts of subjectivity that may be associated with the body. Liberal humanism performs a similar move of producing abjection in its insistence upon individual freedom without any reference to the social structures which interpellate

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

individual subjects with different degrees of freedom. This notion of universal human nature grounded in rational thinking is evidence of a link between extropian philosophy and Cartesian mind/body dualism. Both are discourses which seek to separate self from the rest of the world. Extropians are a present-day example of the ideal citizens of Banks' Culture: they believe that the problems of society can be fixed by adjusting individual bodies, and they seek to escape the fate of embodiment by transforming their bodies through technology. A frequent motif in extropian literature is the modification of the body so that it can survive in outer space. As *The Cyborg Handbook* makes clear, the term cyborg was coined to describe the product of research into this very topic.[6] The extropians, then, are one of the children of the cyborg but – as Sobchack observes regarding her own love of her prosthesis – they are hardly what Haraway had in mind.

The extropian posthumanist philosophy, then, has its roots in both liberal humanism and Cartesian mind/body dualism, and is guilty of the same obfuscation through abstraction that characterizes these discourses from which it grows. Extropians themselves do not acknowledge the influence of liberal humanism, claiming instead that what distinguishes them from liberals is their refusal to insist upon equality of outcome. The Extropian FAQ[7] (frequently asked questions) includes a question about the "typical extropians' attitudes towards women, minority racial groups, and people of nonstandard sexual practices." The response argues that while extropians cherish diversity and welcome novelty, they also believe that "selection must be allowed to take place for progress to occur" and that "enforced equality of outcome leads to stagnation and stasis."[8] Given their focus on individual freedom and denial that social structures have anything to do with

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

producing social subjects in particular relations of power, one wonders what the extropians envision to be agency effecting this selection. Additionally, although the extropians do not include any self-representations which would mark their specific embodiment, the very form of the question posed – "attitudes towards women, minority racial groups, and people of nonstandard sexual practices" – suggests both that we can understand extropians to be primarily male, white, and heterosexual, and that they perceive these embodiments to be neutral or unmarked, unlike the 'other' bodies posited in the question, the ones toward which extropians can have "typical attitudes."

Extropians argue for a form a social Darwinism that is rooted in conscious control and direction of 'evolution' rather than in slower 'natural' selection. Given their insistence upon individual rights and the freedom to experiment upon one's body, they do not believe that they are arguing for an exclusionary politics. Their refusal to attend to the vagaries of material conditions means that they operate in a fantasy space 'as if' everyone equally had access to the technologies they advocate. The extropian response to the question of whether or not they are an elitist organization is: "if the extropians are an elite, they are an elite which everyone is invited to join, and the only barriers to membership are those imposed by your own force of habit and whatever tendency you may have to think self-deprecatingly, in terms of insurmountable limitations rather than possibilities for development."[9] In this move, the extropians both blame the victim for his or her own failure to become an appropriate posthuman subject – "tendency you may have to think self-deprecatingly" – and deny the relevance of material conditions – there are no barriers except mental ones. Like liberal humanists, extropians are guilty of abstracting a universal

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

human nature from specific, material embodied subjects; in both cases, the abstraction is used to ground an ideology of individualism that refuses to acknowledge the political consequences of social institutions and practices that interpellate subjects differently.

Extropians participate in the fantasy that Mark Dery has labeled “escape velocity”, the confidence that a certain level of technological development will enable humans to escape the material consequences of life on earth as embodied beings. Donna Haraway has called this a deadly fantasy,[10] one that refuses to acknowledge that the earth is finite and we are mortal, and that we must learn to deal ethically and responsibly with one another and with the planet and its species if we hope to survive. Like the participants in the fantasy of escape into cyberspace that I discussed in Chapter 3, extropians lack an ethics; they are not engaged with the present material world because they are too busy planning for the ‘next’ one.

The sinister conclusion that may ultimately be reached through such abstraction is accurately reflected in an interview exchange between Mark Dery and Hans Moravec. Moravec, with his plan for uploading human consciousness to computers, is one of the legendary figures within the extropian movement. Dery asked Moravec if he had any concerns about the fate of “those on the lowestmost rungs of the socioeconomic ladder” in his projected future of uploaded consciousnesses and robotic bodies. Dery reports the resulting exchange as follows:

> Moravec: It doesn't matter what people do because they're going to be left behind, like the second stage of a rocket. Unhappy lives, horrible deaths, and failed projects have been part of the history of life on Earth ever since there was life; what really matters in the long run is what's left over. Does it really matter to you today that the tyrannosaur line of that species failed?

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

> Dery: Well, I wouldn't create a homology between failed reptilian strains and those on the lowermost rungs of the socioeconomic ladder.
> Moravec: But I would. (*Escape Velocity*, 307)

This, then, is the ultimate risk of posthumanism as it is currently configured: we can conceive of ourselves as having the same relationship to those body-subjects who do not matter in the current ideological configuration as we do to dinosaurs. This type of posthumanism so distances the subject from his embodied life that he feels that the "long run" perspective of millions of years of evolution is the appropriate model upon which to base his relationship to other subjects in the contemporary world.

One of the things that I find most striking about the extropians is the evident influence of science fiction on their practices and beliefs. Web sites maintained by self-defined extropians and by *Extropy: The Journal of Transhuman Thought*[11] include lists of books that neophytes should read if they are interested in discovering more about extropian ideas. These lists include studies of the most recent developments in fields such as neuroscience and robotics, texts of more dubious scientific pedigree such as Hans Moravec's *Mind Children*,[12] and texts by science fiction authors whose future worlds embody the vision of posthumanism that the extropians are working toward.[13] By pointing out the existence of both genres on their reading lists, I am not suggesting that the extropians are unable to distinguish between fictional and non-fictional representations. Instead, what I find intriguing is the relationship between visions articulated in the science fiction and real experiments that extropians either do perform on themselves or else wish they could perform if not prevented by government regulation or a lack of appropriate funding. Extropians seem to have fallen into the same trap that Anne Balsamo suggests happens to

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

plastic surgery patients during consultations. As the patients watch their features morph on the screen through the medium of visualizing software, they come to believe that identical results can be produced on their flesh.[14] As Balsamo argues, such a belief is misleading because "how those incised tissues heal is a very idiosyncratic matter – a matter of the irreducible distinctiveness of the material body" (*Technologies of the Gendered Body*, 77). Extropians, too, forget about the irreducible distinctiveness of the flesh, and seem to believe that if a modification is represented in an SF text, it is only a matter of time – of technological advance – before such a modification can be realized for them. As I will argue in more detail below, the move to abstraction is precisely what prevents the extropian concept of posthumanism from having an ethical ground.

Rather than rejecting the concept of posthumanism because of these limitations, I want instead to argue for a critical posthumanism. In the following two sections of the conclusion, I will elaborate a new concept of posthumanism, one that remains focused on a subjectivity embedded in material reality, and one that seeks to be responsible for the social consequences of the worlds it creates. This posthumanism will struggle to be post to the investments of liberal humanism and its emphasis on man as the centre of meaning and worth. This posthumanism will try to be faithful to Donna Haraway's vision of the cyborg in which "we can learn from our fusions with animals and machines how not to be Man, the embodiment of Western logos" ("Cyborg Manifesto," 173). My posthumanism endeavors to be a promising monster: to acknowledge difference without hierarchy; to refuse to found its subjectivity on the grounds of repudiation and boundary setting; to reject the "narratives of masculinist, patriarchal apocalypses;" and to remember that "the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

System is not closed; the sacred image of the same is not coming. The world is not full" ("The Promises of Monsters," 327). I would like to outline a posthuman strategy of becoming monstrous by embracing our problematic selves without grounding these identities on the repudiation of unexpected others, a critical posthumanism that includes a ground for ethics. As Haraway writes, "The power-differentiated and highly contested modes of being of monsters may be signs of possible worlds – and they are surely signs of worlds for which 'we' are responsible" ("The Actors are Cyborg," 22). In the following sections, I will explore the possibilities of a responsible posthumanism, one articulated in opposition to the extropian view of a type of posthumanism that welcomes the extinction of 'non-successful' lines of the species.

Why the Body and Its Representations Matter

In my readings of selected SF texts, I have examined the related production of bodies and selves through texts and in texts. I have argued that both technologies of body modification and discourses about their appropriate use are important in shaping the deployment of technology, and the bodies/subjects that are produced through this deployment. Finally, I have argued for taking seriously popular culture representations of technological change to bodies/subjects, for seeing them as an important resource for working through social change. In particular, I have been interested in looking at the ideological construction of the boundaries between self and not-self, between natural and monstrous, and the political effect to which they can be and have been deployed. As our bodies change through interactions with technology, these boundaries will be challenged, transgressed, erased, and re-established. I have looked to SF texts as one of the places

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

where the ideological work of erasing and re-writing such boundaries is taking place or could take place. My readings have looked to examine the ways in which SF texts participate in the ideological construction of the self, the body, and the social at this particular cultural moment. In Chapters 1 and 4, I have focused on the ways in which popular culture texts function as ideological calls to the reader, and work to shape the reader's subjectivity through identification with characters in the text. These two chapters set forth my argument that popular culture texts participate in both subject formation and in the construction of social reality. In Chapters 2 and 3, I have provided readings that emphasize the ways in which other SF texts narrate the risks associated with some of the ideas about embodiment and subjectivity that are circulating in contemporary discourses of genetics and information technology. These two chapters provide examples of the ways in which popular culture contributes to and intervenes in the hegemonic articulation of ideology, that is, the ways in which they help to form our common sense.

Why is it important to examine how we represent bodies? This question is the central driving force of this project. I want to return briefly to the premises underlying my argument (discussed in detail in the introduction) and the argument's main points as a way of answering this question. I have argued that ideology is a lived relation. By this, I mean that ideology is not simply a set of rules imposed from above. Instead, both the social world and the selves that we recognize and take to be natural or inevitable are products of the interactions between ideological representations, personal desires, and material actions. I have argued that the social is a category of historically produced knowledge and that cultural texts play a role in this production. In our current cultural moment, we are

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

experiencing many social changes that are related to our material ability to modify the body through genetic manipulation, and to modify 'reality' through information technologies. The social world that coheres around our interactions with these material capacities will be a product of both the material change that these technologies are capable of producing, and the ideological values influencing how these technologies are deployed and how the bodies and subjects produced through these technologies are valued. Both individuals and their social world are continually (re)produced through representation. I have chosen to read texts which demonstrate three key points: that the body and the subject are mutually produced by ideology; that changing the body changes the subject; and that changing the subject can change the social. It is important to examine how the body is represented because such representations influence how we value different body-subjects, and because such representations influence the choices we make in deploying technologies of body modification. The deployment of such technologies is crucial to the reproduction of the social into the 21st century, as new bodies will create new subjects and a new social. I have critiqued one vision of the posthuman subject that may emerge from these interactions, and will argue for another vision of the posthuman below.

My commitment in examining interactions with technologies that can alter the body is to look for texts that open a space for refiguring a social order that discriminates against people based on race, class, gender and sexuality. Our ability to change our bodies with technology can allow us to transcend the body-based discriminations of the past. However, as I have argued in Chapters 2 and 3, these technologies may also allow us to create new categories of body-based discrimination. My work has been about the new

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

bodies that may be created by technology, and – more particularly – it has been about the discourses that are constructing the shape and value of these new bodies in advance of their material production by the technology. My argument has been twofold. First, technology alone does not produce new bodies/subjects; nothing is inevitable in the deployment of new technologies and the particular bodies/subjects that will emerge from our continued interactions with technology will be a product of the intersection of the technology and the discursive environment in which it is deployed. Second, popular culture is a way of both working through our ethical and material engagements with technology, and of intervening in the discursive context in which that technology is deployed. As we saw in Chapter 2, it sounds like 'science fiction' to suggest that we may be able to use genetic knowledge to selectively construct our offspring or that information about our genetic make-up may restrict our career path. However, such practices are immanently upon us[15] and science fiction provides a way to begin to understand how changes to the body will change our social construction.

As Haraway, among others,[16] has taught us, scientific investigation, like any other ideological activity, is guided by discursive constructs. Studies such as Jane Ussher's[17] analysis of attempts to find physiological evidence of homosexuality suggest that science often finds what it is looking for. Therefore, it is crucial to pay attention to the implications of our representations. Various representations of the body and its meanings can be and are being used to further political agendas. As Nelkin and Lindee argue, "The idea of genetic predisposition encourages a passive attitude toward social injustice, an apathy about continuing social problems, and a reason to preserve the status quo" (*DNA*

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Mystique, 101). Miringoff adds, "Today, the techniques of genetic and reproductive engineering are often viewed as more practical alternatives to the cumbersome processes of social change" (*Social Costs*, 7). These are the risks of understanding the body as identical with the subject, as the encoded determinant of the subject's fate. There are also risks associated with the denial or repression of the body, with celebrations of the escape into cyberspace. Heim writes "VR will enhance the power of art to transform reality. The picture frame, the proscenium, the movie theater all limit art by blocking it off as a section of reality. VR, with its augmented reality allows a smoother, more controlled transition from virtual to real and back. This capability, which may frighten psychologists, will offer artists an unprecedented power to transform societies" (*Metaphysics of VR*, 128). Such excitement about the escape from the constraints of the material body and material reality foster an attitude of neglect and forgetfulness toward those subjects who remain trapped in the base, material world.

Representations of the body, and the attitudes such representations create regarding the use of body altering technology, ultimately return us to the question of bodies that matter. Representations are important not only for the research agendas they endorse or dismiss, the legislation they support or undermine, but also for the psychological role they play in the social imaginary and the choices people make as they live their lives. As I argued in my introduction, I believe that SF representations of body-modified subjectivities are important for the identifications they make possible for the reader, for the role they may play in shaping readers' subjectivities. Changed subjects will, in due course, translate into a changed social world. The changes that will result from

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

changed body-subjects are not determined in advance by features of the technology deployed in the change. As I have argued through this project, technology is neither emancipatory nor oppressive in an absolute sense. Any technology can be deployed to progressive or conservative ends. Additionally, no representation of the body is inherently 'positive' or 'negative'. As we have seen, both the discourse of genetics – which argues that the body is everything – and the discourse of information technology and virtual reality – which argues that the body is nothing – can be deployed in ways that abject some body-subjects. What each of these representations has in common is the notion that improving the body (even by way of eliminating the physical body in favour of a virtual one) improves the subject. Better bodies equal better social subjects.

My argument has been that it is important to attend to the representations and value-structures that are used to support or repress the deployment of a technology, and to examine the political ends which they support. To illustrate this point, I want to contrast two visions of the future and the better bodies-subjects that it may hold. The first is from Lee Silver's *Remaking Eden:*

> The final frontier will be the mind and the sense. Alcohol addiction will be eliminated, along with tendencies toward mental disease and antisocial behavior like extreme aggression. Visual and auditory acuity will be enhanced in some to improve artistic potential. And when our understanding of the genetic input into brain development has advanced, reprogeneticists will provide parents with the option of enhancing various cognitive attributes as well. (*Remaking Eden*, 237)

The second vision of the future comes from N. Katherine Hayles' *How We Became Posthuman:*

> If my nightmare is a culture inhabited by posthumans who regard their bodies as fashion accessories rather than the ground of being, my dream is a

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

> version of the posthuman that embraces the possibilities of information technologies without being seduced by fantasies of unlimited power and disembodied immortality, that recognizes and celebrates finitude as a condition of human being, and that understands human life is embedded in a material world of great complexity, one on which we depend for our continued survival. (*Posthuman*, 5)

Each of these representations shares some common discursive threads. They both envision a future in which technology will change the body in ways that are beneficial to the human subject. They both imagine that technology can expand the field of human influence. However, they differ fundamentally in their attitude toward embodiment ('genetic input' versus 'ground of being') and in the type of human self they see as produced by this technology ('enhanced artistic potential and cognitive attributes' versus 'embedded in a material world of great complexity'). The first vision sees the technologized super-subject as an end in itself, while the second reminds us that this subject must continue to live in a material world of other subjects and ethical responsibilities. I would like to argue for a concept of the posthuman that follows the trajectory outlined by Hayles' representation – one that remains embedded in a material world – and reject that suggested by Silver's. As I argued in my discussion of extropian philosophy, a posthumanism that rejects the body and denies the relevance of material context to subject formation is a posthumanism that lacks ethics.

The difference between these two representations may be articulated in terms of the difference between abstract theory and detailed life. Hayles' work, *How We Became Posthuman*, is a thorough examination of what is left out in the abstractions necessary to scientific theorizing. She attempts to restore some of this mass of detail through both reading science fiction texts in conjunction with the history of scientific developments in

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

cybernetics and information technology, and through telling this history in the form of a narrative that restores the personalities and struggles of those involved at crucial points. She argues "abstract pattern can never fully capture the embodied actuality, unless it is as prolix and noisy as the body itself. Shifting the emphasis from technological determinism to competing, contingent, embodied narratives about the scientific developments is one way to liberate the resources of narrative so that they work against the grain of abstraction running through the teleology of disembodiment" (*Posthuman*, 22). My study has proceeded along critical lines that are similar to Hayles' work. With Hayles, I would argue that SF texts could provide the material grounding, the chaotic consequences of embodied reality that may be missing from scientific discourse regarding the potential social benefits of technological innovation. The difference between Silver's representation of the future of enhanced bodies, and Hayles' cautious optimism about a posthuman subject that remembers it is embedded in the world, is precisely this detail of concrete, real-life, situations. As I argued in my introduction, SF texts provide a space for thought experiments about the social implications of technology; as Hayles suggests, they restore the messy detail of material existence that is erased by the abstractions of scientific theory alone. It is only by resisting abstraction that we can articulate the possibility of a critical posthumanism.

Problematic Selves and Unexpected Others

Popular culture and its representations are important to how people understand their social world and their place in it. In interviews with patients at a genetic counseling centre, anthropologist Rayna Rapp found that people's decisions about genetic

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

information and medical treatment were directly influenced by television medical dramas.[18] Dion Farquhar reports examples of a post-menopausal woman who decided to have a baby via surrogate after reading about another woman her age doing so, and of a woman who decided that she wanted to become a surrogate mother after reading an interview with actress Deirdre Hall in *People* magazine in which the actress described how grateful she was to the surrogate mother of her baby.[19] Nelkin and Lindee link their desire to study popular representations of genetics to their sense of the influence such representations have in structuring people's understanding: "It became clear in our classes that college students' notions of heredity were frequently drawn from such sources as comic books, television sitcoms, science fiction, and other popular forums – sources in which the gene seemed to be daily increasing its authority and scope" (*DNA Mystique*, vii). Representations in popular culture are important to both the choices people make and the social world they construct based on these representations. As I argued in my introduction, discursive invisibility can translate into historical and political invisibility. In a cultural milieu that suggests that building better bodies is the key to creating better subjects, it is important that the full range of human embodiment be given representation, lest aspects of our diverse embodiment be deemed irrelevant or even detrimental. For example, it is far easier to make the argument that finding and treating the 'gay gene' will improve the individual and social body in a discursive context in which the contributions of gays and lesbians are hidden under their presumed heterosexuality, than it is to make the same argument in a context in which the political and historical visibility of gay and lesbian subjects makes evident their contributions to the community. It is essential to retain the image of the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

body as a Möbius strip – both matter and spirit/mind – to represent the full extent of subjectivity, and not fall into the falsifications and erasures of abstraction. As Nikolas Rose argues, "If subjectivity is understood as corporeal – embodied in bodies that are diversified, regulated according to social protocols, and divided by lines of inequality – then the universalized, naturalized, and rationalized subject of moral philosophy appears in a new light: as the erroneous and troublesome outcome of a denigration of all that is bodily in Western thought" (*Inventing Our Selves*, 7). The tradition of liberal humanism, and the posthuman subject of the extropians who is the inheritor of this tradition, are both guilty of this negation of all that is bodily in their constructions of a universal subject. An ethical posthumanism can not embrace this "erroneous and troublesome" subject, but must instead work to include the full range of human embodiment in its understanding of subjectivity.

To avoid the dangers of abstraction, it is important to give representation to the full range of human embodiment. There is no 'the body': there are only various bodies differentiated by endless permutations of race, class, age, gender, sexual orientation, geographical location, and any other category we use to discipline and value bodies. The refusal to acknowledge this chaotic mass of detail that is embodied existence, the desire to distort it through abstractions to 'the' (dismissed) body and the universal mind are the flaws of both liberal humanism and Cartesian dualism. Restoring 'body' to Western thought means refusing to allow the construction of a universalized and naturalized (white, male, heterosexual, able) subject, ending the projection of all that is 'body' onto the marked bodies of others (non-white, female, homosexual, disabled). Insisting that 'body' is

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

part of all subjectivities, that there is no universal and neutral body, means refusing representations of body-altering technologies that refer to this neutral body. Retaining a sense of embodied, material existence and rejecting the idea that there is a single, 'natural' or best body are necessary for an ethical engagement with body-altering technologies. Gail Weiss suggests that the intercorporeal relations between a variety of bodies and body images should be the grounds for all ethics. She writes:

> Rather than ignoring the particularities of our respective bodies, as Kant or Rawls would have us do in order to attain the status of impartial moral agents, the particularities of my own body and the bodies of others need to be taken into account in our moral decision making for the very reason that these decisions are not reducible to abstract, rational deliberations that take place between one mind and another mind in a phantasmatic intellectual space, but because, as Foucault has amply shown, our moral decisions themselves emerge out of specific, disciplinary practices and have material effects on the bodies of those who initiate them as well as those who are subjected to them. (*Body Images*, 158)

Weiss argues that, if we take seriously that our bodies are our selves and not just an adjunct to a subjectivity rooted in the mind, then we must also take seriously her demand to root our ethics in bodily imperatives. She models her notion of bodily imperatives on Kant's categorical imperatives, suggesting that the bodily needs of others can make demands upon us that invoke a moral system beyond the abstraction of reason. The example she gives to illustrate her theory is Simone de Beauvoir's retreat, during her mother's illness and death, from the existentialist imperative to face the truth. De Beauvoir was willing to lie to her mother about the seriousness of her illness, and Weiss argues that the demand of the mother's body – her need to deny the truth to face her last days – outweighed de Beauvoir's rational ideas about truthfulness.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

I take seriously the notion that if our bodies are our selves, then we need an embodied ethics. Further, I agree with Weiss' observation that social oppression based on bodily differences oppresses the body, the body image, and – I would add – the subjectivity rooted in that body, and therefore demand an embodied response.[20] However, it seems to me that her example of the bodily imperative of the dying body is rooted as much in the social relationship of mother and daughter as it is in the demands of the body itself. Weiss, herself, is cautious in describing the beginnings of her system of bodily ethics, and notes some of the risks when she remarks:

> While I do not think, as some care theorists do, that we must heed the call of all those human (or even nonhuman) bodies who need and/or demand our assistance, I do think that developing a sensitivity to the bodily imperatives that issue from different bodies is a necessary starting place for our moral practices. Which bodily imperatives we attend to will depend not upon some abstract teleological framework which places a higher value on some bodies as opposed to others (e.g., human over nonhuman, those I know best over those I know least, my own body versus other people's bodies), but rather, must always be a function of the bodily context that situates our relations with others. (*Body Images*, 163)

While I agree with the sentiments expressed in Weiss' argument – that embodiment should factor into our ethics – I do not find that she provides an adequate starting point for adjudicating among the competing demands of various bodies. There are many difficulties raised by an ethics of bodily imperatives. Does a woman's demand for privacy of her body outweigh a man's demand for sexual access to her body? Does the demand of a fetus for incubation come before a woman's demand to be the sole possessor of her body? Does an animal's demand for life factor into a human's demand for food, or for knowledge gained by medical experimentation?

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

It seems to me that in attempting to answer the questions above, we return to the realm of 'common sense' or ideology. It may seem 'obvious' that most people would weigh a woman's right to refuse sex over a demand of a man's body for sexual gratification. However, the rights of the fetus for incubation put us on less secure ground. Does the woman's right to control her own body still apply given that the fetus faces death, rather than mere sexual frustration, as the consequence of her refusal? Despite Weiss' hopes that we can articulate a bodily ethics without reference to some abstract system which values some bodies over others, it seems impossible to resolve these competing demands without doing so. Is the fetus a person? Does it have the right to gestation? The same questions are raised when we consider the competing demands of human and non-human bodies. An ideological system which values animal bodies less than it does human bodies is invoked to justify meat-eating and medical experimentation. In the absence of this abstraction, how could the competing claims between the human and non-human bodies be resolved? Therefore, while I am sympathetic with Weiss' objective in arguing for an embodied ethics, I do not believe that it is possible to formulate any ethics in the absence of ideology. A bodily ethics constituted without reference to "some abstract teleological framework" is, in fact, as abstract as liberal humanism or as the posthumanism of extropians. In each case, the ideals expressed in the discourse cannot be achieved in practice. Liberal humanists articulate an ideal of individual freedom but refuse to acknowledge the way in which social structures produce concrete subjects with different degrees of freedom in which to act; extropian posthumanism posits itself as a practice available to all comers, but reveals its awareness that there are unacknowledged, material

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

constraints to becoming posthuman in its arguments about the necessity of selection for evolution to proceed.

Weiss calls for our ethics to be a function of the bodily context that situates our relations with others; part of this context will be discursive representations that structure the domain of social intelligibility. Although Weiss wants to argue for a bodily ethics that remains cognizant of the particularities of our own and other bodies, she has failed to provide a practice by which we could make ethical choices among bodily demands. There is an unacknowledged universal in Weiss' work, just as there is in liberal humanism and extropian posthumanism, a universal that suggests that there is some common set of values and standards to which we can look. Weiss' bodily ethics installs a universal body at its centre, just as Kant placed universal reason at the centre of his ethical program. Weiss' universal body is evident in the fact that she feels that we can found a bodily ethics outside of ideological struggles over bodily values. Such a move suggests that we can understand 'the' or 'a' body outside of the discursive representations that produce its particular contours; it suggests that there is an outside to struggles over bodies that matter.

As I have argued throughout this work, I do not believe this to be the case. It is important to keep challenging the range of bodies that matter, so that these bodies will be taken into account when making ethical choices. In our engagements with both genetics and information technology, it is necessary to retain a sense of embodied subjectivity, of real material consequences to our actions and choices. This continued articulation of embodied subjectivity in our representations is, I suggest, the real starting point for an embodied ethics. Rather than trying to find a neutral or innocent ground from which we

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

may articulate our bodily ethics and judge among the competing demands of various bodies, we should instead recognize this move as another attempt to establish what Haraway has called the gaze from no where.[21] Haraway calls knowledge claims made from this gaze from no where "unlocatable, and so irresponsible" ("Situated Knowledges," 191) because they cannot be called to account for their constructions and investments. My notion of an embodied ethics would require that – rather than try to disavow our dependence upon abstract frameworks which place a higher value on some bodies as opposed to others – that we instead acknowledge the positions from which we speak and the social constructions of value that speaking from such positions entails.

Such a strategy for ethics refuses the seduction of constructing one's speaking position as neutral or innocent; it requires that we acknowledge and defend our own ideological investments, our own definitions of bodies that matter. Haraway has called this situated knowledge, a type of knowledge claim that acknowledges that its perspective is always partial, the view from a particular location. She argues that "partial perspective can be held accountable for both its promising and its destructive monsters. ... Feminist objectivity is about limited location and situated knowledge, not about transcendence and splitting of subject and object. In this way we might become answerable for what we learn how to see" ("Situated Knowledges," 190). It is only by remaining faithful to the material context in which we and other subjects are embedded that we can begin to negotiate a collective bodily ethics, an ethics that acknowledges our own and others ideological investments in valuing particular bodies over other bodies, and works to make ethical decisions within this web of bodily demands. Bodily ethics cannot remain free from the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

realm of ideology; instead, it is important to ask the question of who benefits from these choices, and to take responsibility for the consequences of our situated knowledge choices. For example, in an attempt to mediate between the bodily demands of animals and the bodily demands of humans on the issue of laboratory tests using animals, those who argue in favour of the animal bodies must be willing to be accountable for the way in which their position entails the suffering of human bodies from disease, while those who argue in favour of the human bodies must be willing to be accountable for the suffering of animal bodies. Being accountable does not mean that one is personally responsible, as the individual author of the act, but means acknowledging and accepting that such consequences are part of the material context that situates the relation of these bodies. Revealing our ideological investments, articulating a partial perspective or situated knowledge rather than attempting to work outside of ideology and therefore falling into the distortions of abstraction, is the necessary starting point for a bodily ethics.

Donna Haraway's description of science fiction as the domain for the interpenetration of boundaries between problematic selves and unexpected others has been a motif that has guided my exploration of the intersection of body, text, self and social. Throughout this text, I have described the ways in which this interpenetration is an aspect of subject formation: we define what we are through reference to what we are not. Again and again, the problematic selves are revealed to be the alterity that is necessarily incorporated into the self, and the unexpected others are the others that are made other by the practice of boundary setting in subject formation. The other is only the pole of intelligibility of self in the current cultural formation, a pole subject to change.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Unexpected others and problematic selves thus produce one another. SF is the discourse of boundary figures – monstrous and otherwise. Through its representations of figures that push the limits of intelligibility, SF is able to raise questions about what it means to be human, and to suggest definitions that were previously invisible, untold and therefore impossible.[22] Vicky Kirby has an interesting perspective on the current 'crisis of the subject' that fits well with SF conventions. She notes:

> Various theoretical approaches that fall within the loose description 'postmodern' emphasize that *the humanist subject* is actually decentred, that the individual cannot secure his or her identity through intention, and that individuation as such is necessarily contingent. How *the subject of humanness* recognizes itself as a unified subject, individuates itself within species-being, and identifies itself as possessing sufficient stability to ground the destabilization of grounds, however, is entirely unclear.
>
> (*Telling Flesh*, 151)

Kirby suggests that all philosophical grounding for the humanist subject is being re-established based on the subject of humanness, the attempts to articulate a stable identity based on differentiation from other species. She argues that thought/language have been the key to making this differentiation. In Kirby's view, the boundary between human and non-human (animals or machines) is reproducing the Cartesian mind/body split. The new binary of human/non-human again jettisons the body from subjectivity, making the human coincide with qualities considered to be mind/male by Cartesian dualism. In my view, a critical posthumanism needs to move away from this subject of humanness; the 'post' of posthumanism should not be a post-biological embodiment. The 'post' of posthumanism should be a 'post' to the heritage of humanism, which makes man the only subject in a world of objects. This is the only way in which to realize the promises of

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

monsters, to create new subjectivities that refuse to ground themselves in the abjection of others as object.

Kirby writes, "even theoretically sophisticated discussions of essentialism take place within an unexamined anthropocentrism that is itself a form of essentializing" (*Telling Flesh*, 67). She argues that the constructed 'distance' between representation and the thing-in-itself reproduces the Cartesian mind/body split: language is the realm of mind, intelligibility and the material world (which is cut off from knowledge) is the realm of the body. The Lacanian bar between the Symbolic and Real, between that which can be put in language and that which cannot, is the bar between culture and nature. That which cannot be put into language thus represents the "threat to the identity of humanity itself once its abjected exiles have been properly recognized as meaningfully human" (*Telling Flesh*, 120). Incorporating radical alterity – the bodies of the abjected whether human or non-human – into the realm of representation challenges this boundary. Kirby argues that if we truly wish to escape the binaries of Cartesian dualism and embrace the concept of embodied subjectivity, we need to interrogate how the identity of thought/language is used to define the human from the non-human.[23] An ethical posthumanism must work against this boundary of the human from the non-human, refusing this final ground of abjection. An ethical posthumanism which sees itself as materially connected to the rest of the world, in affinity with its other subjects, is an accountable posthumanism. It is a posthumanism that can embrace multiplicity and partial perspectives, a posthumanism that is not threatened by its others.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Each of the novelists I have discussed challenge our notion of the subject of humanness through their representations of problematic selves and unexpected others. Gwyneth Jones suggests that thought and language are not unique to humans, and that they may be used on a level to which humans lack access. Octavia Butler suggests that the uniqueness of humanness is in our genetics rather than in our use of language. Iain Banks challenges this notion by suggesting that the concept of personhood should be extended to all those who possess the ability to use language, including intelligent machines. William Gibson, Pat Cadigan and Raphael Carter imply that humanity is lost with the loss of the body. Jack Womack points to some of the political aims secured in defending the boundary of human/non-human in his description of the army's rationale for attacking the inner city. Finally, Neal Stephenson challenges the notion that uniqueness is a quality of humanness in his representation of the undifferentiated Asian girls. These various challenges to the subject of humanness suggest ways in which we can conceive of a critical posthumanism that remains engaged with the material world, a posthumanism that recognizes that the body as well as the mind are part of the human subject.

Science fiction is an excellent resource for interrogating this boundary between the human and the non-human, and the political ends to which this boundary is deployed, because its generic conventions provide a space for narrating agency for non-human subjects. As Kirby suggests, it is important to examine this boundary if we wish to theorize a truly embodied subjectivity, one that does not let us project the seemingly negative qualities of the body onto the non-human. I believe that examining and challenging this boundary is also essential to any attempt to articulate a bodily ethics. Classifying bodies as

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

non-human is a well-established justification for condoning their abuse and exploitation. The deconstruction of the boundary between human and non-human subjects could provide the first step toward the utopian possibilities of cyborg subjectivity envisioned by Donna Haraway. The construction of the posthuman subject, mergers of human with machine and human with animal, is similar to the deployment of a technology. It is neither emancipatory nor oppressive in itself. It can result in the recognition of our affinity with these non-human subjects; it can also create a reactionary attempt to articulate more forcefully the boundary between human and non-human in an attempt to disavow this affinity. Hayles writes, "But the posthuman does not really mean the end of humanity. It signals instead the end of a certain conception of the human, a conception that may have applied, at best, to that fraction of humanity who had the wealth, power, and leisure to conceptualize themselves as autonomous beings exercising their will through individual agency and choice" (*Posthuman*, 286). In my investigation, I have stressed representations of embodied subjectivity which work to enlarge rather than decrease the range of bodies and subjects that matter. Such representations are the path to an ethical, accountable posthumanism.

The Politics of Popular Culture

I have argued that by embracing the problematic selves and unexpected others found in SF, we can contribute to changing the ideology that constructs these selves and the social world we live in. There are two challenges to this position that I wish to now address in my conclusion: first, the relationship between material and discursive reality; and second, the role of popular culture in political change. These two issues are integrally

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

tied in my argument and my methodology. The resistance to ideology that I have been discussing throughout this project is resistance to accepting given representations of subject positions as the 'truth' of the self, and resistance offered in the form of counter-hegemonic representations; that is, my argument has concerned the realm of discourse alone. A common criticism of such an approach it that it limits itself to change in discursive representations only, and does not adequately theorize change to the material world. As I argued in my introduction, I reject this absolute separation of the material and discursive realms. While I reject the opposite, extreme position that would collapse the discursive and the material into a single entity, I remain wary of erecting too fixed a boundary between the two. I have argued that it is important to retain a sense of embedded, embodied materiality in our representations of subjectivity, to avoid the erasures and distortions that are inevitable when chaos is reduced to system in abstraction. In this sense, the material remains outside and beyond discursive representation; real suffering is not eliminated through its failure to be realized in discourse. However, in terms of any attempts to communicate this embedded and embodied existence, to give it politically inflected meaning, we must return to the realm of discourse. In attempting to intervene in the construction of social reality – to produce a politics – the choice is not whether to privilege representation or experience, but rather it is how to theorize their dialectical relationship.

The distinction between the real and the discursive is a false dichotomy. In order for real experience to be more than a private moment, it must be communicated, comprehended and represented through discourse; the only public and meaningful real we

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

have access to must always be articulated in discourse. The tension between reality and its discursive representations may be thought of as another example of the Möbius strip: "two surfaces which cannot be collapsed into one and which do not always harmoniously blend with and support each other" (*Volatile Bodies*, 189). Any discursive representation will always be a version or a vision of the fullness of material reality. At the same time, discursive representations require some anchor to material reality in order to be successful. The distance between the two cannot be collapsed, but neither can the two be separated entirely. Discursive struggle *is* materialist. Struggles over meaning and value in texts affect the way people make choices, live their lives, and assume their identities. Assuming a social identity, a culturally intelligible subject position from which one can speak, means identifying oneself with a discursive representation. As Nikolas Rose suggests, "to declare 'I *am* that name': woman, homosexual, proletarian, African American – or even man, white, civilized, responsible, masculine – is no outward representation of an inward and spiritual state but a response to that history of identification and its ambiguous gifts and legacies" (*Inventing Our Selves*, 39). Rose goes on to remind us that the history of this name has usually been brought into being by those interested in "problematizing, regulating, policing, reforming, improving, developing, or even eliminating those so identified" (*Inventing Our Selves*, 39). My argument is that by articulating reverse discourses, by offering counter-hegemonic representations of the name that one 'is', we can actively resist this regulating and reforming discipline, and even re-structure the social context from which it emerged.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

The critique of discursive resistance as something that is separate from real, material struggle is similar to the critique of popular culture which suggests that energy spent producing or consuming popular culture is energy diverted from true political struggle. My argument has been that popular fiction texts offer a space for reverse discourses to be articulated, for the boundaries dividing and classifying bodies and subjects to be challenged. I believe that creative representation – in popular culture, in film, in performance – is an important resource for those who have been mis-represented by hegemonic discourse to document their experience and counter the dominant representations. I agree with bell hooks' argument that resistance to hegemonic ideology cannot be limited to the sphere of academic theory. On the subject of gender theory, hooks writes: "Talking sex in meta-language and theoretical prose does not capture the imagination of masses of folks who are working daily to understand how their lives have been affected by shifting gender roles and expectations" ("Talking Sex," 306). In terms of the arguments I have made in this project about subject formation, embodiment, and interactions with technology, I believe that popular culture texts provide a window into the 'imagination of masses of folks' who are struggling to come to terms with the potential of posthuman, cyborg subjectivity.

However, if people are constrained and constructed in which identities and values they bring to a reading experience, which identifications they are able to make with the text, and which pleasures it is capable of offering them, then is it not possible that popular culture may be capable only of 'preaching to the converted'? I offer two refutations of this challenge. First, as Jim Collins has argued, popular culture is not a monolith, neither

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

between genres nor within a genre. While it is true that the readership of a particular genre may to some degree be 'converted' to the picture of the world that genre provides – such as a world in which love conquers all obstacles for romance fans, or a world in which technological change dominates social relations for SF fans – it is not true that such generalizations can capture the full range of representations within the genre. Part of the pleasure of reading popular fiction results from the repetition of genre conventions with which the reader is familiar, but part of the pleasure also comes from surprise when generic conventions are subverted and challenged. As my readings of SF texts have shown, even within a single popular genre, subjectivities that differ from both hegemonic discourse and from one another are easily found.

My second refutation of the idea that popular culture can speak to only those subjects already formed by its ideology is based on John Fiske's notion of the producerly text. Drawing on Barthes' distinction between readerly and writerly texts, Fiske argues that all texts have both a hegemonic or preferred reading – the reading recovered by theorists who see mass culture as a vehicle to disseminate dominant ideology – and space for other readings. Each reader will emerge from the text with his or her own reading, which may be the preferred reading or which may be read 'against the grain' of this preferred reading. Barthes distinguishes between texts based on the degree of effort required from the reader to recover their meaning; Fiske suggests that the distinction should be based instead in readings. Those readings which go against the grain he calls producerly readings, as they require more effort on the part of the reader to construct/produce meaning from the text. Fiske believes that this producerly effort – what Meaghan Morris calls the gap between the

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

politics of culture (what industry does) and politics of politics (what we do with what industry does)[24] – is the primary source of pleasure in consuming popular culture. Fiske theorizes that readers create producerly readings of texts by abstracting from the text what is relevant to their own social context. Readers can resist pejorative representations of themselves that may exist in popular texts by creating a reading of the text that articulates the function of such representations in terms other than that preferred by the hegemonic reading. He argues, "Pleasure results from this mix of productivity, relevance, and functionality, which is to say that the meanings I make from a text are pleasurable when I feel that they are *my* meanings and that they relate to my everyday life in a practical, direct way" (*Understanding Popular Culture*, 57).

The readings I have offered of the novels discussed in this project are producerly readings in the sense that they are readings I – as critic – have constructed of the representations of the body and subjectivity in these texts in conjunction with my reading in other discourses about these topics. I believe that the readings that I have provided here are producerly readings that may also be made by a wider reading audience, one that compares the representations in these texts with their own life experience of interacting with the technologies represented in these texts. The methodology of this project – critical readings supported by research – does not provide tools for assessing whether similar producerly readers are being produced by fans of the genre, a point I will return to later. At this point, however, I would like to suggest that one of the roles of the critic is precisely to produce and circulate producerly readings, to demonstrate the possibilities for understanding that run counter to the preferred reading. My idea of the role of the critic

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

is of someone to mediate the reception of the text, to intervene, politically, in the construction of uses to which a text can be put. This critical role can be extended to all discourses, and has typically been the role of the critic in assessing 'non-fictional' ideological representations. What I am suggesting here is that by applying these tools to popular fiction, by demonstrating that resisting ideological interpellation and creating a reverse discourse is similar to providing a producerly reading, the critic is able to reveal that other examples of hegemonic articulations of ideology are open to appropriation and re-structuring in the same way as the fictional text has been.

This goal of applying producerly reading skills to discourses other than popular culture is related to the question that I started this section with, which is the role of popular culture in political change. Fiske theorizes this role in terms of the difference between macro and micro politics. Macro politics are the politics of politics, in Morris' terms, while micro politics are the politics of culture. While Fiske does see an emancipatory role for popular culture, he recognizes that cultural change is not the same as political revolution. Fiske suggest that popular culture, working at the micro level, attempts "to enlarge the space within which bottom-up power has to operate," as compared to political activities at the macro level, which "try to change the system that distributes the power in the first place" (*Understanding Popular Culture*, 56). Clearly, if the goal is to restructure a social order that distributes power inequitably, change is required at the macro level. I agree with Fiske that popular culture, alone, is not capable of producing such change. Despite this, however, the contribution of the micro politics of popular

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

culture is not negligible. With Fiske, I believe that it can be a necessary starting point which might lead to more engaged political activity:

> Women who find profeminine and antimasculine meanings in soap operas may, through their gossip networks, begin to establish a form of solidarity with others. Such resistances at the microlevel are necessary to produce the social conditions for political action at the macro level to be successful, though they are not necessarily in themselves a sufficient cause of that macropolitical activity. (*Understanding Popular Culture*, 172)

My argument, finally, is that – in addition to providing the grounds for solidarity – popular culture has an emancipatory potential because it contributes to the field of representations that structure subjectivity. Popular culture can create gradual, not revolutionary change; new subjects will eventually produce a new social order.

Patrick Brantlinger has argued that the role of the cultural critic is to bring the utopian impulses in the fantasy of mass culture to the forefront, thereby allowing them to become politically enabling.[25] I believe that the critical work I have performed in this project and described in this conclusion fit within Brantlinger's paradigm. My readings of the texts have sought to connect their representations with contemporary debates about the appropriate use of technology. The consistent idea that has emerged from these readings is that the features of a technology will not determine its social consequences. Instead, the context of meaning in which this technology is deployed will structure its influence as emancipatory or oppressive. I have argued, as does N. Katherine Hayles, that "literary texts are not, of course, merely passive conduits. They actively shape what the technologies mean and what the scientific theories signify in cultural contexts. They embody assumptions similar to those that permeated the scientific theories at critical points" (*Posthuman*, 21). My reading in Chapter 3 of cyberpunk fiction and its influence

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

on the construction of technological-elite subjects is one example of the active shaping power of literary texts.

As I argued in my introduction, I believe SF texts are particularly useful for enabling the move from utopian impulses in literature to the creation of politically enabling insights because of the way that such texts must create new worlds. SF texts foreground the connection between subjects and social worlds – the way in which these two mutually produce one another – through their need to explain the constructed world to the reader. The reader becomes oriented to the SF world by comparison to our social world. The process of coming to understand how the SF world works thus requires the reader to ask questions about how it is that certain social structures and values came to dominate, how it is that certain subjects were produced. As the reader works to understand the SF world through reference to our own world, the *possibility* of asking similar questions about how our world and our subjectivities came to be is thereby created. Popular culture texts are frequently accused of producing exaggerated representations, of drawing their morals with too broad a stroke. John Fiske, however, believes that this is one of the strengths of popular culture as cultural resistance. He writes, “Excess is overflowing semiosis, the excessive sign performs the work of the dominant ideology, but then exceeds and overspills it, leaving excess meaning that escapes ideological control and is free to be used to resist or evade it” (*Understanding Popular Culture*, 114). By exceeding the norms of hegemonic ideology to the extent that they become ridiculous, popular culture can make visible the functioning of these norms *as* norms rather than as merely natural social arrangements. The seemingly ‘overdone’ representations of popular culture can thus be

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

the mechanism by which the hegemonic articulation of the social world is denaturalized for the readers, allowing us – like Nell – to see through ideology because we bring a different context to our encounters with it. Finally, I would like to address the notion that popular culture is mere escapism that siphons away energy that would better be used in real political struggle. I suggest that while it is true that pleasure is undeniably an integral part of the popular culture experience, consumption of popular culture is not reducible to mere self-indulgence. I believe that readers are self-aware enough to recognize that escapism is an aspect of their reading pleasure. However, if readers know they use popular culture to escape, they must then also know that there is something wrong with current social structures, something which requires escape. This insight is the beginning of critical consciousness, and must not be dismissed.

Where Do We Go From Here?

> *Experience alone is unintelligible. Theory alone is empty. Consciousness-raising is whatever brings the two together, formally or informally, in a classroom, a house, on the street, in an apple orchard in Sonoma.* It is research.
>
> *Joanna Russ*

Finally, I want to discuss some of the limitations of this project, and a direction for future inquiry that I believe would address them. This project has been about the influence that popular culture can have on the formation of subjectivity, on the ideological constructions of the social world that such subjects then endorse, and on the debates about the appropriate deployment of technologies that are able to change our bodies and our selves. In brief, I have been interested in what people can *do* with the representations encountered in texts, the uses to which they may be put. However, my methodology has been one that is traditional within my department of origin, the English department. I

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

have provided close readings of the texts, and I have situated these readings within a web of other discursive representations that address the same topics (genetics, information technology, ideologies of reading and writing). This methodology has allowed me to provide my own producerly readings of these texts, and suggest the political ends toward which I believe such readings work. I have also argued that I believe a productive role for the cultural critic is to make and disseminate textual readings in this way, making more accessible the political uses to which the text may be put. What I believe is missing from such an approach is an examination of how other readers are making use of the text and its representations. I think that it is important for literary scholars to try to connect their work and their readings with an examination of how texts are being consumed and used by the public. In this final section of my conclusion, I would like to begin to sketch out a strategy by which such work might be accomplished.

An essential assumption throughout this work has been that representations *matter* because they structure our ideological understanding of the world and therefore the social and political choices we make. Hegemonic ideology is successful because it compels *belief*, and this belief is continually reproduced through the circulation of representations. However, a study of representations is incomplete without examination of how such representations are understood and used. There are two aspects to this need to expand our study of representations. Susan Bordo argues that "subversion of cultural assumptions (despite the claims of some deconstructionists) is not something that happens in a text or to a text. It is an event that takes place (or doesn't) in the reading of the text" (*Unbearable Weight*, 292). Thus, one of the elements missing from a study of representations is an

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

attempt to recover the producerly meanings created in reading practices.[26] Sherry Ortner describes the other missing element of studies of representation in the following terms: "Studies of the ways in which some set of 'texts' – media productions, literary creations, medical writings, religious discourses, and so on – 'constructs' categories, identities or subject positions, are incomplete and misleading unless they ask to what degree those texts successfully impose themselves on real people" (*Making Gender*, 2). Looking for connections between textual representations and material practices is therefore another aspect of analysis that needs to be included.

In their 1984 work, *Literary Texts and Contexts*, Jonathon Potter, Margaret Wetherall, and Peter Stringer outline their ideas about how literature can serve as a resource for social psychology.[27] In this final section, I would like to think through some of the ways in which the methodology of social psychology could be put to use for literature readings conceived of as cultural studies. Potter and Wetherall describe this methodology, called discourse analysis, in their subsequent collaboration, *Discourse and Social Psychology*. Their central argument is that "it is only when we start to look at the functions to which the talk is put that we can begin to fully understand what is happening in social life" (*Discourse*, 72). The methodology they describe is offered as a corrective to the then-current practice in social psychology of attempting to recover individuals' attitudes from statements that they make in interviews. Potter and Wetherall argue that instead of focusing merely on the *content* of the interviewees' discourse, researchers should also examine the function that such representations served. Potter and Wetherall observed that the same interview subject could provide contradictory observations on a topic depending upon the context in

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

which the topic was introduced. They argue that researchers become distracted by the pointless attempt to determine which representation is the 'true' one, that is, which corresponds to the subject's real attitude. Instead, they suggest, a more fruitful line of inquiry would be to examine the function that each representation serves – how it is appropriate to what the speaker wishes to accomplish in the given context – producing an analysis of the ways that people invoke and use ideological constructions.

My suggestion is that the methodology outlined by Potter and Wetherall could be a valuable tool to use to begin to address some of the shortcomings of our current methods of analyzing representations. In *Body Talk*, a collection of essays on the material and discursive regulation of bodies, many of the contributors used this methodology to analyze the way in which discourses of the body were being used by interview subjects to explain their personal experiences.[28] In this work, the researchers interviewed subjects about their bodily experiences, and then performed an analysis of the interview tapes to identify common discursive threads.[29] The researchers then offered arguments about the function that these common discursive representations served in the discourse of the subjects. One of the things that emerged from this work was evidence of the degree to which the interview subjects were taking up and modifying discursive representations provided to them by other discourses such as popular culture, medical practitioners, or institutional authorities from schools, prisons, etc. The methodology of discourse analysis provided the researchers with the ability to examine: the frequency with which representations from various discourses were taken up by the interviewees and used for self-description; the degree of fidelity between these self-representations and their original discursive source;

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

and the *use* which the interview subjects made of these representations, that is, the function they served in the interviewees' discourse.

My suggestion is that interviewing consumers of literary representations – be they popular or otherwise – and subjecting the interview records to discourse analysis will provide valuable insight into the ideological function of these representations. I believe that combining literary analysis (readings of the text) and analysis of representations provided in interviews with reading populations (readings of the uses) provides a way to examine the intersection of public discourses (of all types, including fiction) and self-representation. We would then be able to ask the question, how does experience intersect with ideology to produce the subject? Discourse analysis would provide a tool to look at the ways in which discourses about bodies, subjectivities, and subject positions are (re)produced and/or modified by those who 'inhabit' these positions. Discourse analysis can help us to identify those points of variation identified by Judith Butler as crucial to social and subjective change.

In terms of literary studies and the arguments I have made in this text, I believe that one of the insights that discourse analysis can provide is a sense of how various social subjects are negotiating the complex web of representations provided by various discourses. Interviewing subjects about their ideas on genetics, for example, could provide insight into how these subjects are negotiating between representations offered by television, by science magazines, by the newspapers, and by fiction. Discourse analysis can provide insight into the degree to which popular fiction has been successful in intervening in the ideological debate to construct cultural common sense. Discourse analysis can also be an important

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

tool for cultural studies by interviewing subjects about their readings of a particular text or set of texts. It may give us insight into producerly readings of texts – uses to which their representations can be put – that we had not previously imagined. As Landry and McLean have argued, "politically, the question is not whether texts reflect or change the world, but to what uses they are and have been put, and to what ends they are and can be used" (*Materialist Feminisms*, 92). The methodology of discourse analysis can address the shortcomings of our current practices of representation analysis; it provides information about the readings that are given to the representations and the material practices that are created in response to them.

John Fiske has argued for a type of cultural analysis that examines both the representations made by/in the text, and their circulation beyond it. His theory combines elements of the typically close-reading English literary practice (which this project is an example of) and reading of other discourses (such as the analysis of reader interviews that I have argued for). Fiske theorizes this circulation of representation in three levels:

> Popular culture circulates intertextually, among what I have called primary texts (the original cultural commodities – Madonna herself or a pair of jeans), secondary texts that refer to them directly (advertisements, press stories, criticism), and tertiary texts that are in constant process in everyday life (conversations, the ways of wearing jeans or dwelling in apartments, window shopping, or adopting Madonna's movements in a high school dance). (*Understanding Popular Culture*, 124)

Clearly, not every project can encompass this entire scope of representations. I believe that this current work is an example of what can be accomplished through the analysis of primary texts, and by advocating the use of discourse analysis of interviews I do not mean to suggest that readings of primary texts are inadequate without this tertiary material. I am,

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

however, suggesting that the logical next step for a project that seeks to interrogate the material effects of discursive representations on peoples' lives is to supplement the readings of primary texts with such tertiary material.

Looking to representations produced by readers who consume texts through choice – in whichever theoretical terms we wish to use and understand this verb – is particularly important for the critic who wishes to analyze popular culture. Michèle Barrett has argued that "what feminism requires, however, in order to reach out to a wider group of woman, is a more perceptive and sympathetic account, not only of how or why a dominant meaning of femininity has been constructed, but how or why women have sought, consciously and unconsciously, to embrace and desire it" (*Women's Oppression Today*, 251). The same argument holds true for popular culture. Negative theories of popular culture as mass culture, as simply a vehicle for the dissemination of dominant ideology, ignore at their peril the reasons that fans have for consuming these cultural productions. As Fiske's work suggests, the readings produced and circulated by readers need not be the preferred or hegemonic ones. Discourse analysis provides us with a tool for recovering and analyzing the producerly readings given to texts. It allows space for "a more perceptive and sympathetic account" that looks at what people do with culture and why they understand themselves to be doing it.

However, I believe that critical attention is required when looking at the representations offered by fans of popular culture. As the quotation from Barrett suggests, our reasons for embracing or desiring the representations in popular culture will not necessarily be accessible to consciousness. Jane Gallop argues that "the politics of

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

experience is inevitably a conservative politics for it cannot help but conserve traditional ideological constructs which are not recognized as such but are taken for the 'real'" (*Thinking Through the Body*, 99). It is important to have both perspectives in our work: the readers' representations of their own experience of reading, but also the cultural critic's sense of which discourses are being invoked to which ends by said readers. What the cultural critic can add is the analysis of the discursive representations made by the readers, a tracing of the links between discursive structures and their sources. Such analysis begins to allow us to answer the questions posed by Susan Bordo and Sherry Ortner: Do the readings of the text subvert cultural assumptions? To what degree are texts able to impose their representations successfully on real people? When we begin to combine these levels of analysis, working both to circulate readings of texts that emphasize their utopian potential and to analyze the functions to which other producerly readings of the text are being put, we begin to have a true cultural politics.

Finally, I would like to emphasize once again one of the premises of this study. The purpose of all narratives – including this one – is either to produce or to disrupt the discursive materiality of the present. My purpose has been both to produce specific readings of certain science fiction texts, and to disrupt the practice by which popular culture texts are understood as ideology. I have argued for taking seriously the intervention they may make in the discursive construction of reality, and for supplementing our reading of the texts with representations of their influence that other readers may make. In the particular readings of texts that I have provided, I have sought to disrupt Cartesian mind/body dualism, and argue for the importance of a concept of embodied subjectivity,

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

embedded within a material context. Fiske has drawn a connection between the body and the popular, seeing both as potentially disruptive of the dominant social order: "The struggle for control over the meanings and pleasures (and therefore the behaviors) of the body is crucial because the body is where the social is most convincingly represented as the individual and where politics can best disguise itself as human nature" (*Understanding Popular Culture*, 70). I have argued for uncovering the natural as political in the representations of the body found in popular culture. Both the body and popular texts have historically been represented in pejorative terms by the dominant social order in Western culture. This project has sought to recover the disruptive potential of both the body and popular texts, and to combine theory with material experience. My hope is that a successful cultural politics can grow from these roots.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

NOTES

[1] See *Remaking Eden* and Chapter 2 of this project.
[2] See *Last Flesh* and Chapter 3 of this project.
[3] The definition and "The Extropian Principles" (which I will discuss in more detail below) are written by Max More and are available at www.extropy.org/extprn3.htm.
[4] I use the word technology here in the sense that the extropians themselves see these various engagements with body modifications as technologies, and also to invoke the use of the word to describe institutional practices and discourses that discipline the body to produce the subject in specific ways (as Foucault, Balsamo, and de Lauretis have used the term). I do not intend to suggest that each of these technologies is equally plausible or equally accepted within the mainstream scientific community. For example, the technology of mind-uploading seems to be a science fiction trope and extropian dream only, not a path of research currently being pursued.
[5] This description is available at www.mit.edu/people/jpbonsen/jpbonsen-home.html.
[6] See Manfred E. Clynes and Nathan S. Kline, "Cyborgs and Space," *The Cyborg Handbook*. p. 29-33.
[7] Available at www.extropy.org/faq.
[8] See www.extropy.org/faq/minority.html.
[9] See www.extropy.org/faq/elite.html.
[10] See "Cyborgs at Large" an interview with Andrew Ross and Constance Penley, p. 16.
[11] Available online at www.extropy.org/eo/.
[12] I discussed this text briefly in Chapter 3 in relation to Christopher Dewdney's treatment of it. Moravec argues that there are no insurmountable technical obstacles to uploading one's consciousness into a computer, and he envisions a future in which our uploaded minds will live forever in more durable, robotic bodies or simply in computer memory.
[13] For examples of sites that include reading lists, see www.extropy.org/faz/topics.html which provides a list of 'required' reading that one is expected to master before asking 'obvious' questions on the mailing list; www.aleph.se/Trans/index.html which includes a mixture of fictional and non-fictional texts under each of its various Technology links; and a reading list which distinguishes between fictional and non-fictional sources found following the Extropian Principles at www.extropy.org/extprn3.htm.
[14] See *Technologies of the Gendered Body*, p. 75-77.
[15] See *Dangerous Diagnostics* p. 65 for a discussion of sex-selective abortion practices in India. See also p. 83 for a discussion of a chemical company (Cyanamid) which required women of 'reproductive' age to undergo sterilization before being allowed to work in certain areas.
[16] See Evelyn Fox Keller, Dion Farquhar, Rosi Braidotti, N. Katherine Hayles.
[17] See Ussher, "Framing the Sexual 'Other'".
[18] See *The DNA Mystique*, p. 12.
[19] See *The Other Machine*, p. 19.
[20] See *Body Images*, p. 162.
[21] See "Situated Knowledges" p. 190.
[22] See Veronica Hollinger, "Women in SF and Other Hopeful Monsters" for her discussion of this tendency of SF to push the limits of intelligible subject positions in terms of the ideological tensions between being a good 'woman' and being a good 'human subject'.
[23] See *Telling Flesh*, 157.
[24] See *The Pirate's Fiancée*, p. 269.
[25] See *Crusoe's Footprints*.
[26] I believe that this goal is particularly challenging for those of us trained in the traditional methodology of the English department since both our undergraduate education and, often, our teaching practices are aimed at disciplining students into producing the 'correct' reading.
[27] In fact, they argue that they are looking at both the way that literature can be put to use for social psychology, and the way that social psychology can be put to use for literature. However, I find that they are much more convincing in their arguments for the former than for the latter.
[28] See "Women's bodies, women's lives and depression" by Janet Stoppard which examines the degree to which women adopt ideas from medical discourse that blame their depression on their bodies (hormones, menopause, etc.); "Framing the Sexual 'Other'" by Jane Ussher which looks at the influence of

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

representations of homosexuality on the ability of lesbian adolescents to 'name' and 'become' homosexual; "Intimacy and love in late modern conditions" by Helene Joffe, which looks at the discourses offered by prostitutes about condom-use, and rejects the common perception that a lack of education about AIDS is the reason that condoms are not always used; "Reading the bleeding body" by Catherine Swann, which examines the self-representations of women diagnosed with PMS and the degree to which they use discursive images of PMS women as out-of-control to explain their behaviour; and "Menopause" by Myra Hunter and Irene O'Dea, which looks at the correspondence between medical and personal explanations of the experience of menopause.

[29] See *Discourse and Social Psychology* p. 160-175 for a detailed description of their methodology for choosing subjects, writing questions, transcribing interviews, coding and analyzing representations, and validating hypotheses that seek to explain the function of the representations.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

BIBLIOGRAPHY

Adam, Alison and Eileen Green. "Gender, agency, location and the new information society." *Cyberspace Divide: Equality, Agency and Policy in the Information Society.* Edited by Brian Loader. Routledge, 1998. p. 83-97.

Aldiss, Brian. *The Detached Retina: aspects of science fiction and fantasy.* Syracuse University Press, 1995.

Aldridge, Susan. *The Thread of Life: the story of genes and genetic engineering.* Cambridge University Press, 1996.

Allen Virginia and Terri Paul. "Science and Fiction: Ways of Theorizing About Women." *Erotic Universe: Sexuality and Fantastic Literature.* Ed Donald Palumbo. NY: Greenwood, 1986. p. 165-184.

Althusser, Louis. "Ideology and Ideological State Apparatuses." *Contemporary Critical Theory.* HBJ, 1989. Editor Dan Latimer. p. 1-60. [originally from *Lenin and Philosophy and Other Essays*, 1969]

Appiah, Kwame Anthony. "Racisms." *Anatomy of Racism.* Ed. David Theo Goldberg. University of Minnesota Press, 1990. p. 3-18.

Appleyard, Bryan. *Brave New Worlds: Staying Human in the Genetic Future.* Viking, 1998.

Aronowitz, Stanley. "The Production of Scientific Knowledge: Science, Ideology and Marxism." *Marxism and the Interpretation of Culture.* Eds. Cary Nelson and Lawrence Grossberg. University of Illinois Press, 1988. p. 519-542.

Atzori, Paulo and Kirk Woolford. "Extended Body: An Interview with Stelarc." *Digital Delirium.* Edited by Arthur and Marilouise Kroker. St. Martin's Press, 1997. p. 194-199.

Aurigi, Allesandro and Stephen Graham. "The 'crisis' in the urban public realm." *Cyberspace Divide: Equality, Agency and Policy in the Information Society.* Edited by Brian Loader. Routledge, 1998. p. 57-80.

B.K. "Are You My Daddy?" *Elm Street Magazine*, September 1999, p. 26.

Balsamo, Anne. *Technologies of the Gendered Body.* Duke University Press, 1996.

—. "Forms of Technological Embodiment: reading the body in contemporary culture." *Cyberspace, Cyberbodies, Cyberpunk.* Edited by Mike Featherstone and Roger Burrows. Sage, 1995. p. 215-237.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

—. "Feminism for the Incurably Informed." SAQ 92.4 (Fall 1993): 681-712.

Banks, Iain. "Some Notes on the Culture." Available from Rutger's SF Lover's archive at http://sflovers.rutgers.edu.

—. *Use of Weapons*. Bantom Books, 1990.

—. *The Player of Games*. Orbit, 1988.

—. *Consider Phlebus*. Bantam Books. 1987.

Barglow, Raymond. *The Crisis of Self in the Age of Information: Computers, Dolphins, Dreams*. Routledge, 1994.

Barker, Martin. "Biology and the New Racism." *Anatomy of Racism*. Ed. David Theo Goldberg. University of Minnesota Press, 1990. p. 18-37.

Barnard, Jeff. "Talk about building a better mousetrap; this gene experiment created smarter mice." *The Edmonton Journal*, September 2, 1999, A1.

Barr, Marleen. *Feminist Fabulations: Space/Postmodern Fiction*. University of Iowa Press, 1992.

Barrett, Michèle. "Psychoanalysis and Feminism: A British Sociologist's View." *Signs* 17.2 (1992):455-466.

—. "Words and Things: Materialism and Method in Contemporary Feminist Analysis." *Destabilizing Theory: Contemporary Feminist Debates*. Eds. Michele Barrett and Anne Philips. Stanford University Press, 1992. p. 201-219.

—. *The Politics of Truth: From Marx to Foucault*. Stanford University Press, 1991.

—. *Women's Oppression Today: The Marxist/Feminism Encounter*. Rev ed. Verso, 1988. Originally published in 1980.

—. "Feminism and the Definition of Cultural Politics." *Feminism, Culture and Politics*. Eds. Rosalind Brunt and Caroline Rowan. London: Lawrence and Wishart, 1982. p. 37-58.

Baudrillard, Jean. "Two Essays." *SF Studies* Vol. 18 (1991):309-320.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

—. "The Year 2000 Has Already Happened." Trans. Nai-fei Ding and Kuan-Hsing. *Body Invaders: Panic Sex in America*. Ed. Arthur Kroker and Marilouise Kroker. CultureTexts. New York: St. Martin's Press, 1987. p. 35-44.

—. *Simulations*. Foreign Agents Series. Trans. Paul Foss, Paul Patton, and Phlip Beitchman. New York: Semiotext(e), 1983.

Beal, Frances. "Black Women and Science Fiction Genre: Interview with Octavia Butler." *Black Scholar* 17.2 (1986):14-18.

Belkin, Lisa. "It's a ~~Girl/Boy~~ or Whatever You Want." *The Edmonton Journal*, August 15, 1999, F1.

Bell-Metereau, Rebecca. "Woman: The Other Alien in *Alien*." *Women Worldwalkers: New Dimensions of Science Fiction*. Ed. Jane Weedman. Texas Tech Press, 1985. p. 9-24.

Belsey, Catherine. *Critical Practice*. Methuen, 1990.

Benedikt, Michael. "Introduction." *Cyberspace: First Steps*. Ed. Michael Benedikt. Cambridge, Mass: MIT Press, 1991. p. 1-25.

Bennett, Tony. "Putting Policy into Cultural Studies." *Cultural Studies*. Edited by Lawrence Grossberg, Cary Nelson and Paula Treichler. Routledge, 1993. p. 23-37.

—. "Useful Culture." *Relocating Cultural Studies: Developments in Theory and Research*. Eds. Valda Blundell, John Shepherd and Ian Taylor. Routledge, 1993. p. 67-85.

—. *Outside Literature*. Routledge, 1990.

Bergstrom, Janet. "Androids and Androgyny." *Camera Obscura* 15 (1986):37-64.

Bertens, Hans. *The Idea of Postmodernism*. Routledge. 1995

Bhabha, Homi K. "Of mimicry and man: the ambivalence of colonial discourse." *the location of culture*. Routledge, 1994. p. 85-92.

—. "Signs taken for wonders: Questions of ambivalence and authority under a tree outside Delhi, May 1817." *the location of culture*. Routledge, 1994. p. 102-122.

—. "How newness enters the world: Postmodern space, postcolonial times, and the trials of cultural translation." *the location of culture*. Routledge, 1994. p. 212-235.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

—. "Postcolonial Authority and Postmodern Guilt." *Cultural Studies.* Edited by Lawrence Grossberg, Cary Nelson and Paula Treichler. Routledge, 1993. p. 56-68.

Blundell, Valda, John Shepherd and Ian Taylor (eds). *Relocating Cultural Studies.* Routledge, 1993.

Bordo, Susan. *Unbearable Weight.* University of California Press, 1993.

Bourdieu, Pierre. "The Production of Belief: Contribution to an Economy of Symbolic Goods." *The Field of Cultural Production: Essays on Art and Literature.* Editor Randal Johnson. Columbia UP, 1993. p. 74-111.

—. *Distinction: A Social Critique of the Judgement of Taste.* Translated by Richard Nice. Harvard University Press, 1984.

Braidotti, Rosi. "cyberfeminism with a difference." Available at www.let.ruu.nl/women_studies/rosi/cyberfem.htm.

Braidotti, Rosi and Nina Lykke (eds). *Between Monsters, Goddesses and Cyborgs: Feminist Confrontations with Science, Medicine and Cyberspace.* London: Zed Books, 1996.

Brantlinger, Patrick. *Crusoe's Footprints: Cultural Studies in Britain and America.* Routledge, 1990.

—. *Bread and Circuses: Theories of Mass Culture as Social Decay.* Ithaca, NY: Cornell Univeristy Press. 1983.

Broderick, Damien. *Reading by Starlight: Postmodern Science Fiction.* Routledge, 1995.

Broege, Valerie. "Technology and Sexuality in Science Fiction: Creating New Erotic Interfaces." *Erotic Universe: Sexuality and Fantastic Literature.* Ed Donald Palumbo. NY: Greenwood, 1986. p. 103-129.

—. "Women and Technology in Science Fiction: An Uneasy Alliance." *Women Worldwalkers: New Dimensions of Science Fiction.* Ed. Jane Weedman. Texas Tech Press, 1985. p. 43-58.

Brosnan, Mark. *Technophobia: The psychological impact of information technology.* Routledge, 1998.

Brunt, Rosalind. 'Engaging with the Popular: Audiences for Mass Culture and What to Say About Them." *Cultural Studies.* Edited by Lawrence Grossberg, Cary Nelson and Paula Treichler. Routledge, 1993. p. 69-80.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Brunt, Rosalind and Carolyn Rowan (eds). *Feminism, Culture, Politics.* Lawrence and Wishart, 1982.

Bukatman, Scott. *Terminal Identity.* Duke University Press, 1993.

—. "Fractal Geographies." *Artforum International.* 31.4(1992):6-7.

—. "Postcards from the Posthuman Solar System." *Science Fiction Studies* 18.3(1991):343-357.

—. "There's Always Tomorrowland: Disney and the Hypercinematic Experience." *OCTOBER* 57 (1991):55-78.

Butler, Judith. *Excitable Speech: A Politics of the Performative.* Routledge, 1997.

—. *Bodies that Matter: on the discursive limits of 'sex'.* Routledge, 1993.

—. *Gender Trouble.* Routledge, 1990.

Butler, Judith and Joan W. Scott *Feminists Theorize the Political.* Routledge, 1992.

Butler, Octavia. *Xenogenesis.* Guild Books. nd. [combined edition of *Dawn*, originally published 1987, *Adulthood Rites*, originally published 1988 and *Imago*, originally published 1989.]

Byers, Thomas B. "Commodity Futures." *Alien Zone: Cultural Theory and Contemporary Science Fiction Cinema.* Ed. Annette Kuhn. London: Verso, 1990. p. 39-50.

Cadigan, Pat. *Synners.* Bantam Books, 1991.

Carter, Raphael. *The Fortunate Fall.* TOR, 1996.

Case, Sue Ellen. "The Hot Rod Bodies of Cybersex." *Feminist Theory and the Body: A Reader.* Edited by Margrit Shildrick and Janet Price. Routledge, 1999. p. 140-142.

Chambers, Iain. *Popular Culture: The Metropolitan Experience.* London: Metheun,1986.

Cherniavsky. "(En)gendering Cyberspace in *Neuromancer*: Postmodern Subjectivity and Virtual Motherhood." *Genders* 18 (Winter 1993):32-46.

Clynes, Manfred E. and Nathan S. Kline. "Cyborgs and Space." *The Cyborg Handbook.* Edited by Chris Hables Gray with the assistance of Heidi J. Figueroa-Sarriera and Steven Mentor. Routledge, 1995. p. 29-33.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Collins, Jim. *Uncommon Cultures: Popular Culture and Post-Modernism.* Routledge, 1989.

Conboy, Katie, Nadia Medina and Sarah Stanbury (eds.). *Writing on the Body: Female Embodiment and Feminist Theory.* Columbia University Press, 1997.

Couch, Carl. *Information Technologies and Social Orders.* Introduction by David R. Maines and Shing-Ling Chen. NY: Aldine de Gruyter, 1996.

Cowan, Ruth Schwartz. "Genetic Technology and Reproductive Choice: An Ethics for Autonomy." *The Code of Codes: Scientific and Social Issues in the Human Genome Project.* Edited by Daniel Kevles and Leroy Hood. Harvard University Press, 1992. p. 244-263.

Csicsery-Ronay, Istvan, Jr. "Cyberpunk and Neuromanticism." *Storming the Reality Studio.* Kurham: Duke University Press, 1992. p. 183-193.

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

—. "Three Studies in Postmodernism." *SF Studies* 18.3 (1991):420-430.

Csordas, Thomas J. "Embodiment and Cultural Phenomenology." *Perspectives on Embodiment: The Intersections of Nature and Culture.* Edited by Gail Weiss and Honi Fern Haber. Routledge, 1999. p. 143-162.

Davies, Ioan. *Cultural Studies and Beyond: Fragments of Empire.* Routledge, 1995.

Davies, John Philip (ed). *Science Fiction, Social Conflict and War.* Manchester University Press, 1990.

Davis, Kathy. *Reshaping the Female Body: The Dilemma of Cosmetic Surgery.* Routledge, 1995.

Delany, Samuel R. *Longer Views.* Weselyan. 1996.

—. "The Politics of Paraliterary Criticism." *New York Review of Science Fiction.* 98(October 1996):1, 8-13, 99(November 1996):1, 8-12, 100(December 1996):1, 8-12.

—. Ed. *Silent Interviews on Language, Race, Sex, Science Fiction, and Some Comics.* Hanover: Wesleyan University Press, 1994.

—. "The Future of the Body - and Science Fiction and Technology." *The NY Review of SF* 48 (Aug, 1992):1, 10-13.

—. "The Life of/and Writing." *NY Review of SF* 26 (Oct 1990):1, 8-13.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

—. "Modernism, Postmodernism, Science Fiction." *NY Review of SF* 24 (Aug 1990):1, 8-9.

—. "Neither the Beginning Nor the End of Structuralism, Post-Strucutralism, Semiotics, or Deconstruction for SF Readers: An Introduction: Parts I-III." *NY Review of SF* 6-8 (Feb-Apr, 1989):8-12, 14-18, 9-11.

—. "Is Cyberpunk a Good Thing or a Bad Thing?" *Mississippi Review* 47/48 (1988):28-35.

—. "Some *Real* Mothers: An Interview with Samuel R. Delany by Takayuki Tatsumi." *Science Fiction Eye* 1.3 (1988):5-11.

—. *Starboard Wine: More Notes on the Language of Science Fiction.* Elizabethtown, NY: Dragon Press, 1984.

—. *The Jewel-Hinged Jaw: Notes on the Language of Science Fiction.* Elizabethtown, NY: Dragon Press, 1977.

de Lauretis, Teresa. *The Practice of Love: Lesbian Sexuality and Perverse Desire.* Indiana University Press, 1994.

—. *Technologies of Gender.* Indiana University Press, 1987.

—. *Alice Doesn't.* Indiana University Press,1984.

—. "Signs of W[a/o]nder." *The Technological Imagination: Theories and Fictions.* Ed Teresa deLauretis, Andreas Huyssen, and Kathleen Woodward. Madison: Coda Press, 1980. p. 159-174.

de Lauretis, Theresa, Andreas Huyssen and Kathleen Woodward (eds). *The Technological Imagination.* Coda Press, 1980.

Dery, Mark. *Escape Velocity: Cyberculture at the End of the Century.* New York: Grove Press, 1996.

Dewdney, Christopher. *Last Flesh: Life in the Transhuman Era.* Harper Collins, 1998.

Diamond, Irene and Lee Quinby (eds.) *Feminism and Foucault: Reflections on Resistance.* Boston: Northeastern University Press, 1988.

Dollimore, Jonathan and Alan Sinfield. "Culture and Textuality: Debating Cultural Materialism." *Textual Practice* 4 (1990):91-100.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Dominguez, Virginia. "Invoking Culture: The Messy Side of 'Cultural Politics'." *SAQ* 91.1 (1992):19-42.

Dreyfus, Hubert L. and Stuart E. Dreyfus. "The Challenge of Merleau-Ponty's Phenomenology of Embodiment for Cognitive Science." *Perspectives on Embodiment: The Intersections of Nature and Culture.* Edited by Gail Weiss and Honi Fern Haber. Routledge, 1999. p. 103-120.

Eagleton, Terry. *Literary Theory: An Introduction.* The University of Minnesota Press, 1983.

Ebert, Teresa. "Ludic Feminism, the Body, Performance, and Labour: Bringing Materialism Back into Feminist Cultural Studies." *Cultural Critique* (Winter 1992):5-50.

Evenson, Brad. "Personality can be transplanted, researchers find." *The National Post*, August 19, 1999, A1

Extropian FAQ. Available at www.extropy.org/faq.

Fanon, Franz. "The Fact of Blackness." *Anatomy of Racism.* Ed. David Theo Goldberg. University of Minnesota Press, 1990. p. 108-126.

Farquhar, Dion. *The Other Machine: Discourse and Reproductive Technologies.* Routledge, 1996.

Favazza, Armando. *Bodies Under Siege: Self-multilation and Body Modification in Culture and Psychiatry*, 2nd edition. Afterword by Fakir Musafar. Johns Hopkins University Press, 1996.

Featherstone, Mike and Roger Burrows (eds). *Cyberspace, Cyberbodies, Cyberpunk.* Sage Press, 1995.

Fiske, John. *Understanding Popular Culture.* Unwin Hyman, 1989.

Flax, Jane. "The End of Innocence." *Feminists Theorize the Political.* Eds Judith Butler and Joan W. Scott. Routledge, 1992. p. 445-463.

—. "Signifying the Father's Desire: Lacan in a Feminist's Gaze." *Criticism and Lacan: Essays on Language, Structure and the Unconscious.* University of Georgia Press, 1990. p. 109-119.

—. *Thinking Fragments: Psychoanalysis, Feminism and Postmodernism in the Contemporary West.* University of California Press, 1990.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

—. "Postmodernism and Gender Relations in Feminist Theory." *Signs* 12.4 (1987):621-643.

Foster, Frances. "Octavia Butler's Black Female Future Fiction." *Extrapolation* 23.1 (1982):37-49.

Foster, Thomas. "Incurably Informed: The Pleasures and Dangers of Cyberpunk." *Genders* 18 (Winter 1993):1-10.

—. "Meat Puppets or Robopaths?: Cyberpunk and the Question of Embodiment." *Genders* 18 (Winter 1993):11-31.

Foucault, Michel. *Power/Knowledge.* Ed. Colin Gordon. Pantheon, 1980.

—. *The History of Sexuality Volume 1.* Pantheon Books, 1978.

—. *Discipline and Punish: The Birth of the Prison.* Trans. Alan Sheridan. New York: Vintage Books, 1977.

Fraiberg, Allison. "Of AIDS, Cyborgs & Other Indiscretions: Resurfacing the Body in the Postmodern.' *Essays in Postmodern Culture.* Eds. Eyal Amiran and John Unworth. Oxford University Press, 1993. p. 38-55.

Fraser, Nancy. *Unruly Practices: Power, Discourse and Gender in Contemporary Social Theory.* Cambridge, Polity Press, 1989.

—. "Foucault's Body-Language: A Post-Humanist Political Rhetoric." *Salmagundi* 61 (1983):55-70.

Freedman, Carl. "Science Fiction and Critical Theory." *SF Studies* 14.2 (1987):180-200.

Freeman, Mark. *Rewriting the Self: history, memory, narrative.* Routledge, 1993.

Freud, Sigmund. *On Sexuality.* Penguin Books, 1977.

—. *The Ego and the Id.* Translated by James Strachey. New York: WW Norton, 1961.

—. *The Interpretation of Dreams.* Translated by James Strachey. New York: Basic Books. 1955.

Frith, Simon. "Art Ideology and Pop Practice." *Marxism and the Interpretation of Culture.* Eds. Cary Nelson and Lawrence Grossberg. Univeristy of Illinois Press, 1988. p. 461-476.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Garofalo, Reebee. "Understanding Mega-Events: If We Are the World, Then How Do We Change It?" *Technoculture*. Edited by Constance Penley and Andrew Ross. University of Minnesota Press, 1991. p. 247-270.

Gallop, Jane. *Thinking Through the Body*. Columbia University Press, 1988.

—. *Reading Lacan*. Cornell University Press, 1985.

Garber. Marjorie. "Spare Parts: The Surgical Construction of Gender." *The Gay and Lesbian Studies Reader*. Editors Henry Abelove, Michele Aina Barale and David M. Helperin. Routledge, 1993. p. 321-336.

Gibson, William. *Neuromancer*. ACE Books, 1984.

Gilbert, Walter. "A Vision of the Grail." *The Code of Codes: Scientific and Social Issues in the Human Genome Project*. Edited by Daniel Kevles and Leroy Hood. Harvard University Press, 1992. p. 83-97.

Goldberg, David Theo. "The Social Formation of Racist Discourse." *Anatomy of Racism*. Ed. David Theo Goldberg. University of Minnesota Press, 1990. p. 295-318.

Golding, Sue. *The Eight Technologies of Otherness*. Routledge, 1997.

Gray, Chris Hables. (ed.) *The Cyborg Handbook*. With assistance the assistance of Heidi J. Figueroa-Sarriera and Steven Mentor. Routledge, 1995.

Greely, Henry T. "Health Insurance, Employment Discrimination and the Genetics Revolution." *The Code of Codes: Scientific and Social Issues in the Human Genome Project*. Edited by Daniel Kevles and Leroy Hood. Harvard University Press, 1992. p. 264-280.

Green, Michelle Erica. "'There goes the Neighborhood' Octavia Butler's Demand for Diversity in Utopias." *Utopias and Science Fiction by Women: Worlds of Difference*. Editors Jane Donawerth and Carol Kilmertin. Syracuse University Press, 1994. p. 166-189.

Grossberg, Lawrence, Cary Nelson and Paula Treichler (eds). *Cultural Studies*. Routlege, 1993.

Grossberg, Lawrence and Cary Nelson (eds). *Marxism and the Interpretation of Culture*. University of Illinois Press, 1988.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Grosz, Elizabeth. "Refiguring Lesbian Desire." *Race, Class, Gender, and Sexuality: The Big Questions*. Edited by Naomi Zack, Laurie Shrage and Crispin Sartwell. Blackwell Publishers, 1998. p. 268-280.

—. *Volatile Bodies*. Allen & Unwin, 1994.

—. *Jacques Lacan: A Feminist Introduction*. Routledge, 1990.

Hall, Stuart. "Cultural Studies and its Theoretical Legacies." *Cultural Studies*. Edited by Lawrence Grossberg, Cary Nelson and Paula Treichler. Routledge, 1993. p. 277-294.

Haraway, Donna. "The Biopolitics of Postmodern Bodies: Determinations of Self in Immune System Discourse." *Feminist Theory and the Body: A Reader*. Edited by Margrit Shildrick and Janet Price. Routledge, 1999. p. 203-214.

—. *Modest_Witness@Second_Millennium: FemaleMan©_Meets_OncoMouse™: feminism and technoscience*. Routledge, 1997.

—. "The Persistence of Vision." *Writing on the Body: Female Embodiment and Feminist Theory*. Edited by Katie Conboy, Nadia Medina and Sarah Stanbury. Columbia University Press, 1997. p. 283-295.

—. "The Promises of Monsters: A Regenerative Politics for Inappropriate/d Others." *Cultural Studies*. Edited by Lawrence Grossberg, Cary Nelson and Paula Treichler. Routledge, 1993. p. 295-337.

—. "A Cyborg Manifesto: Science Technology, and Socialist-Feminism in the Late Twentieth Century." *Simians, Cyborgs and Women: The Reinvention of Nature*. New York: Routledge, 1991. p. 149-181.

—. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Simians, Cyborgs and Women: The Reinvention of Nature*. New York: Routledge, 1991. p. 183-201.

—. "The Actors are Cyborg, Nature is Coyote and the Geography is Elsewhere: Postscript to 'Cyborgs at Large.'" *Technoculture*. Edited by Constance Penley and Andrew Ross. University of Minnesota Press, 1991. p. 21-26.

Harris, Leslie. "The Psychodynamic Effects of Virtual Reality." *Electronic Journal on Virtual Culture* 2.1 (1994). Available at www.monash.edu.au/journals/ejvc/harris.v2n1.

Harvey, David. *The Conditions of Postmodernity: An Enquiry into the Origins of Cultural Change*. Blackwell, 1989.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Hayles, N. Katherine. *How We Became PostHuman: Virtual Bodies in Cybernetics, Literature, and Information.* Chicago University Press, 1999.

Hayles, Katherine, David Porush, Brooks Landon, Vivian Sobchack, J.G. Ballard. "In Response to Jean Baudrillard." *SF Studies* 18.3 (1991):321-329.

Haywood, Trevor. "Global Networks and the Myth of Equality: Trickle down or trickle away?" *Cyberspace Divide: Equality, Agency and Policy in the Information Society.* Edited by Brian Loader. Routledge, 1998. p. 19-34.

Heim, Michael. *The Metaphysics of Virtual Reality.* Oxford University Press, 1993.

Heim, Michael. "The Erotic Ontology of Cyberspace." *Cyberspace: First Steps.* Ed. Michael Benedikt. Cambridge: MIT Press, 1991. p. 59-80.

Hennessy, Rosemary. *Materialist Feminism and the Politics of Discourse.* Routledge, 1993.

Hennessy, Rosemary and Chrys Ingraham (eds). *Materialist Feminism: A Reader in Class, Difference and Women's Lives.* Routledge, 1997.

Herrnstein, Richard J. and Charles Murray. *The Bell Curve: Intelligence and Class Structure in American Life.* Simon and Schuster, 1996. Originally published in 1994.

Holderness, Mike. "Who are the world's information-poor?" *Cyberspace Divide: Equality, Agency and Policy in the Information Society.* Edited by Brian Loader. Routledge, 1998. p. 35-56.

Hollinger, Veronica. "A New Alliance of Postmodernism and Feminist Speculative Fiction." *SF Studies* 20.2 (1993):266-272.

—. "Cybernetic Deconstructions: Cyberpunk and Postmodernism." *Storming the Reality Studio: A Casebook of Cyberpunk and Postmodernism.* Ed. Larry McCaffery. Durham: Duke University Press, 1992. p. 203-218.

—. "Feminist Science Fiction: Breaking Up the Subject." *Extrapolation* 31.3 (1990):229-239.

—. "Feminist Science Fiction: Construction and Deconstruction." *SF Studies* 16.2 (1989):223-227.

—. "The Vampire and the Alien: Variations on the Outsider." *SF Studies* 16.2 (1989):145-160.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

hooks, bell. "Talking Sex." *Race, Class, Gender & Sexuality: The Big Questions.* Edited by Naomi Zack, Laurie Shrage and Crispin Sartwell. Blackwell Publishers, 1998. p. 302-307.

—. "Representing Whiteness in the Black Imagination." *Cultural Studies.* Edited by Lawrence Grossberg, Cary Nelson and Paula Treichler. Routledge, 1993. p. 338-346.

—. *Yearning.* Between the Lines, 1990.

Hopkins, Patrick D. "Gender Treachery: Homophobia, Masculinity, and Threatened Identities." *Race, Class, Gender, and Sexuality: The Big Questions.* Edited by Naomi Zack, Laurie Shrage and Crispin Sartwell. Blackwell Publishers, 1998. p. 168-186.

Hoy, David Couzens. "Critical Resistance: Foucault and Bourdieu." *Perspectives on Embodiment: The Intersections of Nature and Culture.* Edited by Gail Weiss and Honi Fern Haber. Routledge, 1999. p. 3-22.

Hubbard, Ruth and Elijah Wald. *Exploding the Gene Myth.* Beacon Press, 1993.

Hunter, Myra and Irene O'Dea. "Menopause." *Body Talk: The material and discursive regulation of sexuality, madness and reproduction.* Edited by Jane Ussher. Routledge, 1997. p. 199-222.

James, Edward. *Science Fiction in the 20th Century.* Oxford University Press, 1994.

—. "Yellow, Black, Metal and Tentacled: The Race Question in American SF." *Science Fiction, Social Conflict and War.* Ed John Philip Davies. Manchester University Press, 1990. p. 26-49.

Jameson, Fredric. *Postmodernism, or, the Cultural Logic of Late Capitalism.* Durham: Duke University Press, 1991.

—. "Cognitive Mapping." *Marxism and the Interpretation of Culture.* Editors Cary Nelson and Lawrence Grosberg. University of Illinois Press, 1988. p. 347-360.

—. "Progress vs. Utopia; or, Can We Imagine the Future?" *Science Fiction Studies* 9.2 (1982):147-158.

Jenks, Chris. *Culture.* Routledge, 1993.

Joffe, Helene. "Intimacy and love in late modern conditions." *Body Talk: The material and discursive regulation of sexuality, madness and reproduction.* Edited by Jane Ussher. Routledge, 1997. p. 159-175.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Johnson, Mark. "Embodied Reason." *Perspectives on Embodiment: The Intersections of Nature and Culture.* Edited by Gail Weiss and Honi Fern Haber. Routledge, 1999. p. 81-102.

Johnson, Mark and George Lakoff. *Philosophy in the Flesh.* Basic Books, 1999.

Jones, Gwyneth. *Phoenix Café.* TOR, 1998.

—. "Metempsychosis of the Machine: Science Fiction in the Halls of Karma." *SF Studies* 24 (1997):1-10.

—. *North Wind.* TOR, 1994.

—. *White Queen.* TOR, 1991.

Kadrey, Richard. "reach out and touch someone." *Shift* (November 1999):44, 46.

Kaplan, E. Ann. ed. *Postmodernism and Its Discontents.* 1988.

Keller, Evelyn Fox. "Nature, Nurture and the Human Genome Project." *The Code of Codes: Scientific and Social Issues in the Human Genome Project.* Edited by Daniel Kevles and Leroy Hood. Harvard University Press, 1992. p. 281-299.

Kelly, Gary. *Women, Writing and Revolution, 1790-1827.* Oxford University Press, 1993.

Kendal, Lori. "MUDder? I Hardly Know 'Er! Adventures of a Feminist MUDder." *Wired_Women: Gender and New Realities in Cyberspace.* Edited by Lynn Cherney and Elizabeth Reba Weise. Seattle: Seal Press, 1996. p. 207-223.

Kevles, Daniel. "Out of Eugenics: The Historical Politics of the Human Genome." *The Code of Codes: Scientific and Social Issues in the Human Genome Project.* Edited by Daniel Kevles and Leroy Hood. Harvard University Press, 1992. p. 3-36.

Kevles, Daniel and Leroy Hood (eds). *The Code of Codes: Scientific and Social Issues in the Human Genome Project.* Harvard University Press, 1992.

Kirby, Vicki. *Telling Flesh: The Substance of the Corporeal.* Routledge, 1997.

Krieger, Lisa. "Nice mice just a new gene away." *The Edmonton Journal* August 22, 1999, B2.

Kroker, Arthur and Marilouise Kroker. *Digital Delirium.* St. Martin's Press, 1997.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

—. "Theses on the Disappearing Body in the Hyper-Modern Condition." *Body Invaders: Panic Sex in America*. Ed. Arthur Kroker and Marilouise Kroker. CultureTexts. New York: St. Martin's Press, 1987. p. 20-34.

Kuhn, Annette, ed. *Alien Zone: Cultural Theory and Contemporary Science Fiction*. London: Verso, 1990.

—. *The Power of the Image: Essays on Representation and Sexuality*. Routledge, 1985.

Lacan, Jacques. "The Mirror Stage." *Seminar I*. Edited by Jacques-Alain Miler. New York: WW Norton, 1988.

Lander, Eric. "DNA Fingerprinting: Science, Law and the Ultimate Identifier." *The Code of Codes: Scientific and Social Issues in the Human Genome Project*. Edited by Daniel Kevles and Leroy Hood. Harvard University Press, 1992. p. 191-210.

Landry, Donna and Gerald MacLean. *Materialist Feminisms*. Blackwell, 1993.

Lash, Scott. "Genealogy and the Body: Foucault/Deleuze/Nietsche." *Sociology of Postmodernism*. Routledge, 1990. p. 55-77.

Ledbetter, Mark. *Victims and the Postmodern Narrative or Doing Violence to the Body: An Ethic of Reading and Writing*. St. Martin's Press, 1996.

Lefanu, Sarah. *Feminism and Science Fiction*. Indiana University Press, 1989.

—. *In the Chinks of the World Machine*. The Woman's Press, 1988.

Le Guin, Ursula. *The Left Hand of Darkness*. Ace Books, 1976. (original text copyright 1969; introduction added in 1976)

Loader, Brian (ed). *Cyberspace Divide: Equality, Agency and Policy in the Information Society*. Routledge, 1998.

—. "Cyberspace Divide: Equality, Agency and Policy in the Information Society." *Cyberspace Divide: Equality, Agency and Policy in the Information Society*. Edited by Brian Loader. Routledge, 1998. p. 3-16.

Lowe, Donald M. *The Body in Late-Capitalist USA*. Duke University Press, 1995.

Lyotard, Jean Francois. *The Postmodern Condition*. Edited by Geoff Gennington and Brian Massumi. University of Minnesota Press, 1984.

Malmgren, Carl. "Self and Other in SF: Alien Encounters." *SF Studies* 20.1 (1993):15-33.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

—. "Against Genre/Theory: The State of SF Criticism." *Poetics Today* 12.1 (1991):125-144.

Martin, Emily. "Body Narratives, Body Boundaries." *Cultural Studies*. Edited by Lawrence Grossberg, Cary Nelson and Paula Treichler. Routledge, 1993. p. 409-423.

Marx, Karl and Fredric Engels. *The German Ideology*. International Publications, 1947.

Mathieson, Kenneth. "The Influence of SF in the Contemporary US Novel." *SF Studies* 12.1 (1985):22-32.

McCaffery, Larry. "Introduction: The Desert of the Real." *Storming the Reality Studio: A Casebook of Cyberpunk and Postmodernism*. Ed. Larry McCaffery. Durham: Duke University Press, 1992. p. 1-16.

—. "Cutting Up: Cyberpunk, Punk Music and Urban Decontextualizations." *Storming the Reality Studio: A Casebook of Cyberpunk and Postmodernism*. Ed. Larry McCaffery. Durham: Duke University Press, 1992. p. 286-307.

—. "An Interview with William Gibson." *Storming the Reality Studio: A Casebook of Cyberpunk and Postmodernism*. Ed. Larry McCaffery. Durham: Duke University Press, 1992. p. 263-285.

—. (ed.) *Across the Wounded Galaxies: Interviews with Contemporary American Science Fiction Writers*. Urbana and Chicago: Univeristy of Illinois Press, 1990.

McHale, Brian. *Postmodernist Fiction*. New York: Methuen, 1987.

McLuhan, Marshall. *Understanding Media: The Extensions of Man*. McGraw-Hill, 1964.

McRae, Shannon. "Coming Apart at the Seams: Sex, Text, and the Virtual Reality." *Wired_Women: Gender and New Realities in Cyberspace*. Edited by Lynn Cherney and Elizabeth Reba Weise. Seattle: Seal Press, 1996. p. 242-263.

McRobbie, Angela. "Post-Marxism and Cultural Studies: A Post-Script." *Cultural Studies*. Edited by Lawrence Grossberg, Cary Nelson and Paula Treichler. Routledge, 1993. p. 719-730.

Mercer, Kobena. "'1968': Periodizing Politics and Identity." *Cultural Studies*. Edited by Lawrence Grossberg, Cary Nelson and Paula Treichler. Routledge, 1993. p. 424-449.

Miringoff, Marque-Luisa. *The Social Costs of Genetic Welfare*. Rutgers University Press, 1991.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

More, Max. "The Extropian Principles Version 3.0: A Transhumanist Declaration." Copyright 1999. Available at www.extropy.org/extprn3.htm.

Morris, Meaghen. "Feminism, Reading, Postmodernism." *Postmodernism: A Reader*. Ed. Thomas Docherty. Columbia University Press, 1993. p. 368-389.

—. *The Pirate's Fiancée*. Verso, 1988.

Mouffe, Chantal. "Hegemony and New Political Subjects: Toward a New Concept of Democracy." *Marxism and the Interpretation of Culture*. Eds. Cary Nelson and Lawrence Grossberg. University of Illinois Press, 1988. p. 89-104.

Mouffe, Chantal and Erneau Laclau. *Hegemony and Socialist Strategy*. Verso, 1985.

Nelson, Cary and Dilip Parameshwar Gaonkar (eds.) *Disciplinarity and Dissent in Cultural Studies*. Routledge, 1996.

Nelkin, Dorothy. "The Social Power of Genetic Information." *The Code of Codes: Scientific and Social Issues in the Human Genome Project*. Edited by Daniel Kevles and Leroy Hood. Harvard University Press, 1992. p. 177-190.

Nelkin, Dorothy and M. Susan Lindee. *The DNA Mystique: The Gene as Cultural Icon*. W.H. Freeman, 1995.

Nelkin, Dorothy and Laurence Tancredi. *Dangerous Diagnostics: The Social Power of Biological Information*. Basic Books, 1989.

Nicholson, Linda. "Interpreting 'Gender'." *Race, Class, Gender, and Sexuality: The Big Questions*. Edited by Naomi Zack, Laurie Shrage and Crispin Sartwell. Blackwell Publishers, 1998. p. 187-211.

Nixon, Nicola. "Cyberpunk: Preparing the Ground for Revolution or Keeping the Boys Satisfied." *SF Studies* 19.2 (1992):219-235.

Ortner, Sherry. *Making Gender: The Politics and Erotics of Culture*. Boston: Beacon Press, 1996.

Pearson, Jacqueline. "Where no man has gone before: sexual politics and women's science fiction." *Science Fiction, Social Conflict and War*. Ed John Philip Davies. Manchester UP, 1990. p. 8-25.

Pearson, Patricia. "Is that a mouse in your pants ..." *National Post*, October 11, 1999 p. D1,D2.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Penley, Constance. "Feminism, Psychoanalysis and the Study of Popular Culture." *Cultural Studies*. Edited by Lawrence Grossberg, Cary Nelson and Paula Treichler. Routledge, 1993. p. 479-500.

—. *The Future of an Illusion: Feminism & Psychoanalysis*. University of Minnesota Press, 1989.

Penley, Constance and Andrew Ross (eds.). *Technoculture*. University of Minnesota Press, 1991.

—. "Cyborgs at Large: Interview with Donna Haraway." *Technoculture*. Edited by Constance Penley and Andrew Ross. University of Minnesota Press, 1991. p. 1-20.

Penley, Constance et al. (eds.) *Close Encounters: Film, Feminism and Science Fiction*. Minneapolis: University of Minnesota Press, 1991.

Peppers, Cathy. "I've Got You Under My Skin': Cyber(sexed) Bodies in Cyberpunk Fictions." *Bodily Discursions: Genders, Representations, Technologies*. Edited by Deborah Wilson and Chrstine Moneera Laennec. State University of New York Press, 1997. p. 163-185.

Pfaelzer, Jean. "Subjectivity as Feminist Utopia." *Utopia and Science Fiction by Women: Worlds of Difference*. Eds. Jane Donawerth and Carol Kolmerten. Syracuse University Press, 1994. p. 93-106.

Pilgram, David and Anne Rogers. "Mental health, critical realism and lay knowledge." *Body Talk: The material and discursive regulation of sexuality, madness and reproduction*. Edited by Jane Ussher. Routledge, 1997. p. 33-49.

Potter, Jonathon and Margaret Wetherall. *Discourse and Social Psychology: Beyond Attitudes and Behaviour*. Sage Publications, 1987.

Potter, Jonathon, Margaret Wetherall and Peter Stringer. *Social Texts and Contexts: Literature and Social Psychology*. Routledge, 1984.

Probyn, Elspeth. *Sexing the Self*. Routledge, 1993.

—. "Technologizing the Self: A Future Anterior for Cultural Studies." *Cultural Studies*. Edited by Lawrence Grossberg, Cary Nelson and Paula Treichler. Routledge, 1993. p. 501-511.

Rieder, John. "Embracing the Alien: Science Fiction in Mass Culture." *SF Studies* 9

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

(1982):26-37.

Roberts, Robin. "Postmodernism and Feminist SF." *SF Studies* 17 (1990):136-151.

Rose, Jacqueline. *Why War? Psychoanalysis, Politics, and the Return to Melanie Klein.* Blackwell, 1993.

Rose, Mark. (ed.) *SF: A Collection of Critical Essays.* Prentice-Hall, 1976.

Rose, Nikolas. *Inventing Our Selves: Psychology, Power, and Personhood.* Cambridge University Press, 1996.

Ross, Andrew. "Cyberpunk in Boystown." *Strange Weather: Culture, Science, and Technology in an Age of Limits.* London: Verso, 1991. p. 137-167.

—. "Hacking Away at the Counterculture." *Strange Weather: Culture, Science, and Technology in an Age of Limits.* London: Verso, 1991. p. 75-100.

—. (ed.) *Universal Abandon? The Politics of Postmodernism.* University of Minnesota Press,1988.

Russ, Joanna. *What are we Fighting For? Sex, Race, Class and the Future of Feminism.* St. Martin's Press, 1998.

—. *To Write Like A Woman: essays in feminism and science fiction.* Indiana University Press, 1995.

Russo, Enzo and David Cove. *Genetic Engineering: Dreams and Nightmares.* WH Freeman, 1995.

Salvaggio, Ruth. "Octavia Butler and the Black Science Fiction Heroine." *Black America Literature Forum* 18.2 (1984):78-81.

Sanders, John T. "Affordances: An Ecological Approach to First Philosophy." *Perspectives on Embodiment: The Intersections of Nature and Culture.* Edited by Gail Weiss and Honi Fern Haber. Routledge, 1999. p. 121-142.

Sayers, Janet. "Adolescent Bodies." *Body Talk: The material and discursive regulation of sexuality, madness and reproduction.* Edited by Jane Ussher. Routledge, 1997. p. 85-105.

Schatzki, Theodore. "Practiced Bodies: Subjects, Genders and Minds." *The Social and Political Body.* Edited by Theodore Schatzki and Wolfgang Natter. The Guilford Press, 1996. p. 49-78.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Schatzki, Theodore and Wolfgang Natter (eds). *The Social and Political Body*. The Guilford Press, 1996.

Scholes, Robert. "The Roots of Science Fiction." *SF: A Collection of Critical Essays*. Edited by Mark Rose. Prentice-Hall, 1976. p. 46-56.

Schuyler, William. "Sexes, Genders, and Discrimination." *Erotic Universe: Sexuality and Fantastic Literature*. Ed Donald Palumbo. NY: Greenwood, 1986. p. 45-60.

Sedgewick, Cristina. "The Fork in the Road: Can Science Fiction Survive in Postmodern, Megacorporate America?" *SF Studies* 18.1 (1991):11-52.

Segal, Lynne. "Body Matters: Cultural Inscriptions." *Feminist Theory and the Body: A Reader*. Edited by Margrit Shildrick and Janet Price. Routledge, 1999. p. 105-110.

Shea, Jim. "Pet clones too doggone weird." *The Edmonton Journal*. July 3, 1999. F2.

Sheridan, Susan (ed). *Grafts: Feminist Cultural Criticism*. Verso, 1988.

Shift: for living in digital culture. November 1999 Issue.

Shildrick, Margrit. "Posthumanism and the Monstrous Body." *Body and Society* 2.1 (1996):1-16.

Shildrick, Margrit and Janet Price (eds). *Feminist Theory and the Body: A Reader*. Routledge, 1999.

Siivonen, Timo. "Cyborgs and Generic Oxymorons: The Body and Technology in William Gibson's Cyberspace Trilogy." *SF Studies* 23.2 (July 1996):227-244.

Silver, Lee M. *Remaking Eden: Cloning and Beyond in a Brave New World*. Avon Books, 1997.

Silverman, Kaja. *Male Subjectivity at the Margins*. Routledge, 1992.

Simpson, David. "Introduction: The Moment of Materialism." *Subject to History: Ideology, Class, Gender*. Ed. David Simpson. Cornell University Press, 1991. p. 1-33.

Slouka, Mark. *War of the Worlds: cyberspace and the hi-tech assault on reality*. Basic Books, 1995.

Smith, Sidonie. *Subjectivity, Identity and the Body: Women's Autobiographical Practices in the Twentieth Century*. Indiana University Press, 1993.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Smith, Anthony. *Software for the Self: Technology and Culture.* Oxford University Press, 1996.

Sobchack, Vivan. "Beating the Meat/Surviving the Text, or How to Get Out of this Century Alive." *Cyberspace, Cyberbodies, Cyberpunk.* Edited by Mike Featherstone and Roger Burrows. Sage Press, 1995. p. 205-214.

Sophia, Zoe. "Virtual Corporeality: A Feminist View." *Australian Feminist Studies* 15 (Autumn 1992):11-24.

Spelman, Elizabeth V. "Woman as Body: Ancient and Contemporary Views." *Feminist Theory and the Body: A Reader.* Edited by Margrit Shildrick and Janet Price. Routledge, 1999. p. 21-30.

Spring, Claudia. "Muscular Circuitry: The Invincible Armored Cyborg in Cinema." *Genders* 18 (Winter 1993):87-101.

Squire, Corrine. "AIDS Panic." *Body Talk: The material and discursive regulation of sexuality, madness and reproduction.* Edited by Jane Ussher. Routledge, 1997. p. 50-69.

Star, Susan Leigh. "From Hestia to Home Page: Feminism and the Concept of Home in Cyberspace." *Between Monsters, Goddesses and Cyborgs.* Edited by Rosi Braidotti and Nina Lykke. London: Zed Books, 1996. p. 30-46.

Stephenson, Neal. *The Diamond Age.* Bantam Books, 1995.

Sterling, Bruce. "Unstable Networks." *Digital Delirium.* Edited by Arthur and Marilouise Kroker. St. Martin's Press, 1997. p. 25-37.

—. "Preface." *Mirrorshades: The Cyberpunk Anthology.* Ed. Bruce Sterling. New York: Arbor House, 1986. p. vii-xiv.

Stone, Allucquère Rosanne. "In the language of vampire speak." *The Eight Technologies of Otherness.* Edited by Sue Golding. Routledge, 1997 p. 58-67.

—. *The War of Desire and Technology at the Close of the Mechanical Age.* MIT Press, 1996.

—. "Will the Real Body Please Stand Up? Boundary Stories About Virtual Cultures." *Cyberspace: First Steps.* Ed. Michael Benedikt. Cambridge: MIT Press, 1991. p. 81-118.

Stoppard, Janet. "Women's bodies, women's lives and depression." *Body Talk: The material and discursive regulation of sexuality, madness and reproduction.* Edited by Jane Ussher.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Routledge, 1997. p. 10-32.

Suvin, Darko. "On Gibson and Cyberpunk SF." *Foundation* 46 (1989):40-51.

Swann, Catherine. "Reading the bleeding body." *Body Talk: The material and discursive regulation of sexuality, madness and reproduction.* Edited by Jane Ussher. Routledge, 1997. p. 176-198.

Tang, Puay. "Managing the cyberspace divide: Government investment in electronic information systems." *Cyberspace Divide: Equality, Agency and Policy in the Information Society.* Edited by Brian Loader. Routledge, 1998. p. 183-202.

Taylor, Gary Watson. "The discursive construction and regulation of dissident sexualities." *Body Talk: The material and discursive regulation of sexuality, madness and reproduction.* Edited by Jane Ussher. Routledge, 1997. p. 106-130.

Terry, Jennifer. "The Seductive Power of Science in the Making of Deviant Subjectivity." *Posthuman Bodies.* Edited by Ira Livingston and Judith Halberstrom. Indiana University Press, 1995. p. 135-161.

Torgovnick, Marianna. "The Politics of the 'We'." *SAQ* 91.1 (1992):43-63.

—. *Gone Primitive: savage intellects, modern lives.* University of Chicago Press, 1990.

Turkle, Sherry. *Life on the Screen: Identity in the Age of the Internet.* New York: Touchstone, 1995.

Ullman, Ellen. *Close to the Machine: Technophilia and its Discontents.* San Francisco: City Lights Books, 1997.

Ussher, Jane (ed). *Body Talk: The material and discursive regulation of sexuality, madness and reproduction.* Routledge, 1997.

—. "Framing the Sexual 'Other'." *Body Talk: The material and discursive regulation of sexuality, madness and reproduction.* Edited by Jane Ussher. Routledge, 1997. p. 131-158.

Vale, V. and Andrea Juno. *Modern Primitives: An Investigation of Contemporary Adornment and Ritual.* San Francisco: Re/Search Publications, 1989.

Wall, Angela. "Conflicts in AIDS Discourse: Foucault, Surgeon Generals, and the (Gay Men's) Healthcare Crisis." *Bodily Discursions: Genders, Representations, Technologies.* Edited by Deborah Wilson and Christine Moneera Laennec. State University of New York Press, 1997. p. 221-239.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Watson, James. "A Personal View of the Project." *The Code of Codes: Scientific and Social Issues in the Human Genome Project.* Edited by Daniel Kevles and Leroy Hood. Harvard University Press, 1992. p. 164-173.

Waugh, Patricia. *Feminine Fictions: Revisiting the Postmodern.* 1989.

Weiss, Gail. *Body Images: Embodiment as Intercorporeality.* Routledge, 1999.

Weiss, Gail. "The Abject Borders of the Body Image." *Perspectives on Embodiment: The Intersections of Nature and Culture.* Edited by Gail Weiss and Honi Fern Haber. Routledge, 1999. p. 41-60.

Weiss, Gail and Honi Fern Haber (eds). *Perspectives on Embodiment: The Intersections of Nature and Culture.* Routledge, 1999.

Wexler, Nancy. "Clairvoyance and Caution: Repercussions from the Human Genome Project." *The Code of Codes: Scientific and Social Issues in the Human Genome Project.* Edited by Daniel Kevles and Leroy Hood. Harvard University Press, 1992. p. 211-243.

Whalen, Terence. "The Future of a Commodity: Notes toward a Critique of Cyberpunk and the Information Age." *SF Studies* 19.1 (1992):75-88.

White, Eric. "The Erotics of Becoming: Xenogenesis & The Thing." *SF Studies* 20 (1993): 394-408.

Wiley, Juniper. "NO BODY is 'Doing it': Cybersexuality." *Feminist Theory and the Body: A Reader.* Edited by Margrit Shildrick and Janet Price. Routledge, 1999. p. 134-139.

Williams, Raymond. *Problems in Materialism and Culture: Selected Essays.* Verso, 1980.

Williams, Simon J. and Gillian Bendelow. *The Lived Body: Sociological Themes, Embodied Issues.* Routledge, 1998.

Wittig, Monique. *The Straight Mind and Other Essays.* Beacon Press, 1992.

Wolmark, Jenny. *Aliens and Others: Science Fiction, Feminism, and Postmodernism.* University of Iowa Press, 1994.

Womack, Jack. *Random Acts of Senseless Violence.* New York: Grove Press, 1993.

X, Robert Adrian. "Infobahm Blues." *Digital Delirium.* Edited by Arthur and Marilouise Kroker. St. Martin's Press, 1997. p. 84-88.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.

Yanarella, Ernest J. and Herbert G. Reid. "From 'Trained Gorilla' to 'Humanware': Repoliticizing the Body-Machine Complex Between Fordism and Post-Fordism." *The Social and Political Body*. Edited by Theodore Schatzki and Wolfgang Natter. The Guilford Press, 1996. p. 181-220.

Young, Iris. *Throwing Like a Girl and Other Essays*. Indiana University Press, 1990.

Zack, Naomi, Laurie Shrage and Crispin Sartwell (eds). *Race, Class, Gender and Sexuality: The Big Questions*. Blackwell Press, 1998.

Zizek, Slavoj. *Looking Awry: An Introduction to Jacques Lacan Through Popular Culture*. MIT Press, 1991.

Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.