Macalester College DigitalCommons@Macalester College

Honors Projects

Environmental Studies Department

5-1-2010

Undue burden: A Feminist Analysis of the Discursive and Material Realities of Breast Cancer and Obesity in the United States

Hannah Q. Rivenburgh Macalester College, hrivenburgh@gmail.com

Follow this and additional works at: http://digitalcommons.macalester.edu/envi honors

Part of the American Studies Commons, Environmental Health Commons, Environmental Public Health Commons, Feminist, Gender, and Sexuality Studies Commons, and the Race, Ethnicity and post-Colonial Studies Commons

Recommended Citation

Rivenburgh, Hannah Q., "Undue burden: A Feminist Analysis of the Discursive and Material Realities of Breast Cancer and Obesity in the United States" (2010). *Honors Projects*. Paper 6.

http://digitalcommons.macalester.edu/envi honors/6

This Article is brought to you for free and open access by the Environmental Studies Department at DigitalCommons@Macalester College. It has been accepted for inclusion in Honors Projects by an authorized administrator of DigitalCommons@Macalester College. For more information, please contact scholarpub@macalester.edu.

Undue burden: A Feminist Analysis of the Discursive and Material Realities of Breast Cancer and Obesity in the United States

Hannah Quinn Rivenburgh

April 22, 2010

Honors Thesis Advisor:

Stephanie Rutherford, PhD

Environmental Studies Department

Macalester College

1600 Grand Ave

Saint Paul MN 55105

Hannah Rivenburgh can be reached at hrivenburgh@gmail.com, and welcomes comments, questions, and engagement on the issues presented here.

ABSTRACT

This paper considers the material and semiotic realities in the lives of those whose bodies deviate from the female norms of thinness and symmetricality. I argue that the discursive formations of both obesity and breast cancer are a biopolitical practice, producing particular bodies as excessive, ill, or deficient in juxtaposition to normative notions of the moral citizen/consumer. For example, both the Body Mass Index and the Gail Model for breast cancer risk assessment pull women into the realm of risk and contamination, in need of monitoring and intervention. This entanglement of therapy and surveillance forecloses possibilities to live other lives. However, spaces of resistance open for and are opened by those struggling for legible ways of living with breast cancer and fat—in the radical potential of outed fat and bared breast and scalp, and in feminist successor science projects—so that a more unbounded politics of living well through difference may be found.

ACKNOWLEDGEMENTS

I wish to thank the Fatosphere community of bloggers for their honesty and insight, and the collective work of the women and allies in Breast Cancer Action, other feminist/queer cancer activism, and the anti-toxics and environmental justice work done by communities of color and their allies all around the world.

More personally, my deepest gratitude goes to Leola Johnson, for her encouragement, great ideas, and sense of humor throughout the writing of the obesity section. I am grateful to Roopali Phadke and Liz Jansen for graciously agreeing to serve on my committee; to Kai Bosworth, for never failing to amplify my ideas when I bounce them off him; to Jeremy Meckler, for reading and commenting on an early draft; to Ellie Jones, for her everlasting faith in me; to Laura Bartolomei-Hill, Nicole Kligerman, Hayley Koenig, Fiona Kohrman, and Jason Rodney for the continuous encouragement; and finally to Stephanie Rutherford for her use of the first person plural in reference to getting things done, and for helping me to grow as a scholar and as a person.

I would not be who I am today without all of you.

TABLE OF CONTENTS

Theoretical Underpinnings: Of Mice and Women	5
Fat: The Weight of the World	23
From Fat to Cancer: Fictions of Contamination	57
Breast Cancer: Booby Trapping	63
Conclusion: Living Well, Through Difference	112
Appendix I: Health Without Shame: Improving Childhood Food Security	119
Works Cited	122

THEORETICAL UNDERPINNINGS: OF MICE AND WOMEN

I begin with a tale of two mice, called into existence almost two decades apart yet born into the same political economy of transgenic research animals bred for the purpose of bio-scientific health research. They are products of the biotechnical, biopolitical Wars on Cancer/Obesity; they are "secular technoscientific salvation stories full of promise"; they are tools of the highest sphere of the geneticized, capital-infused Life Sciences (Haraway *Modest_Witness* 8). One is OncoMouseTM, a genetically modified mouse grown and patented in 1989 by Harvard and DuPont. This mouse develops mammary tumors within months of birth. It is the first patented animal on the planet, opening a new frontier for biopolitics (Haraway *Modest_Witness* 79). The other rodent is a more recent cousin to OncoMouseTM; while it does not yet to have a trademarked name, I will call her ObesoMouse. She is a mouse with a deleted immune system gene known as IKK. The knocked-out gene results in a failure to produce the kinase enzyme which IKK normally encodes for, resulting in the mouse never getting fat, even when it is fed a diet of almost pure lard (Whitley). The idea is that if a blocker is found for the IKK protein-kinase activity, then the IKK inhibitor could become "candidates for drug development" (Leonard). However, the deletion of the IKK severely compromises ObesoMouse's immune system, making it "susceptible to lethal viral infections" (Chiang et al 975).

Both of these mice are tools in the high-tech breast cancer and obesity research system; they reliably produce breast cancer or produce thin mousey bodies. Yet they are

also animals, living and feeling beings. OncoMouseTM and ObesoMouse "suffer physically, repeatedly, and profoundly," so that humans may find one kind of pathway to better health (Haraway *Modest_Witness* 79); in the experimental way of life, s/he is the experiment. S/he also suffers that we, that is, those interpellated into this ubiquitous story, might inhabit the multibillion-dollar quest narrative of the search for the 'cure for cancer" and obesity (79). The question of for whom Onco/ObesoMouse lives and dies frames my research project. Is it for the African American woman who, because of the exclusionary impacts of her race, is statistically 21% more likely to die of breast cancer than a white woman in the US (Haraway Modest_Witness 113)? Is it for the woman struggling to come to terms with her fatness in the face of monstrous societal pressure to lose that fat? Does Onco/ObesoMouse serve the purposes of genetics researchers, the pharmaceutical and life science companies that fund their research, those singled out as high-risk patients who wait anxiously for the next drug trial to cure their contamination by cancer and fat? Above all, do these mice "contribute to deeper equality, keener appreciation of heterogeneous multiplicity, and stronger accountability for livable worlds?" (Haraway *Modest_Witness* 113). Some among us have unleashed these creatures into the lab and within the imagination of the public consciousness. How do we all take responsibility for these "transgenic, transspecific, and transported creatures of all kinds" (Haraway *Modest_Witness* 62), and how can their use be made accountable to us all?

I use these mice to talk about other animals, other mammals, a species which I hold dear to myself: humans, and within this wide genre, women. This project explores the material and semiotic realities in the lives of those whose bodies deviate from the

female norms of symmetricality and thinness due to the "epidemics" of the "diseases" of breast cancer and obesity (these bodies are often marked by other forms of difference as well). I aim not to forget that these are fleshy bodies of real people, who triumph and suffer, feel pain and pleasure. Some of this is of their own making; some is a result of systems, structures, and institutions beyond any one being's control (though of course many would have us believe in the 'it's all in the lifestyle' theory of disease). Yet, this suffering and pleasure, this fat, this cancer, and these bodies come to us highly mediated and thickly signified. That is why I do not remain solely in the material realm. The cultural politics of both adipose tissue and cancerous cells of the breast have deep ramifications for the health and pleasure of us all. Within the biopolitical regimes of cure, diagnosis, treatment, as well as the popular realms of TV shows, news articles, and other forms of visual representation, obesity and breast cancer are figured into the politics of what it means to exist in this specific historical moment.

Existing in this specific historical moment means being bound up in the regulatory functioning of biopolitics in a neoliberal political economy. Let me pause for a moment and explain what *I* mean by these sometimes-duplicitous, always power-laden and power-signifying vocabulary. By neoliberalism, I mean the multivaried and expansive set of "economic and political practices aimed at cutting expenditures on public goods such as education, health care, and income assistance in order to enhance corporate profit rates" (King xxvii). These cultural projects redirect wealth, resources, and capital of all kinds upwards while simultaneously enhancing tolerance of increasing inequality. In terms of biopolitics, I begin with the work of Michel Foucault, who developed the term to document and historicize the fuctionings of power in the modern

state. He argued that the modern state was characterized by both disciplinary anatomopolitics and biopolitics, one individualizing, the other totalizing. Through myriad practices and techniques that induce desire, shame, fear, ideas of freedom, notions of patriotism, and the like, biopolitics operates on the entire social body through rationalizing the conduct of individuals, thereby accelerating the circulation of appropriate goods, ideas, narratives, and orders. In the process, some bodies are excluded and marginalized. More simply put, biopolitics has become 'the politics of life itself' (Rose 1). Living under biopolitics means that no bodily activity—in the sphere of politics, culture, space, etc, but especially illness and medicine—is performed without scrutiny. There are ways upon ways to monitor, exercise, administrate, intervene, regulate, maintain, coerce, constrain, invade, correct, and manage us. Yet this power is not often repressive or overtly violent; it is instead productive, in that it produces conformity by producing the *desire* to conform, the desire to be the opposite of what becomes aberrant, unsightly, weighted down. This is managed through the application of technologies of power, which discipline bodies into docile forms. Therapy becomes entangled with surveillance. It is not only the state which promotes surveillance and therapy, but also a wide and vast assemblage of actors who manage and facilitate what we have come to know as health, healthcare, and medicine. As Foucault writes in his groundbreaking *The* History of Sexuality, these apparatuses are "anatomic and biological, individualizing and specifying, directed toward the performances of the body, with attention to the processes of life" (262). Thus, the body is a site of biological discourse (Haraway Simians 199). From birth to death and including the processes of birth and death, this power "invest[s] life through and through" in ways that "delineate, arouse, and employ" bodies into

societal roles (262, 269). This occurs on many different scales—from individual, protean acts of procreation to the expansive, fuzzy arena of population—with many of the same mechanisms: for example, birth control or sterilization for the individual, for the purpose of population control on the societal level.

The project that Foucault began has flowed through academic discourse, yet his theories were only ever partial, bound as they were by his positionality. Scholars have pointed out his failure to notice that biopower functions differently upon women and sexual others, upon people of color, upon (post)colonial populations, upon the disabled, and so on. Judith Butler enumerates these omissions, writing in *Undoing Gender* that "the human is understood differentially depending on its race, the legibility of that race, its morphology, the recognizability of that morphology, its sex, the perceptual verifiability of that sex, its ethnicity, the categorical understanding of that ethnicity" (2). Both phenotype and the perception of that phenotype matter, something to which Foucault gave scant attention. Others have taken Foucault to task for the lack of agency he ascribes to people—the daily ways in which bodies struggle against easy signification, against conscription into norms. In her scholarship, Donna Haraway requires that "the object of knowledge be pictured as an actor and agent, not a screen or a ground or a resource, never finally as slave to the master" (Simians 198). Similarly, Sandra Lee Bartky helps us remember the "libidinal" body, the impulse toward spontaneity and pleasure as a site of resistance (82). This becomes a way of working against legibility and coherence in our bodies, against assimilation into categories by which we are limited and judged. Bartky also works to more thoroughly spatialize the workings of biopower. Its disciplining power "invades the body and seeks to regulate its very forces and operations, the

economy and efficiency of its movements" (Bartky 61). Through this micropolitics, bodies are fragmented and partitioned along the diameters of "the body's time, its space, and its movements" (Bartky 62).

The manifestations of biopower are not limited to the human body, however; they shape nature and our environment as well. The presence or absence of predators in an ecosystem; the types of species that are able to survive in urban areas; the demarcation of a forest compared with a carbon sink or tree plantation; narratives of takeovers by invasive species; our attempts at ridding our hands of all bacteria with the use of alcohol-based sanitizers; all are expressions of biopolitical regimes upon all that is living. Some of nature becomes figured into normative narratives of human conduct; witness the occasional fervor over birds and mammals which mate for life and are thus called "monogamous," as if the organization of their lives can be directly applied to our own, and are held up as examples of the moral obligations of humans. Nature is invoked for the purposes of inscribing what behaviors, appearances, and ways of being are natural and thus normal; what is unnatural and thus "abnormal" can thus be exclusionarily enforced. Nature is enrolled in a regime of truth, and is also involved in the playing-out of these regimes on many planes of relation.

On countless scales—from the single-celled organism to the nation to the biosphere—beings exist within the "lived relations of domination" (Haraway *Simians* 150). This makes anti-racist, materialist feminist projects such as my own of critical importance as a means to widen the scope of life's possibilities. Thus I hope to practice feminist critical objectivity in my methodology, following Haraway, so that I may offer "a more adequate, richer, better account of a world, in order to live in it well and in

critical, reflexive relation to our own as well as others' practices of domination and the unequal parts of privilege and oppression that make up all positions" (*Simians* 187). This is a tall order, which requires that I perform a practice of "situated and embodied knowledges" which works against "various forms of unlocatable, and so irresponsible, knowledge claims. Irresponsible means unable to be called into account" (*Simians* 191). Audre Lorde, Black Lesbian Feminist Warrior Poet, demands of me and all the same question: "Because I am woman, because I am black, because I am lesbian, because I am myself, a black woman warrior poet doing my work, I come to ask you, are you doing yours?" (Lorde 19).

So, let me get to work and try to situate myself in and amongst these knowledges, so that I and others may demand accountability. As a college-educated white woman of economic privilege, I have only ever my own partial understandings based on where I am placed upon continuums of domination and power. Since conception, I have had access to healthcare managed by doctors who do not moralize or psychologize my physical complaints due to my whiteness—which is figured as an absence of race and even of culture. I am of thin privilege, with symmetrical mammary glands as of yet free of cancer though most certainly carrying the toxic body burdens of our industrial economy. I possess all but one of my major organs, and believe that I owe my life to the FDA discriminatory policies of blood banking.

All of this is called into existence as I move about the world in various modes and nodes of interaction with people, relations of production, and geographical spaces. Much of this information can be recruited from my body with a glance, though this conscription comes without the specificities of my own history. I enumerate these crucial details

within this essay because I want to be accountable and actively responsible for it all, or as much as possible. How has my way of being in the world contributed to the very situations and sufferings I seek to write against? For example, have my consumption and waste disposal patterns caused the release of dioxins into air and water? How have I benefited from the labor performed by and the undue burden of stress placed on black women in the US? What are the ways in which I have gained from redlining lending practices? From the unequitable distribution of toxins? From an unjust agricultural system? I ask these questions not to embark on a massive and paralyzing guilt trip, but to note my complicity and collusion and then, from that point, to find my own path toward solidarity, allyship, and mutual liberation from the systems of racism, classism, sexism, capitalism, and empire which damage all of our psyches and stunt all our capacities for love. "Love is an action, never simply a feeling," writes bell hooks, and this thesis is my small action, a labor of love toward justice.

I aim to write the subsequent chapters not about myself but about how the many varied biological and social bodies of women, in all their multiplicity and intersectionality, move about the world as "material-semiotic actors" within biopolitical regimes, paying particular attention to the voices and lives of black women in the United States (Haraway *Simians* 200). As actors upon the interlaced fields of both material and discursive work and play, these women generate meanings which materialize through social interaction. This happens not from a position of virtue or infallibility, but with a more profound understanding of the kind of "denial through repression, forgetting, and disappearing acts—ways of being nowhere while claiming to see comprehensively" which so often signals the erasure of subaltern narratives. This is precisely what I am

aiming against, yet am also more able to slip into (Haraway *Simians* 191). I rely on Haraway once again to help me describe what I mean:

Not all African-American women are poor, and not all poor women are African-American, to say the least. And all the categories are discursively constituted and noninnocently deployed, both by those who inhabit them (by choice, coercion, inheritance, or chance) and by those who do not (by choice, coercion, inheritance, or chance). I believe that *learning* to think about and yearn toward reproductive freedom from the *analytical and imaginative standpoint* of 'African-American women in poverty'—a ferociously lived discursive category to which I do not have 'personal' access—illuminates the general conditions of such freedom. . . . Such a standpoint is an always fraught but necessary fruit of the *practice* of oppositional and differentiated consciousness (Haraway *Modest_Witness* 198).

The salience and strength of this standpoint comes in part from the deeply complex history of race and racisms in the United States, which I do not have the space to enumerate here. However, I must remark on two important facts: that the discursive politics of race have served as excuses for the exclusion and fragmentation of people; and that racisms have become bound and constructed by "more, less, and other" than nature (Haraway *Modest_Witness* 50). Race is a powerful and power-laden fiction which has real material consequences in our world, and therefore cannot be ignored (Moore Kosek and Pandian 43). It is "a fracturing trauma" on both individual bodies and upon the nation's body politic (Haraway *Modest_Witness* 213). Race and its signs and symptoms

are a matter literally of life and death, of how lives are lived and how they begin and end.

Race also authorizes and excuses privilege. To do this, race and racisms must be
constantly reworked and reimagined in "specific, asymmetrical, congealed processes"

(Haraway *Modest_Witness* 7).

The invocation of race is accomplished partially through the convoluted churningtogether of race and nature¹. Race and nature function simultaneously "as a terrain of power . . . spanning the distance from genetic coils to national territories and diasporic communities" (Moore Kosek and Pandian 1). The connection between race and nature might be placed within colonial eugenics projects which sought to inextricably link race (imagined as phenotype, phrenology, phonetics) with nature (imagined as climate, geography, wildlife) in order to make one kind of sense of genocide, slavery, empire, and resource extraction. Every time race becomes naturalized and nature becomes racialized, these networks of history, meaning, and "violent exclusions" of both people and land are called up (Moore Kosek and Pandian 3). Discourses surrounding the fact of fat and breast cancer, and the fat- and cancer-laden bodies of which they are a part, are subject to naturalization, and thus racialization. Because "race, like nature, is about roots, pollution, and origins," we find anxiety around symbolic and material contamination by blood, fat, and cancerous tissue—and racial and gendered Others—which create exclusions based on these fears² (Haraway *Modest Witness* 213). The systems of power engendered through

¹ Nature is "perhaps the most complex word in the English language"; it is embedded with "extraordinary amount of human history" (Williams 219), yet I use it because what is natural, biological, and ecological matters.

² Writes Stuart Hall: "the hope of every ideology is to naturalize itself out of History and into Nature, and thus become invisible, to operate unconsciously" (qtd in Moore Kosek and Pandian 42)

the cultural politics of representation and the material realities of life³—race, gender, nature, and the difference across fields--"simultaneously shape both the very terrain that produces political subjects and the claims that these subjects make to rights, resources, and their redistribution" (Moore Kosek and Pandian 40). Structural violence is also enacted through the forces of nature:

We live in a world with acid rain, with a hole in the ozone layer, where food is mass produced and picked early with no nutrients, where pesticides are sprayed on the workers and the food we eat, where the animals we eat are raised in a tortured environment and fed hormones and antibiotics. We live in a world that has chemical dumps under housing tracts, schools, and playgrounds. We live in a society that has nuclear reactors and nuclear dumps and nuclear waste and nuclear bombs that go off over us and underground, where winds spread the invisible molecules and atoms everywhere. We call it pollution. It is invisible violence (Winnow 75).

This invisible violence makes the struggle for reimagining how nature functions materially and discursively of crucial importance, in order to change these relations of domination.

The biopolitics of science and medicine are imbricated into notions of the health of the body politic and the natural body. Thus they are inescapably tied to eugenic rhetoric about the exclusion of foreign bodies—from viruses to immigrants—and the

³ Moore Kosek and Pandian emphasize "the *simultaneity* of symbolic and material struggles, refusing an assumed distinction between 'merely' symbolic recognition and material resource redistribution" (Moore Kosek and Pandian 40).

policing and management of blood. "Expansionist Western medical discourse in colonizing contexts has been obsessed with the notion of contagion and hostile penetration of the healthy body, as well as of terrorism and mutiny from within" (Haraway *Simians* 223). There is really only the question of not if, but how to accomplish biopolitical surveillance: "should programs target individual bodies, populations, environments, or social arrangements? Answers hinge on placing race in relation to nature and culture" (Moore Kosek and Pandian 21).

It is important to remember that we can look for and find nature in the enemies of modern medicine: in germs, in tumors, in genetic mutations, in deposits of fatty tissue. Our biology is not unique or different from animals, or even plants; that is why Onco/ObesoMouse become crucial, and become realized. Yet this nature does not come to us fully formed; the same is true of diseases: "although diseases can and do have real effects on all of us, as embodied subjects, regardless of how we respond to them and what we think of them, it is equally true that diseases as social facts do not exist until we have agreed that they do by perceiving, naming, and responding to them" (Klawiter 32). And just as importantly, the actions of the disease agents themselves are real and indisputable. They even often resist efforts to manage them. "The biology and physiology of diseases and the materiality of the body cannot simply be dissolved into the play of power" (Klawiter 36). While humans have learned to bend the course of diseases with medical technologies and interventions, it is equally true that often biology operates on a logic "that often exceeds our understanding and our best efforts to manage the disease. This means that the capacity of disease regimes to shape disease is, almost inevitably, partial and incomplete" (Klawiter 36). Diseases, like nature, are actors in human history; thus,

diseases, like nature, must be seen as an "inescapable ground of struggle" (Moore Kosek and Pandian 43).

The complicated assemblages of race, gender, nature, and disease find rhizomatic expression in the notion of technobiomedicine. Simultaneously, biopolitical power works through social and medical technologies to make people into *subjects* of their own nature, their own biology, their own race. People become bound by this through technobiomedicinal pathways, particularly through increasingly intensive and intricate technologies of "permeating bodies, particularly those of females" for the purposes of visualization and intervention (Haraway *Simians* 169).

This visualization is both generative and productive, performing a literal zooming in on bodies, particularly those of women, to the molecular level. Techniques and technologies of visualization such as screening devices or biometric calculations harvest life in terms of "manipulable strings of information" (Rose 14). "These are not merely medical technologies or technologies of health, they are technologies of life," of self (and self-improvement, self-fashioning) (Rose 17). This visibility at the molecular or numerical level—where it is not only easy to forget, but is expected that one forgets, that the cells being examined or the numerical value spit out come from a moving, living, desiring, fleshy, opinionated person—mirrors a visibility of both obesity and a common

⁴ Women have a particular place in the in the integrated circuit of medicine. It is characterized by "intensified machine-body relations; renegotiations of public metaphors which channel personal experience of the body, particularly in relation to reproduction, immune system functions, and 'stress' phenomena; intensification of reproductive politics in response to world historical implications of women's unrealized, potential control of their relation to reproduction; emergence of new, historically specific diseases; struggles over meanings and means of health in environments pervaded by high technology products and processes; continuing feminization of health work; intensified struggle over state responsibility for health" (Haraway *Simians* 172).

treatment of breast cancer, the mastectomy, and a common side effect of chemotherapy, the loss of the hair. Visibility has been condensed upon the bodies of those with disease since HIV/AIDS has emerged as a societal force, and also with tuberculosis and other diseases. The emphasis on visibility privileges certain types of bodily knowledge over others. Part of that knowledge was in the policing of the borders of AIDS and HIV positive status, a disease which does not have "natural" borders. The visibility of antibodies to the AIDS virus—the way that HIV status is ascertained—is a tool "designed for purposes of investigation and with tabulation and surveillance by medical and other bureaucracies in view" (Sontag 116). The empirical and the discursive meet. This is true also of the formation and management of the in-no-way-natural boundaries of the Body Mass Index (BMI) and the Breast Cancer Risk Assessment Number, or the so-called Gail Model (two technologies explored in subsequent chapters): the replacement of a person with a number that signifies a medical, and thus political, status. It is through these fetishized processes that "existentially healthy" people become "asymptomatically or presymptomatically ill" (Rose 19).

Under this regime in which every body is made visible, citizenship takes on biological and vital characteristics (Rose 24). This is one way in which citizenship is "contested and unequal" (Turner 31); some are more fit for full citizenship than others, some are too risky, either of their own doing or through receiving what is perceived to be the short end of the biological/genetic stick (Dean 311). This disparity potentially might not be a problem, except during times of official disease epidemics, crises which are used to consolidate biopower and identify some with "laxity, weakness, disorder, corruption: unhealthiness" (Sontag 168). This paves the way for making demands "to subject people

to 'tests,' to isolate the ill and those suspected of being ill or of transmitting illness, and to erect barriers against the real or imaginary contamination by foreigners" (Sontag 168). This is the stuff of biopolitics, so that all women over a certain age are feared to be carriers of cancerous tumors, or all fat women are envisioned as rife with contamination. As a result, neoliberal subjects are created who are "charged with the responsibility of knowing the risk factors (for any given disease), avoiding risky behaviors, and continuously surveilling themselves and each other" (Klawiter 27). In many discursive outlets—"from official discourses of health promotion through narratives of disease and suffering in the mass media, to popular discourses on dieting and exercise—we see an increasing stress on personal reconstruction through acting on the body in the name of a fitness that is simultaneously corporeal and psychological," resting on the notion that one's body, one's health, and one's well-being is completely controllable by the individual (Rose 26; Winnow 74).

Yet we must remember, as Donna Haraway says in her essay "The Biopolitics of Postmodern Bodies" that "the language of biomedicine is never alone in the field of empowering meanings, and its power does not flow from a consensus about symbols and actions in the face of suffering" (qtd in Klawiter 277). Many resist visibility, or reappropriate it to their own ends. This is because "struggles over what will count as rational accounts of the world are struggles over *how* to see" (Haraway *Simians* 194). For marginalized women this is particularly true. For example, "within this country where racial difference creates a constant, if unspoken, distortion of vision, black women have on one hand always been highly visible, and so, on the other hand, have been rendered invisible through the depersonalization of racism. . . . that visibility which makes us most

vulnerable is that which also is the source of our greatest strength" (Lorde 20). Bodies never lose all of their visibility, and though they are "bound up in the order of desire, signification and power," they also build maps of power and identity that take on multiple meanings and materialities (Grosz 19; Haraway *Simians* 180). Biologically marked bodies are "a critical locus of cultural and political contestation, crucial both to the language of the liberatory politics of identity and to systems of domination drawing on widely shared languages of nature as resource for the appropriations of culture" (Haraway *Simians* 210). Within the insistence of visibility there is a possibility of transgression against expectations and toward more flexible livability. Bodies are real things, subject to biological constraints; yet they are also social actors, constantly creating, negotiating, and navigating reality.

It is important to enumerate a working definition of what constitutes health, because what I look for in these pages are routes to a more multiple and genuine health for a greater number of people. Health is not merely a scientific category, defined as the lack of disease; rather it is also something continually produced in the cultural and material realm, both by access or lack thereof to medical care (in the form of prevention and treatment) and, "to a measurably greater extent, by the cumulative experience of social conditions over the course of one's life (Daniels, Kennedy and Kawachi 4). These "bodily insults"—the result of "social-structural and cultural factors"—accumulate, manifesting themselves on the body as the fundamental causes of sickness and disease (Daniels, Kenedy and Kawachi 4; Hill Collins 74). Even if the U.S. were to institute universal access to health care, health inequities would not disappear, because racism, classism, sexism, and other forms of oppression would still be pervasive (Hill Collins 74).

Thus, health is infinitely more than outward appearance or internal equilibrium. It is about the *chance to* stay healthy, which is facilitated not only by universal access to healthcare but also the dismantling of race, sex, and class privilege and oppression (Hubbard and Ward 91). It is about promoting "the economic, public health, and medical measures that would reduce unnecessary risks and improve everyone's chance to be healthy" (Hubbard and Ward 61).

One way to help us all toward health would be to try to dissolve the vertical integration of some of the disease-causing and disease-treating entities, in which cancer and fat are both "a product and a source of profits for the global cancer industries (Brown 45). For example, pharmaceutical/agrichemical company Eli Lily makes both raloxifen, an anti-cancer drug, and the bovine growth hormone Rumentin, a suspected carcinogen (McCoid 352). Who knows how many patients they created for themselves through humans ingesting the milk and meat of Rumentin-treated cows? This is seen in the food industries as well, where corporations push nutritionally-deficient food one minute, and weight loss meals the next. As Toxic Links Coalition (Oakland, CA) activists like to say, "they getcha coming and going" (Klawiter 201).

This is particularly important to take note of in the current political economy, in which science and politics are seen as separate and immutable. Science tells untainted truth, so the narrative goes: "scientists declare that they themselves are not speaking; rather, facts speak for themselves" (Latour 29). We must recognize that "scientific discourses are 'lumpy'; they contain and enact condensed contestations for meanings and practices" (Haraway *Simians* 204). What Haraway means by this is that science can be bent in many directions for many purposes, according to the power-laden structures and

actors at play. By "lumpy," I believe, she means "complicated." I will stick with this adjective, as it aptly describes both rolls of fat on bellies, arms, and thighs and is also the predominate, terrifying word used in the context of finding a breast tumor: "I think I feel a lump." This helps us remember what is at stake here; it is both the lovely, manifest, hefty fat on a woman's body, and it is the sudden horror of a newly palpable mass in a woman's own breast tissue. I do not want to abandon science. I want to succeed it: "feminists have stakes in a successor science project that offers a more adequate, richer, better account of a world, in order to live in it well and in critical, reflexive relation to our own as well as others' practices of domination and the unequal parts of privilege and oppression that make up all positions" (Haraway *Simians* 187). Such a feminist critical empiricism, "from the point of view of pleasure" and pain (Haraway *Simians* 173), desire and understanding, cries out to be put into practice. Living well—our well-being—demands it.

FAT: THE WEIGHT OF THE WORLD

In a world where body difference has historically been and continues to be central to the denial of rights (Guthman and DuPuis 429), the meaning of widely circulated terms such as "obesity" are important, not only politically but also culturally. "Obesity" is a category that defines people's identities as well as determines their life chances. In this chapter, I argue that in the US where 40% of 9-year-old girls say they are on a diet (Clark 628) the term "obesity" is in large part a product of the discourse of neoliberalism, rather than a purely scientific or medical term. Neoliberalism is a productive force on our health, in that it both produces fatness while simultaneously framing it as a problem in the form of obesity. Although obesity science reduces this problem to a mere calories-in/caloriesout scenario, thereby foisting the management of weight onto the individual (with plenty of monitoring by the experts and by fellow citizens), I argue that the origins of fatness have more to do with the political economy of health and healthcare, agribusiness, built environments, and race and gender in the US; more succinctly, the problem is structural and discursive rather than individual. This is significant because it has serious implications for the health and happiness of many people, particularly those disproportionately affected by obesity. Obesity discourse in the United States presents us with a dualism. Some bodies are marked as obese and thus host to a range of societal, psychological and medical ills, while other bodies are made into moral citizen/consumers, who inhabit areas of a discourse which emphasizes the containment of bodily boundaries,

and policies these lines vigilantly. These productive biopolitical mechanisms function to limit avenues for self-expression and fulfillment and restrict the lives of many.

It is worth attempting to dispel some myths⁵ about what is popularly and medically known as obesity⁶. First, let us remember that just as nothing can be assumed about race or gender from someone's phenotype or dress, nothing can be determined about health from a glance at someone's body. This is contrary to most common sense notions of obesity. Health comes in all sizes; thin cannot be equated with health, and fat' cannot be equated with poor health or disease. Fat bodies are merely "part of the fabric of humanity, part of human body diversity, not evidence of disrupted inner processes" (Cooper). Making health claims about fat women obscures their diversity. "If we say obesity is a disease then we must say on some level body fat is pathological. But there is no evidence that adipose tissue is harmful to our health" (ASDAH). The real issue is not about a person's appearance but about access to good nutrition. It is very possible to lead happy, healthy, long, and fat lives. There are no medical or psychological problems that only fat people develop (Burgard and Lyons 212). Indeed, "many [thin] people eat poorly, do not exercise, and may otherwise be unhealthy, but as a result of their socially acceptable body shapes they are not called to account," because they are able to "pass" as healthy through the performance of thinness (Guthman and DuPuis 433). And there is

⁵ I aim not to merely reduce this discussion to one of "bias versus objectivity, use versus misuse, science versus pseudo-science" (Haraway *Simians* 186); this terrain is far too complicated for that.

⁶ The term "obesity" itself connotes a medicalization of fatness, thereby constructing fatness into a medical problem, "subject to the usual measures, statistics, and 'cures'" (Guthman 1113).

⁷ I use the term "fat," rather than a euphemism such as large or curvy, based on statements made across the Fat Acceptance movement in support of owning this word. Just as the reclamation of the word queer has been crucial to LGBTQ politics, claiming the word fat can be part, according to Eve Sedgwick, of "a renegotiation of the representational contract between one's body and one's world" (qtd in Murray 266).

certainly more damage done to people's bodies by the application of biopolitical regimes that aim to keep them thin as well as the pressure which individuals push onto themselves as a result, than some extra body fat could ever do.

Indeed, the data linking higher body mass to life expectancy or additional risk of disease is very weak, except at the very extremes (and more so with underweight people). When other factors such as "fitness, exercise, diet quality, weight cycling, diet drug use, economic status, or family history" are controlled for, the association disappears (Campos et al 56). In one study, all excess mortality was linked to weight cycling (of dieting and regaining the weight), rather than the adipose tissue itself (Campos et al 56). In fact, even though we are told "it wouldn't kill us to lose a few pounds," it can be losing weight that is most harmful (Burgard and Lyons 212). What is really dangerous is weight loss methods such as stimulant diet pills, bariatric surgery, disordered-eating behaviors, and chronic weight cycling. According to the Association for Size Diversity and Health (whose motto is 'the road to health and happiness is wide enough for all'), the focus on losing weight—and thus on fat in the first place—is misguided; "numerous studies have shown that so-called 'weight-related' health problems can be treated effectively with lifestyle interventions, without significant weight loss and in individuals who remain markedly 'obese' by traditional medical standards" (ASDAH). And in terms of dieting, "researchers consistently describe the long-term success of scientifically controlled weight loss programmes, where the energy-in and/or energy-out of individuals

⁸ This comes not only from doctors but oftentimes total strangers. "Women regarded as overweight, for example, report that they are regularly admonished to diet, sometimes by people they scarcely know" (Bartky 74).

are modified as, at best, 'disappointing' and, at worst, 'dismal'" (Gard and Wright 47). It is well-documented that between 90 and 98% of those attempting weight loss end up regaining it all in 2-5 years; such weight cycling is very hard on the heart and other vital organs (Burgard and Lyons 213). It is clear in large part that the political economy of the diet industry in part desires this, feeding a boom/bust cycle which keeps people chronically dieting.

An example of a narrow focus on normative appearance in assessing health is the Body Mass Index (BMI). This is a rough tool by which to classify bodies "on a continuum between underweight and morbidly obese" (Evans and Colls 1051). Developed by a mathematician over 150 years ago, the BMI is a simple calculation of weight in kilograms divided by height in meters squared. The BMI has proven to be exceedingly inaccurate, often obtaining absurd results for children, short women, black women, and very muscled people (Gard and Wright 92). It fails to take into account agerelated changes in muscle and fat distribution or other simple measurements such as waist size. The measurement itself was never meant to be an indication of the health of individuals; rather its purpose was to provide an easy measurement over the statistical enormity of a population (Devlin). Overall, the BMI contains within it an "inability to capture the fleshy, material, and experiential bodies of those individuals involved in the process of measurement" (Evans and Colls 1053). The blunt BMI both totalizes and individualizes the individual's body as abnormal and unproductive while also making knowledge claims about the entire national body and its fitness: this is biopolitics at work.

⁹ Another factor of normative appearance is gender, although this does not appear in the BMI calculations. Just as there is a directive to all good citizens to be thin, there are additional strictures placed on women's bodies to conform to the heterosexual male gaze, often codified in terms of bust/waist/hip ratios.

The ambiguity of the BMI came to a head in 1998, when the National Heart, Lung, and Blood Institute (part of the National Institutes of Health) arbitrarily changed the definitions of overweight and obesity. The maximum cutoff for 'normal' weight dropped from a BMI of 27 to a BMI of 25, and overnight 30.5 million people—a 43% increase—became clinically overweight (ASDAH; Guthman and DuPuis 433). I mention this because it helps us keep in mind the historicity of the ambivalence around the shape of bodies, particularly women's bodies, over the past few centuries. Ideal body types have fluctuated wildly; the last time this degree of thinness was in vogue in the late 19th century when thinness was implicated with a perverse bourgeois desire to be consumptive—that is, to have a deadly disease of tuberculosis for which there was no cure—in order to affect artistic creativity, a romantic spirit, and a sickly, frail vulnerability (Sontag 30). Thinness and pallor was a marker of social distinction. Though the social circumstances were completely different, the connection of character to body appearance is clear.

The story of the BMI illustrates the way power operates in and through discourse. If power is a "set of mechanisms and procedures," as Foucault enumerates in his lectures entitled *Security, Territory, Population*, then the manipulations of basic body dimensions into the Body Mass Index becomes one of its tools (qtd in Evans and Colls 1052). The UK performs practices of power using the BMI upon all its gradeschool children through the National Child Measurement Programme. It was first rejected by the National Screening Committee in 2006 on the grounds that it could do more harm than good in terms of psychological and emotional trauma (the original program included seasonal weigh-ins with each child's weight announced publicly). However, the program was

redesigned as a monitoring/surveillance program (rather than a screening one). In this methodology, all children are screened privately and are not told the results (their parents are notified if BMI is deemed worrisome). The reclassification of this program as a population monitoring one is telling; through the management of individuals and their bodies, the entire social fabric is supervised and administered.

In addition, the benefit of this enforced monitoring is unclear. Resources may be better spent teaching all children the importance of good nutrition or providing physical education classes. The focus on weight rather than overall health both stigmatizes fatter kids as different and thus bad, and leaves all children without self-care knowledge (ASDAH). With these understandings, it becomes clear that "the available scientific data neither support alarmist claims about obesity nor justify diverting scarce resources away from far more pressing public health issues" (Campos et al 55).

In terms of cultural politics, a focus on BMI and weight also misses all of the root causes of late capitalisms' unhealthy subject-bodies. The ways that structural and cultural circumstances are produced in bodies are erased in the BMI's equation, as are the pathways that commodity food takes in bodies. Even the term "obesity epidemic" hides what is really going on, which is an epidemic of the pervasiveness of neoliberal foodways. This becomes clear when we recognize the absence of the phrase "hunger epidemic." Hunger, which "in terms of immediate suffering [and numbers—worldwide, over a billion people are chronically hungry] is far more serious than obesity," is not understood as an epidemic (Albritton "Between Obesity" 190). In Albritton's words:

Why is it that the term 'obesity epidemic' has wide currency and 'starvation epidemic' does not? One reason is that capitalists would rather not call attention to hunger, because its widespread existence stands in such jarring contrast to the 'chicken in every pot' pretensions of capitalism. A second reason is that to medicalise starvation with the term 'epidemic' seems out of place in connection with something so obviously connected, except for natural disasters, to institutions of human design. A third reason is that capitalistic rationality dictates profit maximization, and the 'starvation sector' of the economy is not one where profits can be made. A fourth reason is that from the point of view of distributive justice or of ethics, the global massacre that is starvation is totally preventable and totally unjustifiable (Albritton "Between Obesity" 190).

We know that "hunger is basically a problem of poverty, created primarily by capitalism, racism, colonialism, imperialism, racism, and patriarchy" (Albritton "Between Obesity" 190). But what is less clear in the discourse of the "obesity epidemic" is the extent to which obesity, like starvation, is also created by poverty.

Neoliberal politics and policies govern both the production of food and the production of bodies. As a result, the contradictions of neoliberal capitalism become literally embodied by eating food. "The body is not only a site through which capital circulates as labor power, it is also a site through which capital circulates as commodities," temporarily resolving the surpluses of commodity agriculture by increasing the amounts of processed source material—corn and soy—which appear in our [processed] foods such as corn-based sweeteners and high fructose corn syrup (Guthman and DuPuis 442). The outlet for much of this is urban neighborhoods, where residents, often poor and of color, also face transportation racism, food insecurity, additional

stressors 10 which contribute to ill health. High levels of body fat are more prevalent in the inner city; this can be explained by "documented health risks such as the stress of poverty, racism, and violence; discrimination in health services; food insecurity; and so on" (Lopez and Hynes 171). Exercise can be difficult to obtain inside cities¹¹; parks, playgrounds, and other green space are disproportionately found in wealthier, whiter neighborhoods. Thus the built environment, stemming from decades of redlining, urban renewal, tax draining, and white flight, contributes to obesity. There are more likely to be broken sidewalks and empty storefronts, as well as traffic and road planning that caters to through-traffic rather than pedestrians: high road speeds, enormous intersections, highways which bisect neighborhoods. Vacant lots encourage the dumping of hazardous or toxic waste. Inequities in school funding make "extras" like gym class or recess prohibitive. Safety is a concern as well; last summer in Minneapolis, police arrested a (black) man under their notorious lurking law while he was on a jog a block from his house, in full running gear (Spudnik 84). All of these factors limit access to outdoor exercise and recreation.

_

¹⁰ Particularly among low-income women, eating becomes a mechanism of self-preservation in order to cope with "myriad injustices [experienced acutely by many poor women of color] including racism, sexism, homophobia, classism, the stress of acculturation, and emotional, physical, and sexual abuse" (Thompson "A Hunger" 2). Lacking other ways of dealing with these stresses, food becomes the most readily available and socially acceptable "drug" (Thompson "A Way" 547). Such disordered eating, whether in the form of anorexia, bulimia, or binge eating, can manifest itself on the body through obesity and weight cycling, causing additional social stressors.

¹¹ Due to a completely different yet related set of political-economic circumstances, suburbs are also places which create obstacles to exercise in the built environment including car-centric streets, a lack of sidewalks, and a lack of common land.

The built environment of many urban areas, which confounds both exercise and access¹² to nutritionally-dense, affordable, fresh and not to mention culturally appropriate food, is a product of neoliberal management of bodies and of the social body. Thus, proposed economic solutions to the obesity epidemic—tax breaks for bariatric surgery (Herndon 140), tax increases on the type of "snack" and "junk" food which can be the sole source of sustenance in some neighborhoods—miss the point entirely and end up faulting the poor, who may lack health insurance to pay for surgeries and certainly lack excess cash to pay for additional food costs. "The rise of various 'snack taxes' which add to the cost of high sugar, high sodium snack foods neglects to take into account how these foods are distributed across the socioeconomic landscape" (Julier 490). In addition, all these proposals are privatized, dealing in the realm of an individual's relationship to commodity goods. This is true of more generalized advice: "Don't eat it; don't drink it. Take the trouble to pack a lunch; bring a thermos from home; cut up vegetables for your child's school lunch" is what is offered, rather than, say, the dismantling of globalized agribusiness¹³ (Guthman and DuPuis 435). Other solutions, including differential pricing for obese people—on everything from health insurance to airplane seats—function as ways of deflecting blame away from structural inequities through the regulation of fat people. The employees of Disney and the New York City Traffic Department are

¹² To illustrate: neighborhoods of predominately African-Americans have a third of the grocery stores of whiter areas; the food that is available tends not to be lean protein, or fresh fruit and vegetables; the stores tend to be fast food outlets, convenience stores, and liquor stores (Allen). In the US the rich spend 10% of their income on food while poor people spend 40% of their income on food (Pothukuchi and Kaufman). In Julie Guthman's words, "the material contradictions of neoliberal capitalism are not only resolved in the sphere of surplus distribution, but also in bodies . . . instantiating a political economy of bulimia" (1114).

¹³ Another factor which may contribute to weight gain is a economic restructuring which favors part-time and shift workers, who have little control over breaks and thus when they eat, interfering with regular eating patterns (Valentine 344).

expected to maintain their weight as condition of employment, and the NYCTD has fired workers who gain too much (Valentine 344). There is ample documentation of fat discrimination in hiring as well; "people who are perceived to be overweight find it harder to get jobs, are paid less for the same jobs, and are less likely to be promoted" (Julier 486).

Industry thus benefits at multiple levels, from the choicest labor power to turning around and selling the supposed cures for obesity. Just as "life science" companies sell both carcinogenic pesticides and fertilizers and the chemotherapy drugs needed to treat resulting cancer, the food industry sells bad food and then sells ways to lose its fatgaining effects. Diets, as well as eating, are commodified; both the excess and the apparent solution are manufactured by diet/food industries. "To speak of the economic usefulness of 25 kinds of Oreo cookies is to enter the realm of the absurd and yet the food industry depends upon the continued existence of that market while simultaneously providing the products for dieting" (Julier 488). Expensive research into other causes of obesity, such as genetics, distracts from the real problems while providing political and monetary capital to pharmaceutical companies. However, because "profits are not to be made in public health measures that would prevent illness, but in treating illness," it is to the pharmaceutical companies' benefit—and Weight Watchers, and Jenny Craig, and Wyeth, the makers of the now-illegal anti-obesity 'medication' fen-phen—to reinforce the belief that obesity "is a self-induced state from which a self-disciplined individual can escape by hard work or, failing that, the purchase of the right diet book, foods, exercise equipment, or medical interventions" (Albritton "Junk" 191, Julier 489). The issuing and maintenance of this network of blame is vast and complicated.

A biopolitical regime functions to assign personal responsibility to people for their own fatness primarily through the intertwined regulatory mechanisms of governmentality and the power/knowledge produced through the hypervisibility of obesity. As obesity has moved from a "descriptor of a physical state to a disease entity with the potential for contagion" (Julier 483), and most recently to an epidemic, the notion that fat people are "slothful, lazy, weak-willed, unreliable, unclean, unhealthy, deviant, and defiant" has become more solidified (Murray 266). As thinness becomes a marker of privilege and social distinction through apparent evidence of control over one's body and bodily functions, obesity becomes a marker of individualized failing and gluttony. Thus, fat people are constructed as unworthy of full subjectivity (Guthman and DuPuis 433). In this way, "neoliberal governmentality . . . creates divisions between active citizens, who can manage their own risks, and 'targeted populations,' those who require intervention in management of risks" (Guthman and DuPuis 443). This management is accomplished through the penetration of self- and socially-disciplining behaviors and regimes into the intimate spaces of the medical office, the bathroom, the kitchen, the fitting room, and indeed the body itself. Indeed every act of eating, particularly that performed in public, becomes a vehicle to construct ourselves both as spatial in the sense of taking up (too much) space and as "positioned in social space" based on qualifiers of difference (morality, class, sexual attractiveness) (Valentine 331).

This is because of the hypervisibility of eating and of body fat, which in turn engenders a hypervigilance performed by the self and by the social body. Looking at a fat body is oftentimes a process of making judgments about the person. "Massiveness, power, or abundance in a woman's body is met with distaste" rather than respect (Bartky 63). As

Sedgwick explains in her essay with Michael Moon, "Divinity: A Dossier, A Performance Piece, A Little-Understood Emotion" from her book *Tendencies*:

Our culture as a whole might be said to vibrate to the tense cord of "knowingness." Its epistemological economy depends not on a reserve force of labor, but on a reserve force of information always maintained in readiness to be presumed upon....a copia of lore that our public culture sucks sumptuously at but steadfastly refuses any responsibility to acknowledge. (qtd in Murray 266)

As this knowingness around obesity has crystallized in popular discourse, obesity has become a true moral panic. "Fatness is perceived as a social emergency, because fat people literally don't fit' into chairs, seatbelts, clothes, and other constraining devices (Julier 487). As a result, fat people are subjected to rage, disgust, and humiliation on a daily basis, because they do not fit within the biopolitical regime of healthy bodies. The media trips over itself in providing graphic metaphors of substance abuse or violent images such as obesity (and thus obese people) being a "ticking time bomb" draining the resources of the economy or the healthcare system (Gard and Wright 19). Obese people also are said to lack the moral/patriotic fitness that is required of true citizens of the United States. Ties to empire and nation formation are replete in the rhetoric of the Office of the Surgeon General/Health and Human Services' declared "War on Obesity." At the launch of this program in 2001, Health and Human Services secretary Tommy Thompson stated in his speech, "all Americans—as their patriotic duty—[should] lose 10 pounds" (qtd in Herndon 128). This sets a corporeal standard for citizenship, just as historically race and gender were/are implicated in the definition of a citizen. In the same way people

might talk about whether or not a person is 'fit' for marriage or motherhood, ¹⁴ a state mandate to be thin (and thus, it is assumed, healthy) provides a platform for discrimination on the basis of what an ideal citizen is and is not (Herndon 128). This is piled on top of other notions of citizenship. "For those already marginalized within US culture—including women, people of color, immigrants, working-class and poor people—being fat can be yet one more badge of stigma," and an additional node in the management of their lives (Herndon 128). For groups already encountering stereotypes of laziness, unattractiveness, or lack of will power, race becomes intertwined with obesity in crucial ways; a survey of newspaper articles on obesity which mentioned a racial dimension to obesity—citing the disproportionate obesity rate of Blacks and Latinos were eight times more likely to blame obesity on bad food choices, and over 13 times more likely to blame it on sedentary lifestyles (Campos et al 58). This is the racialization of laziness. In the media, the war on obesity (coincidently announced right after 9/11/2001, which may have paved the way for the overblown 'fitness as patriotic' statements) was referred to by some journalists as a "fatwa," resonating with the political climate of the time and adding to the righteous and moralistic tone (Herndon 130).

And as HIV/AIDs activists know well¹⁵, a war against obesity is always already a war against fat people, because the fat is located within and on the bodies of the

¹⁴ For a look a how fit motherhood and fit weight intersect, see posts tagged "pregnancy" on the blog *First Do No Harm*: http://fathealth.wordpress.com/category/pregnancy/. From Marg: "During my 16-week appointment the doctor said. . .: 'Your blood pressure is good, your kidney function is normal, you have good iron levels, low cholesterol and normal insulin levels BUT you are carrying too much weight to have a healthy pregnancy.' As evidenced by what????"

The hysteria and fear around AIDS (and those who are HIV+), some of which continues today, is an example of how the fear of contagion of a virus or also of fat leads to a fear and hatred of those who carry the virus or the fat. The experience of "AIDS, in which people are understood as ill before they are ill; which produces a seemingly innumerable array of symptom-illnesses; for which there are only palliatives,

"victims" (Herndon 129). Because the fat body is usually an "outed" body—"it is always hypervisible, its flabby flesh is always irrevocably seen"—it becomes impossible to disentangle the fat from the person (Murray 273).

Seen through a microcosm of women's prisons, where everything rendered visible is constantly scrutinized and administered, the functionings of biopolitics around eating and body shape spring into sharp relief. High numbers of incarcerated women, who are disproportionately poor and of color, are bulimic and/or use laxatives. As Thompson, the first academic to do research on the eating problems of women of color, writes:

... prison policy supports the development of eating problems. Healthy food is rarely available; the meals are high in starch, which makes it difficult not to gain weight. Because of severe restrictions on freedom of movement, the act of eating takes on an importance that makes incarcerated women vulnerable to binging (Thompson "A Hunger" 4).

With the extreme restriction of creative livability found in prisons, women's eating patterns become disordered. Although the surveillance is not quite as dense or thickly mediated outside of prisons, many of the same forces are at work.

The biopolitics of knowledge through visibility permeate across the political spectrum in the US. "In an age where both the left and right use rhetorics of choice and empowerment," obesity discourse slides into place across much of the political spectrum (Guthman 1130). This can be shown by looking at two, among the many, pop culture fat

and which brings to many a social death that precedes the physical one," closely mirrors the experience of obesity (Sontag 122). It is true that the HIV virus itself is contagious, through highly specific encounters between body fluids; the pathways of contagion for fat are less clearly enumerated.

_

science books published recently: *The Fat of the Land* (1999), by author Michael Fumento—winner of the 1994 Warren T. Brookes Fellow in Environmental Journalism from the Competitive Enterprise Institute—and *Fat Land: How Americans Became the Fattest People in the World* (2003), by Greg Critser.

Fumento's previous two books put forward some spurious and controversial arguments: one suggested that all air pollution laws should be abolished because of their interference with industry, while the other trumpeted the benefits of silicone breast implants for women so they could reach their full potential. In *The Fat of the Land*, he proposes that there is no such thing as benign fat, ignoring, of course, that some vitamins are fat-soluble and thus need some fat to be metabolized by the body, and that many bodily processes need fat molecules to function. Instead, he argues that all fat should be purged from the (social) body. He condemns this "pathological slothfulness" while advocating the use of commercially available weight loss drugs, despite sometimes-fatal side effects. "Nothing appears to irritate Fumento more than the idea that we might accept ourselves the way we are. Self-esteem, he argues, only comes from achievement and it is our *responsibility*, a word he uses repeatedly, to be better, thinner people" by any means necessary (Gard and Wright 147).

By contrast, Greg Critser recognizes the class basis of some of the problems of obesity; he argues that fast food industries "exploit populations who are hungry, need food, are short on cash and time, and often lack transportation" (Herndon 135). Yet, he utterly fails to see how other markers of difference, such as race, gender, and sexuality, are tied up in how we talk about obesity. For example, he writes that broader understandings of what constitutes health and beauty for Black women "denies minority

[sic] girls a principal—if sometimes unpleasant—psychological incentive to lose weight: that of social stigma," failing to recognize both the trauma this may have on women and the lack of success this tactic of shaming has had among the more stringent dominant white culture (qtd in Herndon 135). He has no problem calling upon deep-rooted fears as wide ranging as resource scarcity, anti-Latino sentiment, and homophobia. He writes in Harper's Magazine:

What do the fat, darker, exploited poor, with their unbridled primal appetites, have to offer us but a chance for we diet-and-shape-conscious folks to live vicariously? Call it boundary envy. Or rather, boundary-free envy... Meanwhile in the City of Fat Angels, we lounge through a slow-motion epidemic. Mami buys another apple fritter. Papi slams his second sugar and cream. Another young Carl supersizes and double supersizes, then supersizes again. Waistlines surge. Any minute now, the belt will run out of holes. (qtd in Campos et al 59)

And from his book *Fat Land*:

Places like McDonald's and Winchell's Donut stores, with their endless racks of glazed and creamy goodies, *are the San Francisco bathhouses* of said [obesity] epidemic, the places where the high-risk population gathers to engage in high risk behavior. (qtd in Herndon 136; emphasis mine)

Critser relentlessly invokes racialized, homophobic language, soldering the links between these systems of power and obesity. Just as homosexuality has been historically rendered unnatural, so too does obesity become a deviant, dangerous practice. Fears of surging *numbers* of Latinos in the United States are translated into fear of their growing body *size*.

Critser's rhetoric of gross excessiveness and moral and physical laziness is spoken in the cultural languages of tropes linked to race, gender and sexuality. Just as poor people are poor because of bad decisions, moral weakness, and character flaws, so too are fat people fat.

It is easy to see how statements such as these contribute to the biopolitical maintenance of obesity. As has been the case with HIV/AIDs—first known as Gay-Related Immunodeficiency Syndrome—and a host of other diseases that came to be linked to the bodies of those marked by difference, the contingencies of obesity become something natural. As diseases and marked bodies become one in the same in the social imagination, the suffering becomes a result not of structural inequities but of the suffering bodies themselves (Bourdaghs 649). Thus, "the functional desire to 'fix' social ills by curing dysfunctional members obscures the underlying structures of inequality that foster social problems" (Julier 488).

This extends to that crux of the medical system, the doctor-patient relationship.

Fat people going to the doctor find that their every ailment is attributed to excess weight. Perhaps because of the normative assumptions about the shape of women's bodies, women are "more likely to recount stories of abusive treatment, not to mention outright bullying, by medical professionals. They routinely received weight loss lectures even when their medical complaints were not weight related, such as bladder infections or nosebleeds, or even a broken arm" (Joanisse and Synnott 57). Indeed, "an attitude of 'lose 50 pounds and call me in the morning' often substitutes for a sound treatment plan. Whether they are seeking care for pink eye, a sprained ankle, a stiff neck, or a gynecological problem, fat women receive weight loss lectures" (Burgard and Lyons

214). The combination of infallible authority of the doctor (perhaps especially for female patients and/or patients who are unfamiliar with the workings of the U.S. medical system), widespread confusion over the true health effects of obesity, and internalized shame on the part of the fat patient can have fatal consequences, as the curators of the blog *First*, *Do No Harm*, assert. The site hosts a collection of stories of medical abuses due to fat prejudice—of failure to diagnose or delayed diagnosis, because whatever symptoms the patient experiences are always already due to fat. Difficulty breathing becomes due by default to sleep apnea (rather than asthma due to toxins in the environment, an auto immune system response, lung cancer, or a plethora of other possible explanations), joint pain is always a result of too much weight (rather than osteoporosis or arthritis), and so on. I will offer this story, posted by Danielle:

Three weeks ago my mother was in a car accident and suffered injuries to her feet and knees. One leg has swelled significantly and made it difficult for her to walk. She started going to a physical therapist for her injuries. This therapist told her that the best thing she could do to heal would be to lose weight, and he is requiring her to submit food logs to him so he can monitor her diet. I wonder how all of his thin patients recuperate from accidents (*First*, *Do No Harm*).

And this one from Maggie:

I'm 54 years old, 'morbidly obese,' . . . the last time I went was when I had taken a six mile hike, gotten covered with ticks and developed Lyme Disease. By the time I got to the Doctor, I'd been running a 102-3 degree fever for almost two days and my blood tests came back with elevated

liver enzymes. Immediately, and despite that I had saved all the ticks that bit me, he said the spike in liver enzymes was due to chronic gall bladder disease secondary to morbid obesity. He wanted to take my gall bladder out! But since I'm a nurse and it was my dime, I told him to treat me for Lyme and (to be on the safe side) ehrlichiosis, another tick-borne disease. Grudgingly, he did so. Voila! A week later I was nearly 100 percent cured and a month later my liver panel showed normal values across the board. I remain fat, healthy and active to this day (*First, Do No Harm*).

I do not mean to imply that excess weight is without its difficulties, some of them directly biological, many of them social. As Gard and Wright summarize, "this is not to say that very, very fat people do not have problems in moving about, using public spaces, breathing when lying down or buying clothes that fit. That is, some very large people are disabled in our society. And some of them may be sick—suffering from high blood pressure, heart disease, cancer, non-insulin dependent diabetes, damaged joints or emphysema" (Gard and Wright 95). However, it is necessary to point out that many thin people also suffer from these diseases, yet we do not identify thinness as a disease state, or even much of a risk factor.

If a person carrying a lot of fat wants to feel healthier, how should she go about it? Certainly by abandoning the emphasis on losing weight and dieting. Weight cycling, repeated dieting, and disordered eating endanger health. Rather, a focus on eating healthy food for the "simple sustenance of hunger" and pleasure can be fostered (Burgard and Lyons 216, Gard and Wright 162). "Any woman can enhance her physical and mental health by engaging in pleasurable physical activity, eating hearty and nutritious food,

building support networks of family and friends, and learning to cope more effectively with conflict and social prejudice" (Burgard and Lyons 213). Regaining a sense of trust in ones' own body, in the face of what can be years of failed dieting (all of which rely on an ideology reinforcing a division between the dieter's mind and her body) and a social atmosphere encouraging the internalization of self-hatred 16, can be healthier than any particular weight loss program (Burgard and Lyons 221). I outline this not to prescribe all women a different yet similarly homogenous regimen of attitudes and actions, but to enumerate some of the different ways in which women can relate to their bodies—ways that tend toward freer, more open ways of living. Of course these are still implicated within the workings of power, yet they are perhaps better stories to tell, creating more joyful meanings contrary to the pathologizing of weight loss and dieting.

The discourse that supports this alternative approach is excluded from mainstream media, from popular science articles (see Fumento and Critser discussion above) and reality TV shows to flash animation games disseminated by insurance companies. Instead, what is found is a relentless focus on weight loss through the intervention into, and management and scrutiny of, individual bodies.

One example of this normative obesity discourse is contained in a flash animation game produced by insurance giant Kaiser Permanente called "The Incredible Adventures of the Amazing Food Detective," which is targeted at children. It includes a free

¹⁶ Dieters score significantly lower than non-dieters on measures of self-esteem and a sense of self-control (Burgard and Lyons 221)

The link on the Kaiser website to the game doesn't work. An emulator for the game can be found at http://www.primarygames.com/science/nutrition/games/amazingfooddetective/start.htm>. 9 May 2010.

supplemental lesson guide for classrooms distributed by Scholastic, 18 yet reveals much about the way we are taught from a young age to think about fat (and the way we get fat) as pathogenic. In an amalgamation of the language of epidemics and bad detective novels, the game purports to teach kids how to self-monitor their eating and exercise behavior, beginning an internalization of obesity biopolitics at an early age (the lesson guide is recommended for grades 4-6). A voiceover introduces the premise of the game: "There has been a mysterious outbreak of unhealthy habits hitting too many boys and girls. If we don't solve these cases, and fast, kids might not make the right food and exercise choices as they grow, and that could be trouble!" (Kaiser Permanente). The first screen opens to a "case file" of eight young characters, holding up their names and looking glum against a mugshot background; their wayward diet and exercise behavior has already made them criminals. For character "Emily," guilty of eating too much, the solution proffered by the Amazing Food Detective—a svelte woman in a trenchcoat—is to install a security camera in the girl's kitchen to "catch the culprit in the act" of eating "suspicious" portions of food. Emily's every act of eating—breakfast, lunch, and dinner—is scrutinized by the camera, a surveillance mechanism which "help[s] Emily make the right choices" (Kaiser Permanente). The deployment of surveillance technology into singlefamily homes for reasons of health and fitness is a slippery slope indeed.

Similarly, the NBC show *The Biggest Loser* (with their online store which sells a T-shirt that says "unless you faint, puke, or die KEEP WALKING!"), is based on the premise that "an obese body is evidence of an inner malaise" (Sender and Sullivan 573).

¹⁸ For a discussion of the increasing reliance on corporate-sponsored and –produced classroom content due to the erosion of the tax base (in particular corporate taxes), see Naomi Klein's *No Logo*.

¹⁹ < http://www.nbcuniversalstore.com/detail.php?p=98411&v=nbc_the-biggest-loser>

The show, now in its 9th season as of 2010, "promote[s] unrealistic—even dangerous—expectations about the methods and speed with which to achieve" weight loss (Sender and Sullivan 574). In an effort to be the "biggest loser," participants often lose more than ten pounds a week, which can induce a dangerous strain on the heart. The show must adhere to the "political and visual economies of television production . . . [which] demand quick and simplistic solutions to complex problems of the self," and subsequently fat is always pathological and never okay: "there can be neither an unapologetic nor an unexplained self-presentation as fat" (Sender and Sullivan 578).

In an episode aired 3 November 2009, contestants were flown to Washington DC, accompanied by patriotic music, symbols of nationalism and citizenship, and their trainers. The episode begins: "An epidemic of obesity is sweeping the nation. You have an opportunity to stop it. Each of you. *Individually*. You will spend the next seven days doing everything you possibly can to help your fellow Americans live happier, healthier lives . . . We've done a lot of things on our show, but we've never been to the White House. If this doesn't validate our show, nothing will." The teams are broken up and each member competes alone, reinforcing the ideology of citizens as individuals. "Congratulations on making it this far; you are now individuals," the announcer tells them. They have four tasks: "run one mile (two laps) around Constitution Gardens Lake; move 17954 pennies each from the bottom to the top of the steps of the Lincoln Memorial— one penny for each pound lost on the Biggest Loser; balance on a platform on a narrow 2" brick while holding a Pilates ball, in front of the Capitol; and then, take

_

²⁰ http://www.nbc.com/the-biggest-loser/video/episodes/#vid=1173917>. 7 Jan 2010.

206 steps on a step platform, one for each Biggest Loser contestant since season one" (Wikipedia). The show also hosts a public workout at the base of the Washington Monument, culminating in a "patriotic fever pitch when[trainer] Bob mounted a firefighter as he completed a set of push-ups" (Miller). "Hold it right there, Mr. Fireman" says Bob, as he climbs atop the man, who continues to do pushups, demonstrating a superhuman fitness inextricably linked to notions of the fitness of the body politic.

The connections drawn by *The Biggest Loser* between corporeal fitness and the fitness of citizenship are clear. "The idea that fat people weaken the nation is the stuff of biopolitics" (Guthman 1126). Based on my examination of this show and manyother artifacts of mainstream obesity discourse, I argue that most of the media discourse around obesity is not about making people healthy (despite the language) but about making people over into docile, self-disciplining, rational, productive citizens, vigilantly contained within their slim thighs and flat bellies, where they do not burden society. "The obesity debate itself creates impossible, unachievable standards for economic, biological, and political competence in today's world, privileging a few and leaving the rest to their couch-potato doom" (Guthman and DuPuis 429). The identification of the Other has long been necessary for the functioning of power, and in this case the example of the obese body becomes a tool of juxtaposition, serving to discipline the center while at the same time marginalizing the extremes. "The ideal neoliberal citizen, governed by free will and consumer choice"—consuming much but maintaining an appearance of health, even to the point of bulimia—is constructed in relation to the body of the "undisciplined, foodaddicted, lazy fatty," a being out of control who has exceeded the boundaries of their bodies by "letting themselves go" (Sender and Sullivan 580; Gard and Wright 161). In

opposition to this, thin bodies can tap into a performance of empowerment and control regardless of the effort, or lack thereof it took to obtain thinness (Guthman 1116). These women can be considered literally and metaphorically weightless. Thus:

the slender body codes the tantalizing ideal of the well-managed self in which all is kept in order despite the contradictions of consumer culture. . . . [while] the central contradiction of the system inscribes itself on our bodies (Bordo 201).

Some have been perplexed over the "paradox" that there are growing numbers of anorexia cases as well as cases of overweight in the US. However, the mutual existence of these two diseases signals instead contradictions in the messages around food and eating.

In addition, there is an emphasis on economic costs of obesity: according to the Surgeon General, "obesity related illnesses cost employers \$4.06 billion annually," and 2009's discussion of healthcare reform was repeatedly sidetracked by judgments about who is worthy of medical care, with obese people falling outside of that measurement (qtd in Herndon 128). According to a recent New York Times article, those who happen to be thin are not even supposed to be friends with fat people, because of the risk of the "social contagion" of obesity (Kolata "Study"). This constructs the fat body in multiple ways as a failure to "register as a fully productive body in a capitalist economy" (Sender and Sullivan 581).

This is because the ideal citizen of such an economy is metaphorically (or actually) bulimic, one who is able to maintain (for a time) an appearance of control and rationality while binging; one who wants less by consuming more. Achieving both eating

and thinness becomes the ultimate quest of the good subject-citizen (Guthman and DuPuis 444). The focus on an appearance of health, performed as thinness, "works to legitimate class and racial privilege and constitute others as beyond repair" (Guthman 1116).

One group of Others for whom the obesity discourse is most clealy biopolitical in contradictory and complicated ways—is African American woman, a group which is among the least privileged in terms of class and race. Although "an individual may experience multifaceted, overlapping, and fluid understandings of how they should be producing and regulating the space of their body which may not be completely congruent or consistent, and [which] set up tensions and conflict between different bodily ideals and sets of regulatory practices in different locations," the fat black woman is often understood as a pinnacle of self, family, and community strength (Valentine 348). While for some this can be empowering, it is important to remember that "these cultural images of African American womanhood are typically built on the experiences of the poorest and least powerful women and are more prescriptive than descriptive"; and that "much of what has been perceived by whites as an Amazonic trait in black women has been merely stoical acceptance of situations we have been powerless to change" (Hill Collins 737; bell hooks qtd in Beauboeuf-Lafontant 114). What may be said is that large black women often end up literally carrying the weight of the world within their bodies, as a physical manifestation of the accumulation of insults to body, self, and culture. Fatness becomes evidence of trauma or burden.

Yet, the assumption that black female fatness is evidence of stoic strength and eternal care veers dangerously close to the "mammy" stereotype that black women have

so long struggled against. The "large, dark-skinned, sexless Mammy" with "classical African features," is a trope which operates in opposition to (and is necessitated by) the "blue-eyed, blonde, thin white woman" as the epitome of beauty (Beauboeuf-Lafontant 112, Hill Collins 79). In contrast to the angst-ridden white woman constantly dieting and worrying about her weight, it is often assumed that blackness protects black women from experiencing fat prejudice or having eating disorders. Retha Powers, writing in Essence in 1989, recounts words told to her by a white high school guidance counselor. Powers visited the counselor seeking help with her self-destructive binge/purge eating disorder, who said: "you don't have to worry about feeling attractive or sexy because Black women aren't seen as sex objects, but as women. . . . Also, fat is more acceptable in the Black community—that's another reason you don't have to worry about it" (Powers 78). This conception has not changed much, even in fat-sympathetic communities and amongst fat activists. As blogger Julia writes on Fatshionista twenty years later, "It frustrates me when I hear white women in the fat acceptance community talk about how fat positive the black community is and express bitterness/jealously that "their community" isn't. . . Being told by white women that I have it easy when it comes to body image dismisses all of the complexities and difficulties of my identity." This discourse of strength and acceptance in its multiple forms is a "key oppressive force" acting upon black women, both causing and obscuring eating disordered coping

_

²¹ A relatively recent surge in films starring black comedians who appear in drag and fat suits—including Eddie Murphy, Martin Lawrence, and Tyler Perry—adds another dimension to this hot mess of signifiers. In all instances, the "Big Mama" women they play become the focus of humor through their size, their anger, their overbearing behavior, and their "dragged-out femininity" (Julier 491). "For black comedians to adopt this physical comedy is a questionable route to power that needs to be examined more fully," in light of the numbers of large black woman who have limited cultural and iconic power in our society (Julier 491).

mechanisms, and reveals the overarching expectation that black women "represent a deviant, not fully human, womanhood, as well as a lack of interest in seeing Black women show a full range of emotions and needs" (Beauboeuf-Lafontant 116). However, in this case power is both repressive and productive. Simultaneous to the discourse which seeks to define black women as a "mammy" is the fact that many simultaneously successfully used their size as a revolutionary force. In rejecting white standards of beauty by "embracing African-inspired attire and hairstyles and accepting their full bodied figures," dissent can be embodied (Hill Collins 737). "We should not overlook the fact that many African American women, like [Kara] Walker, have redeployed the rhetoric and spectacle of the 'large' female body as a form of self-affirmation and political protest. Here one thinks of a tradition stretching from activists such as sojourner Truth to contemporary rappers including Queen Latifah who," according to hip hop historian Tricia Rose, uses her body politics to position herself "as part of a rich legacy of black women's activism, racial commitment, and cultural pride" (qtd in Witt 191). And so, the association between black women and particular kinds of bodies is a fraught one, both reinforcing and resisting specific ways of understanding race, gender, and class.

However, for black women whose families experience upward mobility and thus encounter—and must adhere to, to maintain economic success—more white talk, suddenly thinness becomes important as a means of acceptance. Thompson records an interview with Jocelyn (a pseudonym), who recalls her preteen years full of new concerns about dieting. "As my father's business began to bloom and my father was interacting more with white businessmen and seeing how they did business, suddenly thin became important," recalls Jocelyn (Thompson "A Way" 557). In her post "Fatness and Uplift:

Not a Post about Pushup Bras," Julia writes that among upwardly mobile young people—such as those in predominantly white institutions of higher education—being seen as "controlled" and "presentable," particularly through the management of weight but also of clothing, hair, and manner, becomes an important way of setting oneself apart from "potent" images of the mammy (Julia). "Having a fat body that reminded people of a servant²² lacing up Scarlett O'Hara didn't fit the cultivated image of the educated elite" (Julia). And, it was reasoned, while one had minimal control over skin color or hair texture—though there are a plethora of fixes, mostly chemical, for these "problems"—one *could* have control over size. In particular ways, thinness could substitute for whiteness; Audre Lorde's poem, "Song for a Thin Sister," connects bodily diminishment with whiteness:

Either heard or taught
as girls we thought
that skinny was funny
or a little bit silly
and feeling a pull
toward the large and the colorful
I would joke you when
you grew too thin.

But your new kind of hunger

_

²² Charting the movement of public preference of black female actors from Hattie McDaniel to Halle Berry (though of course there were thin, light-skinned black actresses contemporaries of McDaniel, for example Josephine Baker) is a topic for another time.

makes me chilly like danger

I see you forever retreating

shrinking into a stranger

in flight

and growing up

Black and fat

I was so sure that skinny

was funny or silly

but always

white.

In Lorde's poem, thinness is seen as dangerous, in a marked contrast to the dominant discourse. In complex ways, there is a liberatory potential in a wider cultural definition of what constitutes a healthy body.

Yet immediately when a fat black women enters a white space, her body is under attack. Her fatness is still designated as pathological within the wider discourse of obesity in particular racially-charged ways; all of the adjectives associated with fat today (lazy, weak, spineless, gluttonous, unnatural, etc) have historically been tied to racialized Others. As discussed above, many people, including those within the medical community repeatedly deny black women the recognition of the validity of their eating problems. "Can it be that our society places thinness—even to the extreme, pathological capacity to master it [as in the case of anorexia]—on such a pedestal that we must be elitist in our attitudes regarding who is *eligible* for these often deadly diseases?" (Williamson 67).

The pathologizing of black fatness is clear in *The Biggest Loser*. Though usually race is not mentioned at all, in Season Two the managers of weight-loss on the show reframed the assumption that African Americans are more culturally accepting of obesity into a "morbid tolerance of obesity in black communities" (Sender and Sullivan 577). The only remaining black woman candidate was given a pep talk, in which "an acceptance of size among African Americans is described as an unhealthy, even lethal cultural heritage that Shannon must reject in order to save not only herself but her daughter" (Sender and Sullivan 577). This pathological unhealthiness was seen within the show "as a communal lack of will and self-esteem, a heritage that black contestant Shannon must radically disassociate herself from" (Sender and Sullivan 582). This is not an outlying incident; the scrutiny of fat fits directly into discourses surrounding alreadypathologized black bodies. Yet this tension is not always so simple to see, and black women are not passive recipients of malingering words directed at their bodies. "Could it be that Black women's bodies become the playing field for such contradictions between personal needs and cultural norms, between the desire for control and the persistence of oppression, between the voicing of pain and the denial of its existence?" (Beauboeuf-Lafontant 118). If *The Biggest Loser* was not so caught up in the biopolitics of obesity, the trainers may have been able to step back and ask black women contestants "not why they are overweight but what may be weighing them down" (Beauboeuf-Lafontant 118). This kind of question offers us the space to consider not supposed individual failings, but rather structures of oppression and discursive strategies which equate fat with abnormality, weakness, and amorality.

In fall of 2009, with the nomination of Dr. Regina Benjamin as Obama's Surgeon general, racialized notions of black female fatness came to a head. Benjamin, the only doctor in Bayou La Batre parish in Louisiana, is a tireless woman. She got her MD through grants from the National Health Corps, which necessitates five years of service in an underserved area. Instead of serving her five years and then leaving, Benjamin made Bayou La Batre her life's work. She reached out to non-English-speaking Vietnamese and Laotian shrimpers, who make up 40% of the population, making sure they had health care. She accepted payment of any kind from her poor patients, or none. In the days following Hurricane Katrina, she treated people from a tent. She rebuilt her clinic after Katrina, and then when it was destroyed by fire the week before its reopening, rebuilt it again²³. She is recipient of both the MacArthur Genius Grant and the Mandela Award for Health and Human Rights.

Yet she also happens to be read as overweight. When her nomination for Secretary General was announced, 24-hour news channels and the blogosphere lit up with accusations and conjecture, which ranged from attacks on her physical body, to her intelligence, to apparent her lack of self-control²⁴. The comments²⁵ on the articles from

-

²³ Let it be clear that while Benjamin has done incredible things for her community, she, as an individual doctor, should not have to shoulder the burden of the nation's lack of social services or make excessive sacrifice so that all her patients can have access to health care (North).

²⁴ Then-federal appellate judge Sonia Sotomayor and Solicitor General Elena Kagan were also targeted in this way during speculation over nomination, though neither of them are particularly fat. Also, as pointed out by blog Jezebel, none of these issues were mentioned with portly, white male Tom Vilsack, the Secretary of Agriculture, who is in charge of such things as "the food pyramid; agricultural subsidies that go heavily to grains and hardly at all to fruits and vegetables; the school lunch program, food stamps, WIC programs and the lists of foodstuffs that comprise what the poor are able to eat; and the Center for Nutrition Policy and Promotion" (Megan).

²⁵ While the content of the article borders on the absurd, the accompanying computer-generated "related content" ads and the 451 article comments take the cake. The ads included titles like: "Mississippi Tops List of Obese States," "New Weight Loss Pill May be on the Way," "Do Obese People Worsen Global

readers often constructed Benjamin as a hypocrite for advocating healthy eating while she so apparently didn't follow that herself; others directly referenced her race, tying it to moral qualifiers. I include a choice selection here: "she could do with a gastric bypass"; "Now taxpayers will end up paying for two seats when this #### flies"; "fat people are usually self indulgent food addicts. they aren't beautiful. they are mentally ill and extremely unappealing"; "Obesity is a flag for a whole host of behavior problems which usually have an emotional basis. just look at the vehemence by which the fat are defending and excusing fatness"; and "LOL! An Obese hefer [sic] as the new Surgeon General talking about every medical problem other than Obesity! LOL! Thats grand! Too much fried chicken??" Of course, I am cherry picking some extreme of the comments, but it remains that people wrote them and an editor left them posted. Not all comments were of this nature. One poster even commented, hopefully, that "perhaps she knows that poverty causes obesity."

I will hang onto that lone comment through the thickness of biopolitical speculation on mine and others' bodies. The individualization of blame—in which the bad, fat subject is floating in the thick layers of overlapping signifiers which make up the biopolitics of obesity—dampens people's autonomy over their food and their bodies (Julier 495). We are squeezing everyone's bodies, in all shapes, sizes, colors, and genders, into the same (workout) clothes. Even the very notion of obesity as an epidemic, "a runaway pathology, is in some sense tantamount to ceding to the biopolitical governance of neoliberalism" (Guthman and DuPuis 445). Until we start valuing food for more than

Warming?" and "Top 8 Mediterranean Super Ingredients"; here we see the citizenry of certain places being stigmatized as the cause of the next big worldwide crisis, plus a medicalized and nutritionized way of solving that problem.

nutrition, and valuing people for more than appearance, and until "women's access to racial, social, sexual, and political justice is served" (Julier 495; Thompson "A Hunger" 2), people will not stop going to great and terrible lengths to be thin, from taking diet pills known to cause pulmonary hypertension to invasive stomach stapling surgery. What is needed is a vast project toward resignifying fat, creating diversity in health; in Elizabeth Grosz's words, "a defiant affirmation of multiplicity, a field of differences, or other kinds of bodies and subjectivities" (Gard and Wright 164). I end this chapter with an extended excerpt from a speech given by Samantha Murray, a research fellow at the Department of Media, Music and Cultural Studies at Macquarie University in Sydney, Australia, at a medical conference on menopause:

I stand before you now, and I can feel you all 'knowing' my body. You see my fatness, and co-extensive with it, you perceive its indisputable deviation from practices of health and care of the body. I am aware that here, in this space, in fact in most spaces, my body is a quintessential symbol of pathology. When you witness me now: seeing my dimpled thighs, my soft bulges and fatty rolls, you believe you know me. The visible marker of my fatness is laden with knowledges of who I am.

Looking at me now, you must ask yourself what do you know about my body, and therefore, about me? What does my fat body signal? The visible markers of my fatness, my wide hips, protruding belly, vast thighs, all signal a 'knowingness' of pathology and disease. You read my fat as symptomatic of overeating, lack of exercise, poor nutrition. You see me as a high-risk candidate for diabetes, gall bladder disease, hypertension and

heart attack. At a deeper level, you may see a lazy woman without willpower, a sedentary being, with questionable hygiene. You see a woman who will not help herself, a woman out of control, a woman of unmanaged desires and gluttonous obsessions. . . . I have tried to fill the gap between the way you see my body and the way I live it. . . . Medicine has an irrefutable role in reinforcing and reinscribing the fat body, producing and reproducing popular understandings of fatness as symbolic of pathology and disease. There is a gap between the medical, clinical representation of fatness (which asks me to be ashamed of my flesh and to seek to transform it), and the way I want to take up my fatness and live it. . . . My body is not diseased, it is not pathological, it is not out of control. I am posing new body knowledges: there are pleasures and joys I *know* of my flesh that fall outside your pathologizing, objectifying gaze. There is more to this fat flesh than disease, morbidity statistics and obesity epidemics. There is another way of *seeing* fatness, and another way of living fat, outside of the miseries of the constant readings of fat flesh as pathological and abhorrent. I'm not suggesting that we take a view of fatness that is utopian. Rather, I am trying to displace the ways in which our body thinks about fat, and the way medicine urges society to see and read fat bodies (qtd in Gard and Wright 167)

Let us hope that many hear her message. Samantha Murray has found a platform on which to stand to disrupt the discursive solidification around fat bodies. I hope that we all can find and build more fissures, like this one, in the pervasive biopolitics of fat.

TRANSITIONS: FROM FAT TO CANCER: FICTIONS OF CONTAMINATION

In the contemporary discursive formations of obesity, adipose tissue can be made over into a natural cause of seemingly any illness or ailment. This includes diseases caused by damage to DNA and the resulting aberrant cancerous growth—such as breast cancer. Some studies show very weak statistical correlations between postmenopausal obesity and breast cancer incidence; in the plethora of studies done on the link between dietary fat and breast cancer the results are "contradictory and confusing at best" (Yaldon 656). However, these data have been recruited, without qualifications in many contexts, into one more reason to pathologize fat intake and fat on the body, and tell fat people that they should not be so.

Particularly for women, eating choices are managed both by the eater and by onlookers to the act of eating. The accumulation of these eating acts into diet, and the accumulation of these nutrients, proteins, fats, vitamins, and the rest into the biology of the body--sometimes through fat, but also in the other, multiple ways in which bodies use what is found in food--is both a fully natural chain of circumstances as well as a wholly mediated process. The framing dialectic which all people, but particularly women, encounter is a pendulum of restraint and indulgence in which food is *not* seen as a biological need for sustenance but as a personal decision about what kind of body and health choices one makes; "this allows diet to serve its particular function in discussions of breast cancer" (Yaldon 662). Somehow, it is posited, what one ingests affects one's

health. And this is of course true: all of the material that makes up our bodies, from toenails to blood to breast tissue, has come from air, water, food, and other things we ingest (Steingraber "Social Production" 30). However, the concentration solely on bodily fat fails to do justice to the complexities of the materiality of food and food contaminants, the biology of bodies, and the multiple reasons people eat, while at the same time enrolling those bodies in pathological notions about the dangers of fat and obesity. In this case, fear of the contagion of fat gets translated into a fear of invasion by cancer, and vice versa.

The National Cancer Institute, a U.S. government body, is a go-to clearinghouse of information on cancer. Part of what they do on their website is compile, synthesize, and interpret data from scientific studies for easy readability by the general public, on pages such as "Obesity and Cancer: Questions and Answers." Thus, it is particularly unfortunate for this trusted source of cancer data to be dabbling in the kind of logical leaps and rhetorical devices that aim to trap fat and fat people into culpability for their own cancer. Firstly, the complex causes of obesity are reduced to an in/out of calories: only diet and sedentary lifestyle are listed as causal agents (NCI). We have seen in the previous chapter how harmful this can be. They also write that "in 2001, experts concluded that cancers of the colon, breast (postmenopausal), endometrium (the lining of the uterus), kidney, and esophagus are associated with obesity. . . . Obesity and physical inactivity may account for 25 to 30 percent of several major cancers—colon, breast (postmenopausal)" (NCI). This gets translated into the news media at face value, as in a recent article in the Mail (UK) which stated that "up to a third of breast cancer cases could be avoided if women ate less and exercised more" (Hope).

Yet farther down in the NCI's "Obesity and Cancer" page, the data—and the text— becomes more ambivalent. The NCI cites four studies which found that *before* menopause, obese women actually had a lower risk of developing breast cancer than women "of a healthy weight" (NCI). Why do doctors, scientists, and science journalists not spread the news that *pre*menopausal fat may be associated with a lower risk of breast cancer? That seems to be outside the realm of possibility. Instead, this contradictory evidence about the role of dietary fat in breast cancer risk is apparently not an "obstacle to advising women to change their diets" (Steingraber *Living Downstream* 265).

The "Obesity and Cancer" page says one more thing, which is both dangerous and fascinating to me: "obese women are also at increased risk of *dying* from breast cancer after menopause compared with lean women" (NCI). There is no speculation as to why this is, but I will take the liberty of spelling out what some might be thinking. If the discursive biopolitics of fat are taken to its illogical conclusions, it would seem that fat women have lower survival rates after contracting breast cancer simply because they are *lazy*. That is, they are simply unable to put the effort into fighting the cancerous enemy within them; they fail where other, thinner, more fit women would fight to the bitter end, refuse to give up the ghost, continue to battle against the scourge of cancer (we will see in the next chapter how this discourse plays out in women's experiences of breast cancer). Women are told that a positive outlook is just as important as the chemotherapy treatment; perhaps all that fat weighing women down prevents them from tapping this

-

²⁶ This "Obesity and Cancer" webpage lacks a discussion of the statistical difference between correlation and cause and effect. This sentence makes it seem as if obesity directly causes death by breast cancer. Yet we can deduce that if more poor women are obese, and more poor women also lack access to healthcare and health insurance, then breast cancer survival rates may be more an issue of economics than body type.

strength, this positive psychology. These women come pre-demoralized; they cannot be conscripted as foot soldiers in the War on Cancer. This is, of course, ridiculous; each woman's experience with breast cancer and her body's response to treatment are unique and, although bound up in normative narratives about fighting cancer, each women, no matter her BMI, finds ways of making her own strength as well as relying on a network of supporters and allies. Some women chose not to pursue additional toxic treatments at all (assuming they have access to such treatments), because of the decrease in quality of life. This is not about inner strength or tenacity; it is about what the woman feels is right at that time in her life.

This ignores, as well, the potential influence of structural factors on breast cancer. If more black women are obese, and more black women are dying from breast cancer, then perhaps it is not the fatty tissue but the racial exclusions of healthcare, the built environment, the workplace, and the myriad of other ways that racisms play out in the US which contribute to the excess breast cancer deaths for poor women, obese women, and black women.

The NCI website and the news articles are upfront about the fact that medical researchers have no idea why there might be a correlation between fat and breast cancer. Yet they seem to remain sure that there is a relationship: as a recent *Dallas Morning News* article stated, "in fact, the only issue in doubt among most experts is why" (Churnin). There are many theories, ranging from insulin resistance to "inflammation," yet the dominant theory is that fatty tissue secretes estrogenic hormones²⁷. Thus more fat

²⁷ Woe is the fat man under this theory; not only is he visually emasculated by his bulk, but also by the hormones that may be bathing his body.

equals more estrogen in the bloodstream, so the theory goes, potentially affecting breast and other reproductive tissue.

Early theories relied on population studies of immigrant women's health patterns. It was found that "women who move from countries with low breast cancer rates to industrialized countries soon acquire the higher risk of their new country. For example, women who emigrate to the United States from Asian countries, where the rates are four to seven times lower, experience an 80 percent increase in risk after living in the United States a decade or more. A generation later, the risk for their daughters approaches that of U.S.-born women" (Evans 14). It was concluded that this was because of assimilating diet patterns; an 80% change in ten years in dietary habits to an Americanized, high-fat, high-salt diet correlated to an 80% increase in breast cancer risk. Their daughters—who, the narrative goes, have apparently lost all culinary ties to their cultural heritage—have risk equivalent to US-born women. This time, fat invades bodies of immigrants.

This is a dismaying idea, limited as it is by the overbearing biopolitics of fat. That within one generation immigrant women begin to experience the same rates of cancer is truly disturbing, yet it is wrong to interpret the data in this way by relying on the assumption that immigrant women will assimilate their foodways. Instead, let us be suspicious about how the *rest* of the environmental factors in the immigrant women's new place affected her wellbeing.

The same is true of the fatty hormones hypothesis. We know that estrogens affect breast tissue in health and disease; why not examine the conspicuous burden of estrogen-like synthetic chemicals in the body? Why not examine what kind of neighborhoods recent immigrants are funneled into: are they near waste dumps? Power plants? And

where do these women work? Do they work with and around carcinogenic chemicals in poorly ventilated factories or in conventionally farmed fields without access to proper shower facilities? And speaking of food, might it not be the fat itself of animal tissue, but the fat-dissolved hormones and other carcinogens that persistently bioaccumulate in fatty tissue? If the animals we raise to eat are farmed in toxic environments, then we eat that and it becomes us. Perhaps this is a route to breast cancer; it is certainly a route to a rallying point around activism: "what would happen if an army of one-breasted women descended upon Congress and demanded that the use of carcinogenic, fat-stored hormones in beef-feed be outlawed?" (Lorde 15).

So. Decisions about what we eat, where we live, and many others about how we live our lives affect breast cancer risk. Yet these are decisions which are made not only by us, but also by the society in which we live, which tends to value individualized notions of self-discipline and self-preservation over a complex, holistic understanding of the root causes of cancer, and which governs what we eat and where we live. Yet part of what prevents this understanding is a relentless focus on fat, and hence fat people, as the culprit of the disease of breast cancer.

Yet is the discourse tightly circular enough to be able to claim the reverse—that breast cancer is somehow implicated in obesity? No, and partly because of the different societal position of women with breast cancer as compared to women with fat.

Discursively, cancer does not cause obesity. In fact, the opposite is true; chemotherapy is occasionally touted as that "final push" you need to help lose those last ten pounds! You will look slimmer than ever; watch those love handles melt away to reveal alluring hip bones! It will smooth and tighten your skin, and your hair will be "fuller, softer, easier to

control, and perhaps a surprising new color" or texture, as King points out in *Pink Ribbons Inc.* (102)! This is part of the dominant images of heterofemininity which imbue breast cancer discourse, yet weight loss as a side effect of chemotherapy is a very dangerous and undesired reality for many women (and men).

How we talk about breast cancer and obesity is important in the real lives of many women. I now turn to breast cancer and its discourses, exploring its deployment both as a site of power and resistance. While the particulars of words, techniques, practices, and subjectivities here perform and allot power differently from the discourses of obesity, their effects are often the same: a highly circumscribed conception of health, livability, and the pathways to both.

BREAST CANCER: BOOBY TRAPPING

Cancer in the breast is a site of grave consequence to women's 28 lives and bodies, both in the experience of life and death as well as the management, struggle for, and contention over the meanings of those lives. Women along the breast cancer continuum—which has broadened recently to include not just those living with the disease but those who are deemed to be at high-risk, those that name themselves and are named victims and survivors, as well as just about any breast-bearing person—are enfolded in the breast cancer industry, a biopolitical regime by which women become subjects: risky subjects, test subjects, and subject to pain, trauma, uncertainty and questions of identity. I aim to tell not only the narrative of the breast cancer industries and the manipulation of people's lives, but I also wish to delineate the ways in which women living with breast cancer—the least voluntary subjects of this regime—negotiate the complex terrain of their disease and their often profound personal and cultural reactions to that disease (Klawiter 105). Rising breast cancer rates since World War II are accompanied by increasingly cohesive (techno)biopolitical power through the recruitment of women into individualizing high-risk categories, the use of surveillance military technology, and the rise of a corporate-citizen activist partnership, all "for the cureTM."

_

²⁸ I do not wish to silence the men/male bodied people who are diagnosed with breast cancer, roughly one percent of all breast cancer incidence. However, I focus my narrative on women's lives and experiences because the overdetermined cultural importance of female breasts in the US provides a particularly rich framework for examining the biopolitics of cancer and disease.

Yet many are resisting, recognizing that it is the same corporations which cause and profit from cancer, who are struggling for more legible ways of living with breast cancer and reimagining the potential of visibility.

I will begin by sharing some statistics regarding the incidence and mortality rates of breast cancer, gathered from several sources (many of which are policed by players within what is known as the "breast cancer establishment," which I discuss later).

Statistical modeling—and the process by which large-scale population models are translated into individually consequential information—tends to obscure social and structural practices, so I will be as careful as possible in describing this information (Fosket "Constructing" 295). There are politics in numbers that tend to be hidden by their stark, seemingly objective values (Winnow 73). Thus, when I repeat the statistic that women in the US have a one in eight lifetime chance of being diagnosed with breast cancer, I mean precisely that over the entire course of a life which lasts 95 years, 12.5% of women will experience breast cancer. This does not mean that an individual woman at, say, age 40 has a one in eight chance. I spell this out because a statistic such as this can be used by multiple parties for multiple purposes, including the purpose of pushing mammogram screening on younger and younger women.

Nevertheless, one in eight is an awful lot of people. It is particularly stark when we realize how this has escalated over the past half-century: that when chemicals whistleblower Rachel Carson died in 1964 of breast cancer she was among the company of one in twenty women to contract the disease (Brown 47). Since 1940, rates of breast cancer diagnosis have increased by 1-2% per year (Steingeraber *Living Downstream* 36). Between 1950 and 1990 the incidence of breast cancer increased by 53 percent (Klawiter

2). This is a huge surge in incidence, and only less than half of the increase can be attributed to earlier detection (Steingraber *Living Downstream* 36)—although this is often the sole explanation offered by mainstream breast cancer researchers and activists. This cannot be the whole story, however, because the groups of women for whom breast cancer rates are ascending most rapidly are black women and elderly women, those with the least access to mammography. Between 1973 and 1991, the incidence rates for black women of all ages rose more than 30 percent, much faster than for white women; therefore, the majority of the increase cannot be fully explained by mammography detection rates (Steingraber *Living Downstream* 36).

It is worth pausing to examine the stark disparities in cancer statistics for black women as compared to white women. If health is predominately inscribed by the opportunity or "the chance to stay healthy" (Hubbard and Ward 91), then over the entire medical realm, black women are more likely to "be diagnosed with and die from preventable cancers; be diagnosed with late-stage disease for cancers detectable through screening in the early stage; receive either no treatment or treatment that does not meet currently accepted standards of care; die of cancers that are generally curable; and suffer from cancer without the benefit of pain control and other palliative care" (Krieger 5). Women of color have persistently lower rates of screening and shorter survival times after diagnosis (King xvii). In 2000, there were 30% more excess deaths among African American women from cancer than among their white counterparts—meaning that African American women are overrepresented in mortality data—according to American Cancer Society data (King xviii). In 2008, that had jumped to a 36% difference in mortality for African American women with breast cancer (Saldago).

So what is causing the increased rates of breast cancer, particularly for black women? I argue that it is at least in part the burgeoning presence of human-made chemicals in our environment, many of which disrupt the endocrine (hormonal) systems of humans and animals. This can be mapped out into "cancer clusters" over the most polluted counties in the US, which is often where people of color including black women live (Bullard). Evidence for an environmental connection comes not from complete toxicological information on many of these chemicals or knowledge of the synergistic effects of complex exposure to multiple chemicals in the human body: the political economy of chemicals and plastics research tends away from this sort of understanding. However, we know that only 5-10% of breast cancer cases occur in women born with a genetic predisposition for the disease (Evans 4); that in the largest study ever conducted on twins (44,788 sets) inherited genetic factors accounted for only a small increase in susceptibility to cancer (Lichtenstein et. al. 78); that cancer correlates by families not biologically but geographically—that is, adoptive children have cancer at rates of their adoptive families but not of their biological ones (Steingraber *Living Downstream* 251); and that the human genome does not evolve fast enough in a population over only two or three generations to explain the marked increase in breast cancer (Brown 65).

If cancer is not caused by genetics, some think, perhaps it is a set of choices made by individuals over the course of a lifetime. Their life*style* decisions²⁹, if you will.

-

²⁹ Robert Proctor, in his book *Cancer Wars*, lists these risk factors in the index: "Breast Cancer, causes of: abortion, 6; abstinence from sexual intercourse, 28; anger and 'languid circulation,' 26; childlessness, 3, 23; compressing breasts during prayer, 19; failure to breast-feed, 23, 28, 278; failure to exercise, 3; fat, 3, 24, 273; heredity, 218-19, 237-42, 246, 315; meat, 104; pesticides, 2, 24; squeezing during lovemaking, 326; synthetic hormones, 24, 277; tight-fitting garments, 19" (Proctor 343). These generally demonstrate how deviant behavior is thought to lead to disease.

Lifestyle factors like minimizing alcohol and cigarette consumption, getting regular exercise, having children early and breastfeeding them, lowering the fat in your diet, performing breast self-exams, even receiving regular mammograms are seen as preventative behavior. Avoiding nightshift work can also mitigate the risk of developing breast cancer, according to the Susan B. Komen Foundation, a mainstream breast cancer advocacy group (Komen "Lifestyle"). The stipulation to avoid nightshift work is particularly troubling, embedded as it is in a shift economy which devalues workers, and into which poor women are particularly conscripted. The Komen Foundation claims that night shift work is a risk factor because of increased exposure to light at night; no cause-proving studies are referenced (Komen "Light"). Yet most night shift work is janitorial, factory, or road crew work. Could the increased risk of breast cancer amongst these women possibly arise from increased levels of exposure to industrial-strength solvents and cleaning products, petrochemical derivatives, combusted plastics, or volatile particulate matter?

Many environmental justice advocates define the environment as the places where we live, work, and play (Gottlieb 7). This expansive definition provides space for understanding the connections to the biology of our bodies and the places where we spend our time. Our breath, our pores, and our digestive systems are some of the major interfaces with the world around us. Thus, the environment constitutes not only our natural/ecological and built surroundings, but also the environment of our bodies and our cells. This is not a contradiction. "What we drink, inhale, and find to eat in the environment external to ourselves quickly becomes our internal environment"; all of the material that makes up our bodies, from toenails to blood to breast tissue, has come from

air, water, food, and other things we ingest (Steingraber *Living Downstream* 61, Steingraber "Social Production" 30). It is also difficult to separate out what is "lifestyle" from what is "environment": sunbathing is a lifestyle choice which contributes to skin cancer, but also human-induced CFCs in the stratosphere are causing the ozone layer to thin. In another instance, vinyl chloride workers have much higher rates of liver cancer than other types of factory workers. This is because vinyl chloride dissolved in the blood causes liver scarring, which is noncancerous—until the liver is exposed to ethanol through alcohol consumption (Steingraber *Living Downstream* 68). Is this an environmental condition or a lifestyle choice³⁰? "By emphasizing personal habits rather than carcinogens, [the lifestyle discourse] present[s] the cause of the disease as a problem of *behavior* rather than one of *exposure* to disease-causing agents," putting the blame on the individual and distracting from the work of reducing environmental risk factors (Steingraber "Social Production" 25).

The only proven cause of breast cancer is ionizing radiation, which is classified as a known human carcinogen by the National Toxicology Program (Evans 5). Radioactive matter is present in our environment to varying degrees according to geography and type of employment, and much of the time we have little to no control over our exposure to it.

And the fact that as many as half of all breast cancers occur in women who have no

³⁰ Beluga whales in the highly industrialized St Lawrence river have been increasingly prone to reproductive tumors and miscarriages. Scientists have found PCBs, DDT, chlordane, toxaphene (at the highest levels ever recorded in living animals) in their blubber (Steingraber *Living Downstream* 133). This is deeply concerning to many people; in the words of Leone Pippard, a local environmental activist: "Tell me, does the St Lawrence beluga drink too much alcohol and does the St Lawrence beluga smoke to much and does the St Lawrence beluga have a bad diet . . .is that why the beluga whales are ill? . . . Do you think you are somehow immune and that it is only the beluga whale that is being affected?" Leone Pippard (qtd in Steingraber *Living Downstream* 139).

known risk factors for the disease illustrates that we have only begun to characterize the causes of breast cancer (Evans 4).

We live in an industrial and post-industrial society which leaves us bathed in manufactured chemicals, more than 90% of which have never been tested for their effects on human health (Evans 6). There are more than 85,000 registered chemicals which have been synthesized, patented and marketed for industrial, agricultural, military, and consumer use since World War II (Brown 56). More than one thousand are added every year (Evans 6). Some have been banned for their toxicity—DDT in the US is a good example—yet remain in measurable levels in the air and water, in fish and animals, and in human tissue, in both the US and to a measurably greater extent in the Global South where they are still used widely. Dioxin is such a chemical which has become ubiquitous in human body fat, including that of newborns. It is not used in any industrial process; rather, it is an incidental byproduct of the combustion of chlorinated compounds such as PVC (polyvinyl chloride) and PCBs (polychlorinated biphenyls) (Brown 56). In 1976 the town of Sevesco, Italy experienced massive dioxin contamination from a factory explosion. For residents of the town, a tenfold increase in dioxin blood levels led to a twofold increase in breast cancer incidence (Brown 68).

This is not to discount genetic factors completely. Carcinogens work at the cellular and molecular level on predispositions. It "most often appears to be the case [that] cancer begins through some kind of environmental insult—exposure to ionizing radiation or to one of the many chemical carcinogens in our air, food, or water—then the fact that oncogenes must be activated and suppressor genes turned off does not alter the fact that, it is the presence of these chemicals that is the root cause of the cancer (Proctor

244). This is good news: it means that most breast cancers are environmentally caused and therefore preventable.

However, even having the sorts of discussions which compare causes of breast cancer necessitates a public discussion of the disease itself. For much of the 20th century, breast cancer incidence, treatment, and its effect on women was swept under the rug. Yet behind doctors' office doors and in women's private and public lives, the disease—and the debilitating treatment for it—were managed. In 1882, William Halstead invented a procedure known as the Halstead Radical Mastectomy for the treatment of breast cancer (Klawiter 76). The treatment involved removing all of the breast tissue, the major and minor pectoral muscles to the bone, and the lymph nodes and fatty tissue from the adjacent armpit—an attempt to excise all of the possibly cancerous tissue which left the woman with a concave chest, a profound loss of strength, and painful chronic arm swelling³¹. In 1889 a patent was filed for a rubber Bosom-Form "conforming closely to a well-developed woman's breast, with or without a nipple" (Greene 1), signaling the entrance of a device for the mitigation of women's cosmetic and psychological trauma into the formal US capital economy. The radical mastectomy procedure persisted as the default treatment for breast cancer until well into the 1970s, when the burgeoning women's health movement spoke out against radical mastectomies, as well as the common and patriarchal practice of performing mastectomy during the same anesthesia event as the biopsy without the woman's consultation (Klawiter 108). While these

-

³¹ In some type of post-mastectomy breast reconstruction surgery, the plastic surgeon detaches the Latissimus dorsi back muscles (which run around the shoulder blade) and reaffix them to the chest in order to anchor a saline or silicone implant, permanently constricting the chest wall and thus lung capacity and limiting range of motion. Progress?

practices have been recognized as problematic, breast prostheses are still the norm after any breast surgery, augmented by additional breast reconstruction surgery. I will discuss the implications of breast surgery later in the chapter.

Throughout most of the 20th century women were expected to bear the pain and trauma of breast cancer and treatment in silence and isolation. Cancer of the breast was something indecent, something crass. Any public acknowledgement of the disease insisted that despite these associations, the woman patient need not fear the loss of her husband, family, or social life. As a 1954 article published in *Good Housekeeping* called "After Breast Surgery" dictated, "[the breast patient] will emerge from the operating room [of a breast surgery] the same woman she was when she went in . . . no one outside the immediate family need know she had the operation—just as she does not know that many women whose names are household words have undergone the experience" (qtd in Klawiter 78). Also in 1954, Sears Roebuck marketed prosthesis in their lingerie section of the catalogue under the name "New Charmode Post-Operative Bra," a "compensation bra [which] can often be worn home from the hospital!" by breast cancer patients, conflating medical, scientific use with cosmetic value (Knopf-Newman 311). Such breast patients—"mastectomees"—were spoken of only obliquely in the public sphere; the evidence of their surgery was never to be revealed, disguised instead by the breast prosthesis. Women were taught to pass as two-breasted, to hide the visibility of their disease—often by other mastectomees, who volunteered for an organization founded in 1952 called Reach to Recovery. The goal for its patients was to "feel normal again" (Knopf-Newman 216). So, for example, in 1964, when Rachel Carson died of breast cancer the public culture of the disease was almost nonexistent. She told no one publicly

of her disease, fearing that chemical companies would be able to use that to paint her as bitter and accusatory, spiteful in her critique of the chemical industries³² (Steingraber *Living Downstream* 20). Ten years later, both Betty Ford and Happy Rockefeller publicly announced their status as breast cancer patients as well as their operations for mastectomies (King xiii). This contributed to the destignatization of breast cancer because of the public "coming out" nature of their actions, but many women still hid their diagnoses (Klawiter 92). When Susan Sontag wrote of cancer in *Illness as Metaphor* in 1978, the dominant representations of breast cancer constructed the disease as a "demonic pregnancy"; the fight was within one's own body, on the individual level; and causation—as well as failure to win the 'battle' against cancer—was placed somewhere in the realm of the patient's character traits and emotional resilience, putting "the onus of the disease on the patient" (Sontag 14; 17; 47). No wonder women did not want to publicly display their disease state.

Even in the late 1980s, when lesbian AIDS activist Jackie Winnow delivered a speech at the Conference for Lesbian Caregivers and the AIDS Epidemic, she lamented the silencing of women with breast cancer. Despite the public face of men with AIDS and the growing network of feminist rape crisis centers, battered women shelters, and reproductive health clinics, "ordinary flesh-and-blood women with breast cancer were still invisible to each other and invisible, as embodied speaking subjects, to the public" (Klawiter 167).

³² Rachel Carson experienced such *ad hominem* attacks anyway. Her lack of a husband and children, not to mention her being a scientist, were seen as deviant and suspicious by those who sought to debunk her theories.

I want to explore the program Reach to Recovery to demonstrate the institutionalization of silence, invisibility, and positivity, which conscripts breast cancer patients into an invisible behavioral regime. Reach for Recovery, begun by a woman with breast cancer in 1954, is modeled after Alcoholics Anonymous, and its purpose is to provide newly postoperative breast cancer patients with a "training" prosthesis, with physical therapy instructions, with dressing tips to disguise the scars and the prosthesis, all with exuberance and positive energy. This social and psychological support comes in the form of a successful, surviving, happy ex-breast cancer patient. The point is not to provide ongoing friendship or a link to a network of breast cancer survivors; the point is to demonstrate symbolically, through the ex-patient's attitude and physical appearance, that breast cancer is survivable and that it "need not alter either the mastectomee's selfperception or the way she was perceived by others" (Klawiter 119). The point is to reteach both physical fitness through the strengthening and range of motion exercises, but also to re-enroll the woman into full, fit womanhood. The volunteers must be (ostensibly) cancer-free, optimistic and upbeat at all times, able to present an attractive, heterofeminine appearance ("we insist that she wear a tight fitting gown so that both breasts show and her hair is all combed," wrote a 1970s-era proponent of the program Dr. William Markel), and be certified as psychologically fit by her doctor (qtd in Klawiter 119). If a recovering woman was able to see herself at all in this image, there is no doubt that it could have been helpful and even hopeful to see that breast cancer and its treatment was not a physical or social death sentence. However, for women whose lives differed from this script, such insistence upon positive attitude and prosthetic disguise does violence to their ways of being. I will quote Audre Lorde, Black Lesbian Feminist

Warrior Poet, who underwent mastectomy in the late 1970s, writing in *The Cancer Journals* of her experience with Reach for Recovery:

It is within this period of quasi-numbness and almost childlike susceptibility to ideas (I could cry at any time about almost anything outside of myself) that many patterns and networks are started for women after breast surgery that encourage us to deny the realities of our bodies which have just been driven home to us so graphically, and these old and stereotyped patterns of response pressure us to reject the adventure and exploration of our own experiences, difficult and painful as those experiences may be. . . . A kindly woman from Reach for Recovery came in to see me, with a very upbeat message and a little prepared packet containing a soft sleep-bra and a wad of lambswool pressed into a pale pink breast-shaped pad. . . . Her message was, you are just as good as you were before because you can look exactly the same. Lambswool now, then a good prosthesis as soon as possible, and nobody'll never know the difference. But what she said was, 'You'll never know the difference,' and she lost me right there because I knew sure as hell I'd know the difference. . . . I looked away thinking, 'I wonder if there are any black lesbian feminists in Reach for Recovery?' (Lorde 42)

Probably not. That is in part because the wider political economy of the breast cancer industry post-World War II necessitated the formation of a passive, feminine receptor of breast technologies, incorporated somewhere along the

patient/mastectomee/prosthesis-wearer continuum³³. Such rhetoric did not allow space for queer and feminist women, certainly, and within the early women's movement, there was not much space for black women either. Discursively, women were the victims in a war against breast cancer. This language authorized the development of and profiting from a host of detection and therapy technologies, many derived from military circumstances. Just like any disease and practically any social problem, "the function of cancer in a profit economy" is to become a specter against which citizens and business must mobilize to fight (Lorde 8). President Nixon used this rhetoric when he announced War on Cancer in 1971, citing an optimistic Promethean belief in the power of technological progress in order to stamp out/eradicate/cure cancer. His Cold War-era paranoid isolationism "sounded like a colonial war—with similarly vast appropriations of government money" (Sontag 66). Nixon was riding the crest of such "science-fiction ventures" as harnessing atomic power, jetting a man to the moon, and eliminating polio (Sontag 69; Proctor 265). The militaristic hyperbole matches that of the war on poverty, and then the war on drugs, with a similar limiting of the scope of possibility to address these issues: there was "only the great destination: the cure," as if cancer as only a single undifferentiated disease that needed a single cure, and rather than the reigning in of a polluting industrial economy in order to prevent cancers from ever occurring in the first place (Sontag 69). But "the wars against diseases are not just calls for more zeal, and more money to be spent on research"; they also actively promote some types of solutions while closing off the possibility for others (Sontag 99). Hence we can begin to understand

³³ Of course this process was never complete nor wholly successful, yet it had real effects on countless women with breast cancer.

the insistence on military visualization technologies, mass screening of populations, and treatments for breast cancer that are themselves carcinogenic. Solutions developed under a framework of war tend to continue the same social relations under which war and profit from war—and the racism and sexism that becomes necessitated—are possible³⁴. "The Master's Tools Will Never Dismantle the Master's House"; this is why there is a focus on a single, seemingly simple cure rather than complex, messy approaches to prevention³⁵ (Lorde *Sister Outsider* 110).

This is especially true because many of the chemicals used in warfare and adapted for industry are carcinogenic themselves, usually by route of hormone mimicking. It is ironic that many of the "hypermasculine" weapons of war and technological progress are biologically speaking estrogenic (Steingraber *Living Downstream* 109). DDT, for example, was originally put to use stopping typhus and malaria outbreaks among Allied troops during World War II, then adapted as an agricultural and "Third World development" tool. It was banned from the US in 1972, yet is still used in the Global

³⁴ Another good example of this is agricultural and turflawn pesticides, most of which are derived from synthetic formulations developed for chemical warfare. All we need are the trade names of pesticides in common use: Arsenal, Assault, Assert, Bicep, Bladex, Bullet, Chopper, Conquest, Contain, Dagger, Lasso, Marksman, Prowl, Rambo, Squadron, Stomp, and Storm are some familiar ones (Steingraber *Living Downstream* 160). Military rhetoric is replete. For a further study, see Rivenburgh, "Mow Jobs, Monocultures, and Marking Turf."

³⁵ To get an idea of the scale of the environmental impact on breast cancer, "suppose we assume for a moment that the most conservative estimate concerning the proportion of cancer deaths due to environmental causes is absolutely accurate. This estimate, put forth by those who dismiss environmental carcinogens as negligible, is 2 percent. Though others have placed this number far higher, let's assume for the sake of argument that this lowest value is absolutely correct. Two percent means that 10,940 people in the United States die each year from environmentally caused cancers. This is more than the number of women who die each year from hereditary breast cancer—an issue that has launched multi-million dollar research initiatives. This is more than the number of children and teenagers killed each year by firearms—an issue that is considered a matter of national shame. It is more than three times the number of nonsmokers estimated to die each year of lung cancer caused by exposure to secondhand smoke—a problem so serious it warranted sweeping changes in laws governing air quality in public spaces" (Steingraber "Social Production" 31)

South. In developing boys and adult men, DDE, the metabolite byproduct of DDT which remains in the body, is associated with undescended testicles, lowered sperm counts, and testicular cancer (Steingraber *Living Downstream* 110). Higher levels of DDE have been found in malignant breast lumps than those judged benign, suggesting a link to cancers of the breast (Yaldon 652).

Donna Haraway writes that all humans are cyborgs: "We have all been injured, profoundly. We require regeneration, not rebirth" (Simians 181). She is speaking mostly in the metaphysical realm of how our psyches are wounded by technobiopolitical capitalism. Yet I feel like a cyborg in a very material way as well. When I contemplate the burden which my body carries of chemicals which can mimic the hormones which makes me most animal, and the burden of toxins which can affix themselves to the DNA which makes me most human; when I remember that there are heavy metals floating around my bloodstream and accumulating in my liver and fatty tissue; when I remember that decades-old DDT is metabolized by my industrious cells into DDE, which takes up residence in my body and in my breast tissue; I feel cyborgian. Genetic "adducts" are molecules which can bind to a cell's chromosomes, altering and degrading the structure of DNA and producing a genetic mutation. These adducts can be seen as molecular tags—as the obscene graffiti of our industrial economy—mapped onto our DNA. Xenoestrogens are synthetic chemicals which have the ability to bind to hormone receptors within the endocrine systems of human bodies, thereby "mimicking" estrogens as I have previously written. That is, substances manufactured in a lab or factory can ingratiate themselves into our cells—and potentially none more so for those who work in the lab or factory. These are chemicals which disrupt our endocrine system and induce

breast, vaginal, and uterine tissue—and cancers—to divide. "Certain breast cancers, for example, are notorious for growing faster in the presence of estrogen, which is why prescribing antiestrogenic drugs is standard chemotherapeutic protocol" (Steingraber *Living Downstream* 110). Bodies "are living scrolls of sorts. What is written here—inside the fibers of our cells and chromosomes—is a record of our exposure to environmental contaminants. Like the rings of trees, our tissues are historical documents that can be read" (Steingraber *Living Downstream* 236). What we may read in our bodies is the political economy of toxic chemicals in the US and the failure of safeguard measures that would protect all people, yet would cost the chemicals, life sciences, and plastics industries their free pass on the unrestricted introduction of novel chemicals compounds to our environments.

There are some efforts to assess the presence of carcinogenic and endocrine-disrupting chemicals in our bodies. The Center for Disease Control has published the National Report on Human Exposures to Environmental Chemicals for a decade or so. In 2003, the second published report found 116 chemicals in the blood and urine of study subjects. The third report two years later found traces of 148 chemicals. New additions included PCBs, phthalate metabolites, the insecticide permethrin, and the organochlorine pesticides aldrin, endrin, and dieldrin. The fourth report, published in 2009, found 212 chemicals in the blood and urine of people (DHHS 7). This does not necessarily mean that over the last decade these chemicals have suddenly started showing up in our bodies; in fact, some of them have been banned for decades. Rather, with each new report the researchers are considering the effects of and testing for more chemicals. For example, in the fourth report, newly tested chemicals include: arsenic, bisphenol-A (found in plastics),

perchlorate (dry cleaning solvent), perfluorinated chemicals (nonstick/Teflon coating), volatile organic compounds (VOCs), and polybrominated diphenyl ethers (flame retardants) (DHHS 2). The presence of them all were found in the volunteer's bodies. In another study performed by the Environmental Working Group using the permission and blood samples from five environmental justice activists, all women of color from around the US, found high levels of more than 45 contaminants. What is incredible is how much these women can accomplish despite these toxic body burdens. Bodies can be read and understood in many different ways; only one of them is through the kind of advanced chemistry it takes to isolate the heavy metals and synthetic compounds in blood and urine, in order to produce a picture of individual chemical exposure. Right now under US law, toxins are considered 'innocent until proven guilty'; that is, until an absolute link to the illness and death of many people can be accurately mapped, the chemicals are permitted to be used widely and thus enter air, food, water and our bodies. Some continue to be used after such toxicology is demonstrated, merely at reduced levels of tolerance. It is not illegal to sell food tainted with carcinogenic chemicals, as long as it is at or below levels determined to be "safe." This post-exposure, incremental reduction in allowable tolerance levels is flawed. It "exposes people for months or years to levels of pesticides [on food, for example] that were later admitted to be unsafe" (Steingraber Living Downstream 164).

Some breast cancer organizations do not find this to be a problem. The Komen Foundation, a powerful national breast cancer advocacy and fund-raising group, publishes a list of risk factors for breast cancer as well as a list of factors which they claim have no effect on the development of breast cancer. "Plastics" falls under this list on the Komen website; any connection between plastics (a broad category including

phthalates³⁶ and bisphenol-A) and breast cancer risk is dismissed as an "e-mail hoax" (Komen "Factors"). More detail is given under the heading "Blood Organochlorine Levels,"—actual studies are cited—yet the risk of DDE and PCBs is written off. The text admits the existence of clusters of breast cancer, yet explains them through "differences in risk factors such as ages at menarche and menopause and number of children" (Komen "Factors). Similar stonewalling is found at Komen and also at the American Cancer Society and the National Cancer Institute in regard to increased rates of breast cancer. They claim that the skyrocketing rates "can be accounted for by the spread of screening and the introduction of technology that enables smaller cancers to be identified," or perhaps an increase in personal lifestyle risk behaviors (King xvii).

If such mainstream, influential organizations reject environmental explanations for the increased risk of breast cancer, to what do they point as causes of breast cancer? Mainly, diet and reproductive history, including age at first childbirth and first menarche. "Delayed childbirth" is considered a risk factor—meaning after age 20. These are constructed as individual lifestyle choices over which women have complete control, yet are simultaneously the "'natural' course of the mature female body" (Yaldon 665). Through childbirth and breastfeeding, "traditional codes of femininity are reconfirmed as a defense against breast cancer" (Yaldon 664).

Yet what is buried by this logic is that all of these factors are structurally shaped (Brown 50). "Many economic, cultural, and other social factors, including corporate

³⁶ Phthalates, which are found in many plastics (such as kid's toys, cookware, computers, shampoo, furniture, soundary, and medical IV tubing) for its durability and flexibility is also found in makey

furniture, soup cans, and medical IV tubing), for its durability and flexibility, is also found in makeup, perfume, and personal care products—many of these products women are more likely to use (Evans 9).

Perhaps following certain gender norms is a risk factor for breast cancer.

efforts to promote smoking and other clearly unhealthful habits, affect what people eat or drink, how much time and energy they can devote to healthful exercise," how they can access food or healthcare, or how they build families (Hubbard and Ward 79). In actuality, there is very little which women can do to avoid breast cancer dependably because of a lack of research³⁷ focused on prevention, other than having more babies earlier and breast³⁸feeding them (Klawiter 3).

Instead of providing real-world efforts at prevention on both the personal and political levels, women and their breasts are imagined as "risky subjects" in the war on cancer. Women are conscripted into high-risk categories and mapped onto ongoing disease continuums through constructing risk as broadly as possible for the purposes of expanding markets. By moving beyond the actual presence of the disease and "into the prehistory and posthistory of diagnosis and treatment—that is, into the terrain of pure risk," institutions with stakes in the breast cancer disease continuum seek to make all women worried about their breast cancer risk (Klawiter 289). Thus, women are diagnosed as 'at risk' as if this is a disease state in and of itself³⁹ (Fosket "Constructing 294). Biopolitical regimes function simultaneously through the medical management of individual bodies and the public administration of the body politic (Klawiter xxiv).

³⁷ It does not have to be this way. "Despite decades of research and billions of dollars spent on the 'war against cancer,' there remain few options for primary breast cancer prevention. Knowledge about what causes breast cancer is scientifically and politically problematic to ascertain" (Fosket "Constructing" 292).

³⁸ Breasts themselves are treated with ambivalence. They signify "sexual pleasure and desire, as well as motherhood and nurturing," while simultaneously they have "come to signify danger and risk: risk of disease, risk of defeminization, risk of deformity, risk of death" (Klawiter xx). Breasts are seen as "time bombs waiting to go off"; on cafepress.com you can buy an apron (!) which is emblazoned with two cartoony, lit bombs over the chest (Proctor 242; www.cafepress.com/+brca2_time_bombs_bbq_apron,274011182).

³⁹ This can have wide-ranging consequences, including possible discrimination at work or with insurance as well as an "increased sense of unease and distrust with one's own body." (Fosket "Constructing" 294).

Because bodies are not "transhistorical objects but a culturally and politically invested product of specific regimes of practices," when there are "changes in the practices of cancer education, early detection, diagnosis, disclosure, treatment, and rehabilitation," bodies also change (Klawiter 22; Klawiter xxvii). Thus, when personal responsibility and lifestyle choice are invoked in the discourse of breast cancer risk, cultural work is performed that has particular gendered meanings about women's roles in society. An example of this is a recent flurry of specially targeted concern about an increased risk of breast cancer in lesbian women.

According to this script, it is because lesbian women do not have babies, drink and smoke more, and are fatter than straight women that they may have more breast cancer. "Lesbianism becomes synonymous with nulliparous [no pregnancies], and, by implication, heterosexuality [becomes synonymous] with [biological] reproduction. This collapse serves an important function—it allows lesbianism itself to become a risk factor rather than reproduction" (Yaldon 670). When ways of being in the world are made over in the language of risk, those who "practice such a lifestyle"—said to involve fewer children, higher alcohol consumption, fewer gynecological exams, fewer breast cancer screenings—and higher body mass because lesbians are able to "resist hegemonic notions of beauty" in ways that straight women cannot and are thus fatter—the identity and person herself becomes a culprit (Yaldon 670; Yaldon 677). Increasingly, these increased risk factors are cited over and over again; the Komen website has a special section on lesbian women on their Who Gets Breast Cancer page, though they at least write that "this is not because of their sexual orientation" (Komen "Who Gets"). This crops up again and again although it is based mostly on conjecture; no studies have been done

specifically on lesbians and breast cancer risk (Yaldon 670). A parallel problem, of course, of conducting such a study is defining who and what exactly constitutes this "high-risk" category. Is it a woman who has been a lifelong, active engager in homosexual sex? What about a woman in her forties, married to a man, with children, who has recently come out? Women's experiences of their sexuality, and the pathways by which they define for themselves their sexual identity, are extremely diverse.

By expanding the disease state to include all its pre- and post-cancer risk factors and by enrolling high-risk women into these roles, it becomes clear that women do not simply get breast cancer; rather, they exist on a "more fluid, fuzzily bounded, and ambiguous breast cancer continuum" (Klawiter 86). When asymptomatic populations are asked to receive screening and treatment based solely on a number of risky characteristics, suddenly the field of those interpellated into the technobiomedical breast cancer regime expands to include all adult women. Biomedicalization operates powerfully through the assignation of a risky, pre-disease state.

Such a widening of the lens of risky subject occurs in breast cancer risk assessment through what is known in the industry as the Gail Model. The Gail Model is a complicated formula for tabulating risk over a population, expressed as a percentage—the percent chance that a woman will get breast cancer over the next five years. It is not well-tested and is a very blunt tool for verifying risk, because risk factors for breast cancer are still not well understood—recall that more than half of breast cancer patients have no risk factors in their medical or personal history—and because it was developed as a population-level model which, like the BMI, loses meaning when applied to the individual. However, "[the Gail Model] has become the assumed standard—shaping

practices, identities, and definitions—through its organizational embeddedness in the multiple practices and public images" of reacting to the potential reality of breast cancer (Fosket "Constructing" 292). Like the Body Mass Index, the Breast Cancer Risk Assessment number harnesses complex, fleshy bodies into dangerous categories through the assignation of "eminently mobile, decontextualized, and factlike" numbers. In the Gail Model, a Breast Cancer Risk Assessment number of 1.7 (percent) is the magic cutoff between "high risk" and "normal risk." However, 1.7 obviously means that a woman has a 98.3% chance of not developing breast cancer in the next 5 years. This seems like pretty good odds; "ironically, it would seem that most women—of any risk category—would be enormously relieved to discover that their risk for developing breast cancer in the next 5 years was less than 2%" (Press). Yet this news is treated with grave seriousness by some doctors and creates the desire, in some, for drastic prophylactic defense. High-risk women so constructed become the bearers of a pre-disease state "designed for purposes of investigation and with tabulation and surveillance by medical and other bureaucracies" (Sontag 116).

Investment into the development of such a pre-disease state and imbuing the high-risk status with such concern as it is mapped on individual women' bodies would not be necessary without a readily proposed medicalized 'solution.' Chemoprevention is the term coined for the prophylactic taking of estrogen inhibitor drugs. Tamoxifen (brand name Nolvadex) was approved in 1978 specifically for metastatic breast cancer patients. Tamoxifen's chemical structure is similar to estrogen and can bind with estrogen receptors in the breast, thus blocking the body's natural estrogen from affecting breast tissue (Hubbad and Ward 89). If an estrogen-receptive tumor (meaning that the cells of

the tumor are affected by the presence or absence of estrogen) is present, tamoxifen can bind to the tumor cells to slow the rate of growth (Simpson 139). Thus, it is termed an "anti-estrogenic" drug (Simpson 139). In the 1990s, the makers of tamoxifen, Zeneca (now called AstraZeneca), partnered with the National Cancer Institute in the Breast Cancer Prevention Trial to test the prophylactic use of tamoxifen. Eight thousand women—91% of them white, which means that the results of this trial may be particularly ill-suited to assessing risk in other racial groups—took tamoxifen preventatively over a period of seven years while a control group did not (Hubbard and Ward 89, Fosket "Constructing" 307). The study participants were women as young as 35 who had the high risk assessment number of 1.7. This expansive categorization was protested by many in the medical community. "'We believe the definition of 'high-risk' women used in this protocol is appallingly broad,' asserted 26 leading researchers in a November 1991 letter to the Food and Drug Administration (FDA) about the tamoxifen trial. 'While a small trial of extremely high-risk women may be defensible, a large trial that includes numerous healthy women is premature and unethical.' The letter urged the agency to ask investigators 'to more clearly define and justify the level of risk that makes a woman eligible" (Allina and Pearson). The trial continued anyway. In 1998, the trial was halted 14 months early for its supposed unmitigated success: only 124 women developed breast cancer in the tamoxifen group while 244 women did in the placebo group (Fosket "Constructing" 293). Thus, the FDA approved tamoxifen for preventative use based on the observation of fewer cases of breast cancer.

Yet while tamoxifen is anti-estrogenic in the breast, it acts like estrogen in many other places in the body, promoting tissue growth (Simpson 139). This is what the study

researchers failed to emphasize: that because of this, "women taking tamoxifen were also, however, approximately two times as likely to develop endometrial cancer (cancer of the lining of the uterus), three times as likely to develop pulmonary embolisms (blood clots in the lungs), 50% more likely to suffer a stroke, and equally likely to die (but less likely to die from breast cancer)." (Klawiter 263). Critics of the study's mechanisms and outcome have called this a "disease substitution" (Fosket "Constructing" 293).

Ideologically, the taking of drugs that are themselves carcinogenic by (currently) healthy women who have been made over into the bearers of a pre-disease state is a thoroughly technologized, biomedicalized way of dealing with the potential of breast cancer. The Breast Cancer Prevention Trial could have aimed at eliminating carcinogens from women's homes or workplaces, or at providing diets free of toxins in food. But there is no money to be made in those sorts of interventions. "The profit potential in a patentable pill to prevent breast cancer [drew] industry interest, whereas research into the environmental causes of breast cancer ... could only tell women what to avoid, not what to buy" (Allina and Pearson). Instead the trial centered on recruiting women into highrisk categories through the application of a numerical formula, then dosing them with toxic chemicals to try to interrupt the effects of estrogens and xenoestrogens; finally, despite additional rates of other cancers, using the study to more firmly affix the category of high-risk upon women's bodies so that chemoprevention begins to sound like a good idea. Through this process women become potential tamoxifen consumers. Another factor to consider is that taking tamoxifen is never a permanent solution; it must be introduced to each woman at a certain age, fostering an ongoing market for the drug. Tamoxifen "in a sense, basically [offers] only stop-gap measures or temporary solutions,

in that they can only help individual women in the short term. The taking of drugs or other such options, without making any long-term socio-environmental changes, will need to be repeated for each generation of women and this seems to miss the alternative environmental approach that can concurrently be taken to reducing breast cancer risk" (Simpson 148).

It is perhaps because of these concerns that women have not fallen over themselves to adopt the practice of taking tamoxifen prophylactically. Despite this lukewarm interest, trials of raloxifene (Evista—an osteoporosis drug owned by Eli Lilly) and anastrozole (Arimidex—owned by AstraZeneca) for the purposes of breast cancer prevention are underway. Many of these studies only assess these new drugs compared with tamoxifen, without a placebo control group (Klawiter 267).

AstraZeneca has pushed ahead with promoting tamoxifen, winning direct-to-consumer marketing approval under recently-relaxed direct marketing rules from the FDA. Print ads in mainstream publications like *Parade* magazine featured a thin white woman in a black lacy bra, her back turned to the viewer, cut off at the neck⁴⁰. The text on the ad reads:

If you care about breast cancer, care more about being a 1.7 than a 36B.

Know your breast cancer risk assessment number. Know that

NOLVADEX® (tamoxifen citrate) could reduce your chances of getting

breast cancer if you are at high risk. . . . Knowing your number gives you

⁴⁰ The ad may be viewed online at: http://www.acponline.org/clinical_information/journals_publications/ecp/marapr00/womensfg1.htm.

power, and knowing about Nolvadex should give you hope. (qtd in Fosket "Constructing" 304)

In a few sentences, AstraZeneca attempts the cooptation of the rhetoric of the women's health movement using the framework of knowledge as power and self-knowledge as empowerment. AstraZeneca also tries to capitalize on the recent women's health groups' interest in prevention, though this comes in the form of a pill rather than political action. The ad also seeks the substantiation of the ethereal number 1.7 by aligning it with the breast size measurement, something that stands directly for real weight, flesh, and heft which women feel every day and to which many ascribe great importance. In particular, it is aligned with a normative, ideal breast size. Thus, "this 'risk' number appears to also measure something tangible and material, as opposed to a handful of factors that have been stabilized into a risk assessment model" (Foster 305). The number is seen as internal to each individual woman, a precise measurement along the continuum of risk upon which women can locate herself, "rather than a cut-off point created by the statistical needs of power calculations in a randomized clinical trial" (Press). Women are mandated to submit to a risk assessment because they "owe it" to themselves and their families. "The burden for knowing such information is placed on women, with the implication that this can somehow assist them in not developing breast cancer" (Foster 304). This demand "sets up a logical train of commands: Worry about breast cancer. Relate that worry to yourself. Do something" (Press). The 'doing something' comes down to a pharmaceutical solution to prevention, rather than elimination of the root causes of breast cancer. Prevention is made over into something that individuals purchase for themselves—and

they are at fault if they do not—rather than a society-wide change to rules about how industry functions.

Under the high-risk regime, women's breasts, bodies, and lives are catalogued and monitored for the purpose of enlisting them into the patient/consumer role. Yet this complicated field relies not only on the high-risk label, but many other interwoven and mutually reinforcing discourses and practices: of dangerous, interpellating individualization through genetics research, of the promotion of medicalized visibility and militarized surveillance of women's bodies, and of the insistence on cosmetic reconstruction as part of a healing prescription.

Hereditary breast cancers, due to mutated genes known as BRCA1 and BRCA2, account for between five and ten percent of breast cancer incidence, but to the average eye the amount of press, research, and money devoted to genetic causes of breast cancer would suggest that the majority of this disease is hereditary (Brown 51). It is true that, biologically speaking, breast cancer is a genetic disease. However what this means is not that our mothers give us breast cancer; rather, it means that substances cause genetic damage to cells which cause them to replicate inappropriately. BRCA1 and BRCA2 are genes which are implicated in very high incidence of breast cancer in women, somewhere between 36 and 85 percent depending on the study (Klawiter 262); there are probably also genetic factors which contribute to a body's ability to metabolize toxins—"in a world free of aromatic amines, for example, being born a slow acetylator would be a trivial issue, not a matter of grave consequence—yet a primary focus on genetics at the expense of other factors "focuses us on the one piece of the puzzle we can do absolutely nothing about" (Steingraber Living Downstream 260; Hubbard and Ward 91).

But for Myriad Genetic Laboratories, who first isolated BRCA1 and BRCA2 and developed and patented the test for them, "genetic screening further expanded the regime of breast cancer and created a new category of risky subjects" including not only the woman being tested but also her relatives (Klawiter 262). These expensive tests—costing over \$4,000—are now given to women for whom cancer appears to "run in the family," for example if a few relatives have had breast cancer, opening the door to genetic discrimination by employers and insurance companies. Myriad Genetic Laboratories has begun direct-to-consumer marketing, and also held the patent on the BRCA1 and BRCA2 genes themselves—although seven patents on these genes and associated mutations were invalidated by the United States District Court in March of 2010, with potential broad applications for the biotech industry, which holds patents for around 20 percent of the human genome. The judge giving the ruling is quoted as saying, "Natural things aren't patentable; inventions are" ("US Judge").

Rhetorically, genetic research is talked about in terms of finding a "magic bullet" which will allow us to find a cure; if we can only find the "gene for" cancer, we can then figure out what to do about it. But this merely serves to "channel research questions and public attention toward individual pathology or deviation from a biological norm and away from more difficult questions related to social conditions, environmental factors, and other 'external' variables" (King 38). Genetic research is not prevention; in fact, genes are the one thing we can truly do nothing about.

Another tactic by which women are placed along the breast cancer continuum is mammography. Getting your yearly mammograms is seen as a healthy, proactive, even preventative behavior within mainstream discourse. Bringing women into the sphere of

risk-based surveillance medicine collapses the distinction between healthy and ill "fundamentally remap[ping] the spaces of illness" (Klawiter 27). Many women throughout the late 1980s and 1990s were admonished that "early detection is your best prevention!"—which is both a non sequitur⁴¹—detecting a cancer negates the possibility of preventing it—and profoundly disappointing refrain: it means the best that society can do for women is to let us get cancer, then try to treat it quickly; in fact, it means that prevention has obviously failed (Brown 45). Disguised in the language of "prevention consciousness," the push for mammograms conflates early detection with prevention, all the while creating the assumption that if the disease is found at the early stage, it can be more likely cured (Whatley 200). But "at best, early detection may make cancer less fatal, allowing us, as the epidemiologist Robert Millikan puts it, 'to live in a toxic soup without breasts or prostates" (Steingraber Living Downstream 263). However, it may not even make cancer less fatal; mammography produces a picture of the breast using radioactive x-rays⁴², aimed at an organ that is one of the most highly susceptible to carcinogenic radiation (Colomeda 131). Recall that ionizing radiation is the only absolutely known cause of breast cancer; yet with "problematic irony," women are asked to expose themselves to it once a year in order to fulfill their roles as good patients (Fosket "Problematizing" 32). When nationwide screening programs were forming in the 1970s,

⁴¹ The slogan is now "early detection is your best protection"—a little less of logical fallacy, perhaps, but still depressing. This was due to protests by breast cancer activist groups, who called for the more accurate farming of mammography as early-detection, rather than prevention, technology (Brown 286).

⁴² The technology of radiography was developed to make images of density variations through sections of the body "composed of bone or relatively hard tissue. It is not suited to imaging of the breast, a region composed of fluid, soft tissue. Rather than adapt the technology to its object, radiologists more often attempted to adapt the breast to the technique," through squishing it, meanwhile characterizing the breast as an elusive object which is too soft, too irregular, too changeable—too feminine—to image properly (Cartwright 159).

Dr. Irwin Bross, director of biostatistics at Buffalo's Roswell Park Memorial Institute, predicted publicly that the joint American Cancer Society-National Cancer Institute breast cancer screening project would result in "the worst iatrogenic [physician-induced] epidemic of breast cancer in history" (Proctor 261). While dosages of radiation in machines were lowered and standardized in 1996, hereby lessening the exposure to radiation, there is another problem: "according to even the most conservative estimates, mammograms⁴³ (and the radiologists who interpret them) fail to diagnose breast cancers large enough to be visualized by this technology at least 15% of the time" (Colomeda 131; Klawiter 347). False positives are another burden which women have to bear, along with unnecessary biopsies. And it is not just that women will now be forced to deal with the psychological anxiety of uncertainty, though that is no small matter; additionally, "for every woman recalled for additional testing who received a positive breast cancer diagnosis, nine or ten women were recalled for follow-up diagnostic procedures" that led not to a diagnosis but an ambiguous placement along the breast cancer continuum (Klawiter 101). There is some debate as to whether early detection actually improves survival odds as well; rather early detection does not alter the course of the disease; instead it may simply "extend the amount of time in which women bear knowledge of their condition" (Whatley 202; Ehrenreich 52; King 38). This understanding is reflected in the federal mammogram guideline changes of November 2009, which stated that women in their 40s should *not* routinely have annual mammograms and after 50, women should have mammograms every two years instead of annually, based on an analysis

 $^{^{43}}$ X-ray technicians, who are often women, are exposed to incidental radiation every day.

showing that biennial screenings could provide 80% of the benefits of annual screening while cutting the risks associated with annual screening almost in half (Kolata "Panel"), which caused an uproar.

All of this ambiguity has not stopped the burgeoning installation of mammogram machines across the country. This is a chicken-and-egg scenario in which the promotion of mammography bolsters the purchase of these expensive machines, and vice versa. In 1981 there were 134 mammography machines installed across the United States. By 1990, nearly 10,000 new machines had been installed—concentrated on the coasts and major cities—even though only 1,675-7,892 machines running at capacity are necessary to serve the entire population of eligible women (depending on how eligibility is assessed) (Klawiter 100). This is part of the possessive investment in mammography, particularly by companies GE and DuPont, who in 2004 combined to sell over \$100 million in mammography machines (GE) and the film used in them (DuPont) (McCoid 353). GE and DuPont are—not incidentally—rivals in greatest responsibility for some of the worst Superfund toxic waste sites in the US, sources of some of the hazardous chemical unknowns which contribute to overall environmental toxicity.

Yet, instead of being seen as part of the corporatization of medicine, mammography is pushed as the behavior of good citizens, constructed as a moral obligation to family and self and a civic duty to country (Klawiter 132). "Individuals [are] encouraged, rewarded, and penalized for adopting, or failing to adopt, strategies for biological self-betterment by networks of government that sought to reduce health costs by educating the public against bodily neglect or abuse" (King 49). However, it must be immediately noted that this pressure is delineated according to ability to pay and

insurance status. For women who fall outside of the medical system—those with the least access to medical care—the management is less rigorous, simply because they are not paying customers. Biomedical regimes do not penetrate equally everywhere, and everyone's experience of screening is not the same. This is true of the entire medical system, with profound material effects on the health of medically marginalized people, who are significantly more likely to be diagnosed with and die from preventable cancers; be diagnosed with late-stage disease for cancers detectable through screening in the early stage; receive either no treatment or treatment that does not meet currently accepted standards of care; die of cancers that are generally curable; and suffer from cancer without the benefit of pain control and other palliative care" (Krieger 5). In this system built on structural inequality, mammographic imaging is a class and cultural privilege (Cartwright 146). This became a mainstream issue when, in the 1990s, mainstream breast cancer campaigns (cancer charities, corporate philanthropies, and also politicians) became newly committed to raising awareness of the need for mammograms for medically marginalized low-income women and women of color, and even provide funding for screening (Klawiter 132). The Komen Foundation was a leader in making this issue a moral imperative (Klawiter 139). Communities of color were targets of expansion in breast cancer screening programs. To do this, breast cancer screening discourse appearing in PSAs, clinics, community newspapers and bulletins—were racially recoded "in an effort to counteract decades of campaigning that privileged white women" (Klawiter 133). However they are more hesitant to fund the treatment needed if breast cancer was found, often leaving women in the lurch who came to be screened and were found to have breast cancer, yet were unable to afford treatment. This results in a

paradoxical situation in which "uninsured women with breast cancer have more reliable access to screening but are frequently left with no means to receive treatment after diagnosis" (King 118). In the words of cancer activist Jackie Winnow, "government and corporate researchers not only have not found a cure for cancer, but they continue to allow its spread while remaining apparently unwilling to offer adequate services to people who have cancer" (74). Obviously, "mammography screening is valuable only as a part of *good* cancer care and treatment services available to *all* women," which is not the case today (Whatley 217). Today, African-American women are more likely to die of breast cancer than white women because black women with cancer often face structural barriers to accessing treatment because of poverty, as well as institutional racism within the medical system (McCoid 355). Thus, it is important to note that "the stratified history of (bio)medicalization maps onto stratified histories of gender, race, class, and sexuality" (Klawiter 291). Biopolitics is not innocent.

Rather than focus on these structural questions, which would be a threat to the status quo, breast cancer prevention and screening discourse constructs bodies as immanently and immediately visible, observable, and detectable for the purposes of good health. Such a focus on surveillance comes partly through mammography's ties to US militarization. Mammographic visibility, by which an opaque body is *known* (Sontag 12), is imaging at the cellular level, where it is easy to forget that the image being examined

⁴⁴ Such comprehensive measures for change find less widespread support than the rallying cry of "mammogram awareness": "when support for the fight against breast cancer takes the form of providing Medicaid coverage for the treatment of low-income women diagnosed with breast and cervical cancer, or providing coverage for the routine patient care costs of Medicare beneficiaries who are participating in clinical trials, or enacting a comprehensive and enforceable Patients' Bill of Rights, or passing a law to prohibit public health insurance and employment discrimination based on genetic information," many are less thrilled to support these solutions (King 78).

comes from a moving, living, desiring, fleshy, opinionated person. This mirrors the kind of fetishization generated by technologies such as smart bombs and unmanned spy aircraft. So how did the military get involved with mammograms? While it can be stated that in a militarized society most technologies begin or end in the military (Cartwright 162), the recent history of entanglement between breast cancer screening and the US Department of Defense (DOD) suggests much about the intent and purpose of mammography. In 1992, the National Breast Cancer Coalition pressured Congress to increase the breast cancer research budget from \$155 million to \$400 million the next year (King xvi). Because of a Cold War-era budgetary firewall which provided for unlimited defense spending—designed to prevent 'poaching' of military money to social programs—and a domestic spending cap, the only way to apportion this huge budgetary increase was to route the vast majority of it through the DOD (a small sum went to the National Cancer Institute). The DOD was reluctant to take it. They had never conducted any medical research, and did not want to expand in this direction. Some breast cancer activists were concerned as well that the US Army, "an institution with a demonstrated lack of interest in women's rights," were being given money to research a women-killing disease (Cartwright 144). Yet the DOD took the money, spending the entire sum on optical detection devices. "It outfitted the army, navy, and air force with stereotaxic mammography machines (computer-driven locational devises that zero in on the tiniest lump with great precision); it purchased new mammography equipment for US bases at Pearl Harbor and Iceland; and it initiated a study of digital mammography and other experimental diagnostic methods" (Cartwright 143). The DOD had been charged with the mission of researching the diseases of the breast, and the decision was made to invest "in

body imaging and locational devices, those techniques that emphasize visuality and the fetishization of the breast . . . this conflation of national defense and defense against diseases is more than a little disturbing." (Cartwright 144). The War on Cancer persists, and the DOD continues to be one of the main recipients of federal research monies⁴⁵. In 'prevention,' militant, vigilant screening procedures dominate the discursive field. The question now is how to reconfigure these technologies, because they have "been invested with the power to transform the body physically," so that they can be used in ways that do not harm women (Cartwright 170).

Treatment also constructs precise pathways for the healing and "cure" of breast cancer. Breast reconstruction—or in the "very least," breast prosthesis—is discursively imagined as a legitimate and *important* part of a healing regimen. This distracts from the reality that there is no cure for breast cancer and attempts to position the post-mastectomy woman within a stereotyped female role. In advertisements and in the hospitals which cater to breast cancer patients, the restoration of a symmetrical chest after the mastectomy is assumed to be that a part of the mental, emotional, and physical healing process—a mind and body reconstruction. And it is true; "the torso is a constant reminder of the relationship of the body to self-image, gender identity and sexual expression, and is always also a reminder of the possibility of recurrence and/or metastasis," so of course

⁴⁵ Breast cancer is now one of the most highly funded diseases in terms of research dollars per incidence and mortality. This angers some, particularly anti-women, anti-feminist men's groups such as the National Prostate Cancer Coalition, American Prostate Society, Prostate Cancer Action Network, and US Too!. Slogans abound, figuring these men with prostate cancer as the victims of a women-controlled medical industry and a systematic ignorance of the particular difficulties of men. Slogans such as "Save the Males!" or "Men Get Prostate Cancer, Women Don't—And if they did everyone would know about it" abound (King 120-121).

many women look upon the new landscape of their chest in this way (Manderson and Stirling 76).

Within the biopolitical world of breast cancer, the answer to this problem is figured as breast reconstruction, or at a minimum prosthesis. Discursively, reconstruction is seen as the surest, most permanent way of restoring bodily and mental harmony, so much so that the surgeon often simply asks whether a woman wants reconstruction immediately during the same surgery as the mastectomy, or whether she wants to wait for a bit. Rebuilding the breast mound and rebuilding confidence are one in the same. This allows prosthesis to be juxtaposed with reconstruction, positioned 'radically' within mainstream breast cancer discourse, as a non-surgical, more-'feminist' option for regaining symmetricality. This is done by pointing out that, for example, a reconstructed breast hardly ever restores physical sensation to the area, or that the technology and techniques are the same as for breast enlargement, a misogynistic surgery⁴⁶. The triumph of the prosthesis is in the refusal or silencing of the possibility of emerging into public flat-chested or one-breasted. Indeed, the proper fitting of an artificial breast so that evidence of the disease is disguised from the public is billed as the fundamental cure, rather than an actual eradication of the disease⁴⁷. Audre Lorde writes: "after a mastectomy, for many women including myself, there is a feeling of wanting to go back, of not wanting to persevere through this experience to whatever enlightenment might be at the core of it. And it is this feeling, this nostalgia, which is encouraged by most of the

-

⁴⁶ The blog www.breastfree.org is a good example of this.

⁴⁷ The mastectomy prostheses websites, known as "mastectomy boutiques" (Knopf-Newman 309) with brand names like "Still You" or "Nearly Me," have sections for sleeping prosthetics, lovemaking prosthetics, and other categories of "leisure."

post-surgical counseling for women with breast cancer. This regressive tie to the past is emphasized by the concentration upon breast cancer as a cosmetic problem" (Lorde 56). Yet for Lorde, because of her position outside of many cultural assumptions about womanhood and femininity, she refused this. Gazing at herself in the mirror with a prosthesis in, it is "perched on my chest askew, awkwardly inert and lifeless, and having nothing to do with any me I could possibly conceive of. Besides, it was the wrong color, and looked grotesquely pale through the cloth of my bra" (Lorde 44). The assumption of whiteness, heterosexuality, beauty, and femininity means that the continuation of normality is "restricted to superficial and disempowering stereotypes" (Spence 175).

Normative positionality is summed up in this advertising copy from Anita, a mastectomy prosthetic company: "unlike the loss of the limb, your breast operation need not be noticeable to outsiders. Buy yourself bras, swimwear, dresses and blouses in the same pretty, feminine colors and materials . . . remember, there is no need to look dowdy" (qtd in Spence 174). The solution to what is a devastating, life-threatening illness is the consumption and successful display of a "prosthetic pretense" (Lorde 56).

Mastectomy is looked upon as a cosmetic and appearance-laden occurrence, excluding other considerations in a "constellation of factors" which may include death (Lorde 58).

Indeed, this discourse denies both the presence of the disease and the reality of the woman's new body, focusing on the commercial enterprise which sells a "whole range of possibilities for the resurrection of the feminine body and thus apparently of the woman

⁴⁸ At mastectomy boutiques, it is difficult to find prosthetics that match the pigmentation of black women's skin—or indeed, in any shade other than "nude," which means pink. The only one I could find which came in more than the default color of whiteness was a color called "tawny," though there was no indication of what that actually means color-wise.

herself" (Spence 177). An insistence on prosthesis limits possibilities for self-definition and reclamation of women's bodies, not to mention a personally authentic grappling with a potentially fatal disease.

There is nothing inherently wrong with the desire for a prosthetic, although they can cause back and neck pain because their full weight, often 3-4 pounds, must be carried on the shoulder (they are not attached to the chest). In addition, the bras that must be worn with them are by necessity of underwire construction with a tight underband, which often rubs on chemo-sore ribs (Spence 178). The solutions to these problems are technical, such as extra padded shoulder straps, and make it the woman's job to "manage" the problems generated by her misshapen body" (Spence 179). It also is worth pointing out that breast prosthetics do not serve a function, unlike a prosthetic arm or leg; "false breasts are designed for appearance only, as if the only real function of a women's breasts were to appear in a certain shape and size and symmetry to onlookers, or to yield to external pressure" (Lorde 65).

There are many complex and complicated reasons why a woman might choose to wear a prosthetic. In the end, however, the discourse necessitating a prosthetic can "undermine the individual woman's struggle to deal with the consequences of her illness, to incorporate the idea of death into her life and to reconstruct herself in her own image" and her ability to decide for herself what is best for her (Spence 178).

This discourse is so complete that "refusing to wear a prosthetic . . . is to make a statement about sexual politics and women's health in every human encounter," as if acquiescing to the expectation of a prosthetic is not also doing just that (Spence 183). In this biopolitical climate, such visibility both makes for intense vulnerability yet also has

profound revolutionary potential (Lorde 20). Everyday asymmetricality and bald heads are the bodily paraphernalia of a less mediated state of cancer, chemo, and mastectomy. Marien Klawiter, author of *The Biopolitics of Breast Cancer*, writes in her introduction about what inspired her to write the book, of seeing a bare-chested, single-breasted woman walking fearlessly down the street during a Gay Pride parade in San Francisco in 1994:

"what registered for me, in the short space of a glance, was the image of a sexy, leather-clad woman unabashedly displaying her one-breastedness, visually broadcasting her encounter with what was supposed to be a shameful, mutilating, desexualizing, and deadly disease . . .[I was] riveted by the vision of one large breast next to a smooth, flat surface " (Klawiter xviii).

The geographical and political circumstances under which this woman is able to walk about the world in this way are very particular and very unique. However, we cannot doubt the potential of visible (by which I mean apparent rather than necessarily naked) single-breastedness for disrupting assumptions about what women are supposed to look like. Because "knowledge, authority, and domination are exerted through a visual ordering of bodies," interrupting this neat ordering can destroy the tight control circumscribed on women's bodies (Cartwright 170). An approach to cancer that strives to make the effects of the cancer and its treatment visible explodes notions of the cosmetic cure and the out-of-sight-out-of-mind mentality that governs most prosthetics discourse. In addition, it lays bare that it is not the outline or the symmetricality or even the yielding to pressure that most women mourn; it is the weight, the heft, "the feeling and the fact" of

the breast (Lorde 66). It also makes visible the scarring⁴⁹ nature of the disease and its treatment. Yet in today's culture to live one-breasted is to "live, breathe, attempt to love neither as fully negated nor as fully acknowledged as being" (Butler *Undoing* 58). Refusing prosthesis means mutual visibility for women with breast cancer, creating bodily and discursive space for difference to be affirmed.

There is another way for women with breast cancer to discover each other, and that is to adopt the mantle of pink⁵⁰, take on the identity of the survivor⁵¹, and join the mainstream breast cancer awareness movement with its focus on early detection and

⁴⁹ "For me, my scars are an honorable reminder that I may be a casualty in the cosmic war against radiation, animal fat, air pollution, McDonald's hamburgers and Red Dye No. 2, but the fight is still going on, and I am still a part of it. . . . I refuse to hide my body simply because it might make a woman-phobic world more comfortable" (Lorde 61)

⁵⁰ The Libby Ross Foundation, based out of New York City, distributes "Pink Ribbon Kits" to newly-diagnosed women containing "comfort items and self-help tools that women with cancer find helpful during treatment" (Libby). Included are "a hot-pink satin pillowcase, inexpensive jewelry, candies, a pink-striped journal, and a small box of crayons, which were, [the author] was told, for expressing her thoughts" (Kedrowski 198). Apparently, "in some version of the prevailing gender ideology, femininity is by its nature . . . a childlike dependency . . . certainly men diagnosed with prostate cancer do not receive gifts of Matchbox cars" (198).

⁵¹ There is politics in naming, and identity formation to be had. Thus what women with beast cancer *call* themselves is important, and strategic. Since the early 1990s the mainstream breast cancer movement has posited the term *survivor* as a display of strength, agency and perseverance, in opposition to the previously common cancer victim. It linguistically attaches itself to survivors of sexual abuse and domestic violence. For this and other reasons some women find the term empowering. This alliance served to create a community of survivors, which tended to subsume differences in age, race, and class (King 41). There is also a way in which the "triumphalism of survivorhood" buries the dead and dying, literally and figuratively; that those who are still alive are better, braver, stronger people than those who have given up (King 104). Steingraber feels "the term divides us in half and at the same time denies the uncertainty of our prognosis, one of the major issues with which we have to struggle," because the notion that being free of cancer for five years connotes survivor is a fiction; the cancer can return at any point (qtd in Yaldon 673; Proctor 253). The survivor/dead dichotomy is played out in the Breast Cancer Ouilt, modeled off the hugely important AIDS quilt, with one important difference: survivors made squares to commemorate their battle against cancer, rather than others making squares to honor the dead (Klawiter 144). Some have repossessed the victim label, as if to say: "I had no choice about the toxic circumstances under which I got breast cancer, yet look at me now in my insistent strength." The term victim highlights the human rights abuses and the preventable nature of the disease. Other activists want to distance themselves from the historical legacies of the word victim and instead claim a moniker which helps to explain the incurability of cancer: living with cancer becomes the handle. This acknowledges how women have been incorporated into risky subjecthood, yet in a way that owns this identity in solidarity with women living with cancer. Collective identity is also formed between women with different cancers (Klawiter 46).

screening activism. This collection of charity, corporate, and governmental organizations is called "Breast Cancer Establishment" or the "cancer control establishment," and it includes the Susan G. Komen Foundation, the American Cancer Society, the National Cancer Institute, the CDC, the FDA, and the pharmaceutical and biotech companies (King xviii). Symbolically these institutions rely discursively on the pink ribbon⁵² as its signifying ephemera; "its presence on a T-shirt, a billboard, or a Hallmark card confer an instantly recognizable set of meanings and values related to femininity, charity, white middle-class womanhood, and survivorship" (King xxiii). Breast cancer has become so thoroughly implicated with pink⁵³ that for some it is hard to disassociate from their experience of the disease—along with its trappings of corporate sponsorship, gendered cause-related marketing, and consumption as political participation. The pink ribbon becomes "a mechanism for limiting how people think about, speak of, act upon, and

⁵² In 1990 the Komen Foundation wanted to borrow a page from an art activism group called Visual AIDS, who had dreamed up the idea of red ribbons (King xxiii). They tracked down 68-year-old Charlotte Haley, a grassroots activist and "the granddaughter, sister, and mother of women who had battled breast cancer" (Fernandez). Haley made peach-colored ribbons to raises awareness specifically about breast cancer prevention. Each ribbon, which she handed out at stores and churches, came with a card saying: "The National Cancer Institute annual budget is \$1.8 billion, only 5 percent goes for cancer prevention. Help us wake up our legislators and America by wearing this ribbon" (Fernandez). Estée Lauder and the Komen Foundation contacted her, hoping to strike a deal. She flatly refused on the grounds that they were "too commercial," sending the groups to their lawyers who told them to simply come up with another color (Fernandez). A "pretty, pastel" pink was chosen, which quickly became an "icon, a semiotic superstar" (Fernandez). Studies showed them that pink was "the quintessential female color," "playful, lifeaffirming," "girlie," "calming," "quieting," "about femininity," and "health-giving" (Fernandez). In short, "everything that cancer is notably not"; cancer is not pretty, soft, or comfy (Fernandez; Kedrowski 194). Pink also connotes innocence, meaning both prepolitical and also a refusal to know (King 43). It was also entirely differently implicated than the red AIDS ribbon, AIDS discourse, and bodies with AIDS: "in response to the angry, flaming red ribbon of AIDS, breast cancer offers us the pink ribbon. If AIDS is the disease of dirty boys and their innocent victims, breast cancer is the disease of innocence, of mothers, grandmothers, aunts, and sisters. It is a disease that grows at home, not out there in dirty places" (Rothman

⁵³ For men the disease is about saving the breasts themselves, rather than the women to whom they are a part—or at least that is how it is assumed that men relate to breast cancer. Breast cancer awareness campaigns and events typically sell shirts with messages such as "Save the Tits," bringing the focus to saving breasts as sexual artifacts for man rather than saving the lives of women, or saving them from being targets of toxicity.

constitute the disease" (King 79); the same is true at Race for the Cure® events. At Komen's Race for the Cure®⁵⁴ events, women with breast cancer can visit the Breast Cancer Survivors Station, get a pink visor, and proudly mark themselves as a breast cancer survivor, "visually embod[ing] an identity not otherwise apparent. This was an act of social disobedience—a collective coming out, a rejection of stigma and invisibility, an appropriation of the traditional color of femininity by the survivor identity" (Klawiter 143). These women are proud to be called survivors. The process of putting on a pink visor, and of being able to recognizes others as survivors because of these visors, is a very significant process for many women, creating meaningful interaction with strangers and providing space for political identification "albeit across a fairly narrow socioeconomic spectrum" (King 122).

Corporate interest⁵⁵ in breast cancer awareness has exploded over the last two decades. Some of these companies are paradoxically implicated in the increasing incidence of breast cancer, as well as the profiting from the treatment and philanthropy surrounding it. This has been termed 'pinkwashing' by activist groups. For example, the pharmaceutical company AstraZeneca began National Breast Cancer Awareness Month in 1985, back when they were called Imperial Chemical Industries. It has snowballed into a multiple-industry effort: "it is October again: National Breast Cancer Awareness Month. Breast health is in the air and pink ribbons are everywhere. In the past two weeks I have been asked to Clean for the Cure with a Eureka vacuum, Cook for the Cure with a pink

⁵⁴ The Komen Foundation holds the trademark on the phrase "for the cure" (King 14).

⁵⁵ Why the industry interest in breast cancer cause-related marketing? According to one industry analyst, breast cancer worked as a marketing tool because "it hits the sweet spot in all modern American women where soap-opera fan and feminist meet" (qtd in Klawiter 135).

KitchenAid mixer, Kiss Cancer Goodbye with Avon lipstick, and shop for the cure with an American Express card" (Klawiter 131). Yet until 2000 AstraZeneca's agricultural divison was a leading producer of the carcinogenic herbicide acetochlor, as well as numerous chlorine and petroleum-based products that have been linked to breast cancer (King xxi) (Proctor 255).

AstraZeneca also holds the patent (since expired) on anti-cancer drug tamoxifen. "AstraZeneca's interest in promoting mammography and thereby raising detection rates and increasing sales of tamoxifen is a story widely circulated in activist circles and progressive media," yet this sort of culpability is ignored in mainstream breast cancer discourse (King xxi). This company is profiting from "both ends of the cancer cycle" (Proctor 257). In a sense, Komen and the other breast health awareness organizations are the "ladies' auxiliary to the cancer-industrial complex" (Ehrenreich "Not So").

The injection of corporate interest into breast cancer activism represents a reduction from politics to charity. Breast cancer activism has become, in large part, "a feminist issue without the politics," relying on an ethic of volunteerism, philanthropy, and do-gooderism without the political consciousness (Brown 85). Political activism, "rights and mass sympathy," can be demonstrated not with anger or panic but only with an "ethical serenity, patriotism, and proper deference to experts, scientists, and other authority figures (King 41). "In this respect, the Komen Foundation and the Race for the Cure might be read as quintessential tools of neoliberal governmentality" (King 45). Corporate-subsidized philanthropy diffuses political rage while enriching corporations (Brown 85). The potential for a communal experience of righteous anger becomes an individualized one of platitudes and politeness.

Under this regime of corporate-subsidized philanthropy, citizenship responsibilities are most frequently reenacted through consumption of merchandise and 'thon' experiences: witness the pink lingerie, pink running shoes, pink KitchenAid mixers, pink extension cords, pink buckets of KFC© fried chicken. As Nikolas Rose pointed out in *Powers of Freedom*, people are not only insular, atomistic consumers; they are also "addressed and understood as individuals who are responsible to themselves and for others in their 'community'" (qtd in King xxvii). These individuals—those who have survived breast cancer and their supporters—who buy pink merchandise and fundraise through pledges as they participate in walks, runs, and other physical activity for the cureTM, are figured as healthy both in body and in capacity for citizenship, able to care for others "less fortunate". Such a participant is an activist because she is physically active; she is "doing good by running well" (King 29). A healthy citizen is one who possesses the inclination and the fitness to participate in runs, helping to produce "active, rather than activist or armchair [or couch potato], philanthropists" by both invoking and shaping the moral, civic, and physical dimensions of citizenship (King xxix; King 51). Here, bodies are judged, revered, and condemned; most valued are those survivors who are "uniformly youthful (if not always young), ultrafeminine, trim, immaculately groomed, radiant with health, joyful, and seemingly at peace with the world," not to mention wellconnected to certain types of people, having the capacity to personally amass thousands of dollars of pledges (King 102).

The appearance of personal joy is wrapped up in how women are able to express emotion, and what types of emotion, within the confines of mainstream breast cancer discourse. Part of the personal responsibility involves projecting a show of strength and

happiness, or at least positivity and optimism; this is now framed as one of the "most effective tools for fighting the battle against the disease" (King x). Here, women have responsibility, not necessarily to struggle for the reigning in of toxic dumping or more strict pollutants standards, but instead, to herself and those nearby to look on the bright side of things. "The resulting rhetoric is so upbeat and so optimistic that it is possible to deduce from these events that breast cancer is a fully curable disease from which people no longer die" (King 36). Anger is an emotion to be avoided; its display is policed on online message boards and at awareness events. Anger is marked as treason to both the self and to the sisterhood of survivors and those battling cancer. The preferred emotions are caring gestures and uplifting feelings (Klawiter 45). This simultaneously prevents women from emphasizing the political, and figures breast cancer into a life-stage milestone, a right of passage to be crossed, just like puberty, menopause, or marriage (Lorde 75); women are made better for their cancer; more patient, more steadfast, more happy. This is not only restrictive on a personal level but also works to obscure complex social relationships between patients and their cancer and the industrial society in which they live. One of the key features of corporate-subsidized philanthropy is a refusal to consider subjects of "compassionate action" in any historical or structural way, thereby creating distance from structural inequality; the relentless drive for happiness reproduces the "notion that suffering, be it physical, emotional, economic, or otherwise, is actually an opportunity for individual growth, empowerment, and achievement" (King 118).

Many women chafe at the narrow constraints for self-expression in mainstream breast cancer discourse. Says the author Barbara Ehrenreich, diagnosed with breast cancer in 2001, "let me die of anything but suffocation by that pink sticky sentiment;

[where I am told to go to] confront my mortality bears striking resemblance to a mall" (44). Audre Lorde rejects the command to "seek 'joy' rather than real food and clean air and a saner future on a livable earth! As if happiness alone can protect us from the results of profit madness" (76). Limiting activism to corporate nodes "have helped fashion a farreaching constriction of public life, of the meaning of citizenship and political action, and of notions of responsibility and generosity," confining ways of living and self-expression (King xi).

But this needn't be the only option for a public face of breast cancer. Indeed, if we are to move toward its elimination, the public face has to get more political, more revolutionary, more diverse and deviant. Anger must not be bottled up but channeled:

"is it not possible to retain the publicness of the breast cancer experience and refuse to wear the disease as a badge of shame and at the same time to recognize the failings of the current approach to fighting the disease? The histories of social movements ranging from civil rights to anticolonial struggles to AIDS activism suggest that anger and pride are not mutually exclusive emotions and, in fact, can work quite productively together in bringing about social change" (King 122)

Mobilization along the lines of bodily visibility and cancer prevention is difficult yet necessary work. Many feminist breast cancer organizations confronted the public unease over expressions of "difficult and unpleasant emotions such as sorrow, anger, grief, aggression, and accusation" (Klawiter 169). The slogan "cancer sucks," found on buttons, tshirts, and the like, became the shorthand for the anger and pain (Klawiter 175).

Breast cancer activists have also found ally-ship with environmental justice and toxics groups. Prevention of cancer in the first place, rather than mitigation of its presence and prevention of death, is vastly preferable to the suffering of the disease as well as the treatment itself (Proctor 253). Real prevention necessitates a fundamental shift in social structures: in how industry functions, how infrastructure is built, how medical care is dispensed (Winnow 73). Feminist and environmental justice groups find common ground and mutual benefit over the idea of the precautionary principle, a philosophical and political tenet that would do much to reduce the toxic body burden which leads to cancer and many other illnesses. Currently, chemicals are considered innocent until proven guilty, only banned retroactively after it is proven to sicken people⁵⁶. This is "tantamount to experimenting on humans" (Proctor 261). Instead, if the political economy was reorganized so that "when an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically. In this context the proponent of an activity, rather than the public, should bear the burden of proof." (Science and Environmental Health Network). Thus, suspected toxins⁵⁷ would be eliminated and public exposure and illness as a result would be reduced. Concurrently, the bending of socioeconomic norms to a more equitable society would also reduce

_

⁵⁶ In the words of molecular biologist John Gofman: "If you pollute when you DO NOT KNOW if there is any safe dose (threshold), you are performing improper experimentation on people without their informed consent. . . . If you pollute when you DO KNOW that there is no safe dose with respect to causing extra cases of deadly cancers, then you are committing premeditated random murder" (qtd in Steingraber "Social Production" 37).

⁵⁷ The permeability of chemicals into our bodies is disturbing to many people—especially when it can be tied to a single source, and particularly if that source carries a brand identity. Recently, a chemical used in Scotchgard stain repellant was detected in the blood of many in the US. Even without data on its health effects, 3M Company "was compelled to change the formula" (Brown 73).

suffering (Evans 11). Particularly for those women who are cancer "victims" as well as victims of multiple institutionalized oppressions and of the cancer-producing industries in particular. Unlike the middle-class white women of Komen, cancer is "just one of the many obstacles they were up against. . . . This was a narrative of suffering, poverty, and dislocation, not a discourse of individual choice and responsibility, not a story of triumph and survival" (Klawiter 185). There needs to be space for the articulation of these intersecting stories which helps us all toward dismantling the circumstances under which they played out.

It is entirely possible for society to bend toward justice, as long as people collectively reimagine different life-affirming possibilities, in all of life's multiple ways of being (Winnow 75). Cancer, thus—like AIDS—"is about living. It's about living with a life-threatening disease, in whatever state, in whatever condition," wrote Jackie Winnow. "As an activist, I have learned that action and change take place through collective support. My own cancer experience has strengthened my belief that all disease and illness are not only physiological, but also political." (Winnow 71). Repoliticizing cancerous bodies through the politics of visibility and a refusal to silently accept the burdens of toxins and screening helps us to explode the rigorous biopolitics of breast cancer detection, treatment, and activism, and move toward a more visible, productive climate of health, equity, and justice.

CONCLUSION: LIVING WELL, THROUGH DIFFERENCE

I have demonstrated how biopolitical regimes of fat and breast cancer constrain women's experiences and affect their lives materially, politically, and spiritually. Bodies are enrolled into and resist the medicalized regimes of truth which are woven around disease. Diseases are not only biological; they are medical, social, bodily, and political. The pain and pleasure of fat, the trauma and living-with of cancer, these bodies whose lived experiences include all this come to us highly mediated. The cultural politics of both adipose tissue and cancerous cells of the breast are deeply significant, lumpy in their meaning.

And that is my particular contribution with this thesis: in examining how these two seemingly unrelated bodily phenomena work in parallel and often intertwined ways, particularly on women's bodies, and particularly in the bodies of Black women, I lay bare some of these dense connections. These connections come as the result of two different, yet related burdens: chemical, material, emotional, and psychological burdens of our racist, sexist, classist, and polluting capitalist economy. The 'body burden' of stress, racism, and a poor food environment manifests itself as fat, and the 'body burden' of chemical carcinogens manifests itself as breast cancer. It is fat women and women living with cancer who end up paying socially and medically.

There are striking similarities which I have found in how fat and breast cancer move through discourse and through bodily space. Primarily I find this in the

numerical/statistical models—the Body Fat Index, the Breast Cancer Risk Assessment Number—which recruit women into high-risk categories of medical, and thus social danger. Both fail to account for the fleshy, material, and experiential bodies of individuals, while individualizing women's bodies as unproductive, abnormal, and risky, and thus in need of medical intervention.

In addition, both obesity and the dominant treatment for breast cancer render women highly visible in uniquely marked ways. This is not unrelated to the ways that bodies are marked in other ways. Black women, for example, are already simultaneously both hypervisible and invisible, able to be written off through the silencing of their bodies, experiences, and voices. The distaste we see exhibited toward fat bodies and toward asymmetrical bodies signals our society's discomfort with massiveness, power, and size—particularly in a women's body—on the one hand, and with asymmetrical, queered breasts on the other hand. We are profoundly uncomfortable with many signs and signals of bodily difference—from physical or verbal disabilities to differences of skin color and other phenotypic racial markers. I seek to open up a little bit of space for all of us to move, in any way we might choose, despite the burden that we may feel from other's discomfort or staring at our bodies.

Other connections I have made highlight how both fat and cancerous bodies are read as contaminated by medical and popular discourses, leading to exclusionary practices based on fears of contagion; and that both fat women and women with breast cancer are asked to reconfigure and reconstruct their bodies—often surgically, through weight loss or bariatric surgery, and through breast reconstruction and prosthesis. I ask, in whose image is this reconfiguration happening?

By examining how and why this constraint happens, my aim is to "open up the possibility of different modes of living" (Butler 4). Judith Butler's notion of the politics of livability stirs me here. What she wants to build space for "is the moment in which a subject—a person, a collective—asserts a right or entitlement to a liveable life when no such prior authorization exists, when no clearly enabling convention is in place" (Butler 224). The transgressive politics of visibility—of outed fat and bared breast and scalp—provide a possibility to collectively authorize such rights. "Fighting the spread of radiation, racism, woman-slaughter, chemical invasion of our food, pollution of our environment, the abuse and psychic destruction of our young" are also ways of accomplishing the broadening of possibility (Lorde 77). If I can read the functionings of biopower upon fat- and cancer-laden women, perhaps I can also in some small way expand the ways of being in the world, the viability of women's lives, the ability to exercise bodily autonomy, and the "social conditions that enable that autonomy" (Butler 12), so that more may live better, with a greater sense of well-being.

While all this is true, it is also not very practical advice. While I included a small paragraph on promoting individual health in the obesity section, I failed to adequately engage a discussion of what both individual and community-level decisions or policies, what social change could be implemented to further the causes of health for all.

In terms of beginning to change obesity discourse, we must remember that health cannot be equated with thinness; there are many fat people who eat better and exercise more than those who are naturally thin. Health can be found at any size. Yet also I must be careful of running the risk of complete moral or nutritional relativity with food. I do believe that some types of food are "better for you" than others—for example, food that

is fresh, that is naturally high in fiber, vitamins, and minerals (not added later during a processing stage); food that is not covered with pesticides or laced with antibiotic residues. Yet what this looks like on the table and on the plate has to be pluralistic and multivaried according to a many factors including but not limited to the cultural foodways of the eater and her family or friends, what sorts of fresh vegetables are available nearby, etc. But here I also aim certainly not to fault the eaters of fast food; nor even the fast food itself; rather, I fault the political economy which subsidizes corn and cheap meat causing the creation of fast food and which concentrates fast food restaurants in low-income neighborhoods to those who can least afford it, medically.

Finding the health in living with breast cancer seems to me more complicated, due to the toxicity which we all carry in our bodies to varying degrees based mostly on race and class stratifications, put there by the industrial processes in which the vast majority of us have little say. For example, one of the reasons that epidemiological studies of environmental toxicity and cancer are so difficult is that there is no unpolluted control group to measure against. Although I have not had breast cancer and thus do not know for myself what I would do, I am wary of a treatment that relies on the continued poisoning of women's bodies, the introduction of more cell- and DNA-damaging radiation and heavy metals. However I did not get a chance to spend much time talking about treatment; I mostly worked from the visible results of chemotherapy and mastectomy, and left it at that. Yet in the words of activist Jackie Winnow, cancer is "about living," as well as we are able (71).

It is also hard to disconnect health form the scientific and medical discourses woven through our sense of it. Science, medicine, and thus health have a history; they

come from somewhere; and that somewhere is located in culture. Thus science and medicine are not universal, totalizing, and omnipotent, no matter how they may try to be. One pathway to imaging health and medicine might be to work on decoupling the spinning gears of profit from scientific exploration.

Parallel to that is another idea we must hold on to: that health is infinitely more than genetics, or the presence or absence of disease. It is political. Health is not just in the body, but it is in the interaction with politics and in the "interimplication" with nature and the environment (Butler 12). Finding ways of flourishing, of "sheltering and maintaining life [while] resist[ing] models of assimilation" is key to building health for one's self and community (Butler 4). This is about who has the right to live in which body and how, and access to the necessary tools for fulfilling that desire. The politics of livability constitute the opening up of space for people to become not only biological, but political, social, pleasuring, and emotional beings—and to be accepted for this way of living in the world. Perhaps this is what health comes down to: expanding the capacity for living well. Living well, then, becomes about cultivating not only personal wellness but also community, relationship, and political wellness in our hearts, minds and bodies.

Part of this is a readiness on the part of us all to acknowledge and accept bodily difference, whether one was born with its markers or whether they were gathered over the course of a lifetime. None of us are pure, no matter how much we would like to think so. As AIDS hospice worker Jan Zita Grover writes when looking at the clear-cut forest tracts of the Minnesota North Woods: "[I was offered] an unanticipated challenge, a spiritual discipline: to appreciate them, I needed to learn how to see their scars, defacement, and artificiality, and then beyond those to their strengths—their historicity,

the difficult beauties that underlay their deformity" (Grover 6). Learning to recognize this in each other in all its intersectionality and complexity is crucial for the survival of us all. I return to Audre Lorde once again: "I could die of difference, or live" (9). Let us chose to live—powerfully—in and through difference, not with optimism but with a political hope and an anger borne of the "rage to live" (Lorde 32). In moving toward "freedom, justice, and knowledge" we must be mindful that it will not be "necessarily nice and definitely not easy" (Haraway *Modest_Witness* 192). However, if "the point is to make a difference in the world, to cast our lot for some ways of life and not others," then "to do that one must be in the action, be finite and dirty, not transcendent and clean" (Moore Kosek and Pandian 42). The dirt of the earth and the shared grime of each other's bodies can nurture us all to grow beyond the narrow confines of a disciplined, sparse existence to a more thorough freedom for life.

In moving forward past the submission of this thesis, then, is to work toward the dismantling of racism, classism, and sexism and other forms of oppression which is needed to promote a more full and flourishing health. Being an ally for fat people and people living with cancer, for example by an active practice of fat acceptance, is difficult, but I feel that because of the particular visibility of fat on women's bodies, my role in any fat acceptance movement as someone of thin privilege is to speak up and say the things that for a fat person might be dismissed as self-serving complaints of a both literal and emotional "softy." This work is of vital importance to me because I know that my liberation is tied up in the liberation of others, and that without a framework of mutual liberation little progress will be made. Others are working vitally for a feminist successor science and a broader notion of the cultural and political possibilities around disease,

combining pride with history, anger and action. Groups like the Silent Spring Institute, which grew out of the Massachusetts Breast Cancer Coalition and is a leading actor in epidemiological/geographical environmental health research; Indigenous Environmental Network/Institute for Agriculture and Trade Policy's Healthy Legacy project; the Center for Health, Environment, and Justice; and many other groups working around the world, as well as organizations I have mentioned previously such as Breast Cancer Action and the Association for Size Diversity and Health. Practicing these politics of livability—living as well as I am able, according to my previously cited expansive notion of "well"—brings fuller richness to the lives of all people.

APPENDIX I: "HEALTH WITHOUT SHAME: IMPROVING CHILDHOOD FOOD SECURITY"

AN OP-ED POSTED ON MINNESOTA 2020, APRIL 30, 2010

Michelle Obama has the right idea. Her highly publicized "Let's Move"

Childhood Obesity campaign works to improve the nutrition and health of our children.

But her focus on obesity misses the real problem: that of a broken food system. And framing this issue as one of childhood obesity is too narrow and may end up traumatizing the very children she wishes to help.

Almost 10 percent of Minnesota's children are at risk of hunger, according to Minnesota's Emergency Food Shelf Network, and sadly 12.2 million children nationwide face the same hunger risk, according to WhyHunger.org. Michelle Obama's initiatives could do much to fix this.

Wait-hunger? Isn't Obama talking about obesity? Those junk-food-eating, video-game-playing, spoiled American children that need to get off their rear ends and go play outside? For many, this is the picture of obesity in America. No one can be obese and hungry-can they?

And therein lies the problem: the focus should be on family and community food security, not obesity.

In the U.S., hunger and obesity go hand in hand; they indicate poverty in America. Lack of access to healthy, fresh, nutritious-and affordable-food leads to increased consumption of energy-dense but nutrient-poor junk food. The timing of paychecks and food benefits often leads to cycles of want and plenty in which the pantry

is empty by the end of the month. In our food system, energy-dense processed foods cost \$1.76 per 1000 calories while fresh fruits and vegetables cost \$18.16 per 1000 calories, according to the Food Research and Action Center. Thus, children-particularly low-income children and children of color, who tend to live in neighborhoods under-served by grocery stores-are unable to access the healthy food they need to grow. Plus, we know that children without enough of the right kinds of food to eat have a harder time concentrating and more behavioral problems at school, setting these kids back further.

Michelle Obama recently rolled out an interactive map online called the Your Food Environment Atlas, developed by the USDA Economic Research Service. The map shows the connections between access to food and levels of health. This includes statistics on the number of grocery stores in a given neighborhood, the availability of fresh fruits and vegetables in stores, dependency on public transit, and relative prices of milk versus soda and whole grains versus refined grains. As the map shows, a lack of food freshness, quality and affordability becomes concentrated in poor neighborhoods, while an excess of food outlets with high quality and low prices is plentiful in richer neighborhoods. This picture of food insecurity at a community level demonstrates the inequality of our food system in the U.S. For example, while in more suburban areas the average is about one grocery store per 5,000 people, in North Minneapolis there are two grocery stores serving over 45,000 residents.

So why doesn't Obama focus on childhood food security? An anti-obesity campaign ends up vilifying fat and can quickly descend into a campaign against obese children. Anyone who has struggled with weight knows that fat-shaming does not work. Singling out fat children makes them targets of teasing, distancing them from their bodies

and the food they eat. A focus on the negative prevents all children from learning about positive nutrition, self-care, physical activity, and a healthy relationship with food. And in the United States, where a 2006 study "Appearance culture in Nine- to Twelve- Year-Old Girls" revealed that 40 percent of nine-year-old girls say they are on a diet when asked about their food choices, kids need all the help they can get.

There are other, better ways to promote and evaluate children's health. Simple measures like more public green space and safer streets enable kids to play actively. Working toward more equitable food access, the implementation of localized food policy councils across the nation, teaching children knowledge about food and nutrition; all of this would be a good place to start. The goal: nourishing the 12.2 million hungry kids in the U.S. and more than 100,000 Minnesotan children, and helping all kids grow up healthy.

In her speech announcing the initiative, Obama said, "The tone, hopefully, that I approach this, is one that is inclusive, and not judgmental - and helpful." By reframing her campaign in terms of childhood food security rather than obesity, Obama can be more fully inclusive.

WORKS CITED

- Albritton, Robert. "Between Obesity and Hunger: The Capitalist Food Industry."

 Socialist Register 2010: Morbid Symptoms: Health Under Capitalism. Ed. Leo
 Panitch and Colin Leys. Pontypool, Wales: Merlin P, 2009. 184-197.
- ---. Let Them Eat Junk: How Capitalism Creates Hunger and Obesity. London: Pluto Press, 2009.
- Allen, Patricia. "Mining for justice in the food system: perceptions, practices, and possibilities." *Agriculture and Human Values* 25 (2008): 157-161.
- Allina, Amy and Cindy Pearson. "Pills, Prevention, and Profits: The Case of Tamoxifen."

 **Multinational Monitor. 20.9 (1999):

 http://www.multinationalmonitor.org/mm1999/091999/allina.html>. 1 April 2010.
- Association for Size Diversity and Health (ASDAH). *HAES: Health at Every Size*. 2009. www.sizediversityinhealth.org>. December 20 2009.
- Bartky, Sandra Lee. "Foucault, Femininity, and the Modernization of Patriarchal Power." *Feminism & Foucault : reflections on resistance*. ed. Irene Diamond and Lee Quinby. Boston : Northeastern U P, 1988. 61-85.
- Beauboeuf-Lafontant, Tamara. "Strong And Large Black Women?: Exploring

 Relationships between Deviant Womanhood and Weight." *Gender and Society*.

 17.1 (2003): 111-121.

- Bordo, Susan. *Unbearable Weight: Feminism, Western Culture, and the Body*. Berkeley: U of California P, 1993.
- Bourdaghs, William. "The Disease of Nationalism, the Empire of Hygiene: *The Broken Commandment* as Hygiene Manual." *The Dawn that Never Comes: Shimazaki Taoson and Japanese Nationalism*. New York: Columbia U P, 2003. 47-76.
- Brown, Phil. *Toxic Exposures: Contested Illnesses and the Environmental Health Movement*. New York: Columbia U P, 2007.
- Bullard, Robert, Paul Mohai, Robin Saha, and Beverly Wright. *Toxic Wastes and Race at Twenty, 1987-2007*. United Church of Christ Justice and Witness Ministries.

 March 2007. http://www.ucc.org/assets/pdfs/toxic20.pdf>. 8 April 2010.
- Butler, Judith. *Undoing Gender*. New York: Routledge, 2004.
- Burgard, Debora, and Pat Lyons. "Alternatives in Obesity Treatment: Focusing on Health for Fat Women." *Feminist Perspectives on Eating Disorders*. Ed. Patricia Fallon, Melanie Katzman, and Susan Wooley. New York: Guilford Press, 1994.
- Campos, Paul, Abigail Saguy, Paul Ernsberger, Eric Oliver, and Glenn Gaesser. "The Epidemiology of Overweight and Obesity: Public Health Crisis or Moral Panic?"

 International Journal of Obesity 35 (2006): 55-60.
- Cartwright, Lisa. *Screening the Body: Tracing Medicine's Visual Culture*. Minneapolis: U of Minnesota P, 1995.
- Chiang, Shian-Huey, et al. "The Protein Kinase IKK#603 Regulates Energy Balance in Obese Mice." Cell. 138.5 (2009): 961-975.
- Churnin, Nancy. "Uncovering an obesity-cancer connection." *The Dallas Morning News*. 5 April 2010.

- http://www.dallasnews.com/sharedcontent/dws/fea/healthyliving2/stories/DN-nh_cancerside_0406_gd.ART.State.Edition1.12f6269.html. 5 April 2010.
- Clark, Levina, and Marika Tiggemann. "Appearance Culture in Nine- to 12-Year-Old Girls: Media and Peer Influences on Body Dissatisfaction." *Social Development*. 15. 4 (2006): 628-643.
- Collins, Patricia Hill. *Black Feminist Thought: Knowledge, Consciousness, and the Politics of Empowerment.* New York: Routledge, 1991.
- Colomeda, Lorelei. Through the Northern Looking Glass: Breast Cancer Stories Told by Northern Native Women. New York: NLN P, 1996.
- Cooper, Charlotte. "Is This What Killed Fat Liberation?" *Obesity Timebomb*. 22 February 2010. http://obesitytimebomb.blogspot.com/2010/02/is-this-what-killed-fat-liberation.html>. 3 March 2010.
- Daniels, Norman, Bruce Kennedy, and Ichiro Kawachi. *Is Inequality Bad for Our Health?*. Boston: Beacon Press, 2000.
- Dean, Mitchell. "Risk." *New Keywords: A Revised Vocabulary of Culture and Society*.

 Ed. Tony Bennett, Lawrence Grossberg, and Meaghan Morris. Malden, MA:

 Blackwell P, 2005. 311-313.
- Department of Health and Human Services. Fourth National Report on Human Exposures to Environmental Chemicals. Atlanta GA: Center for Disease Control and Prevention, 2009.
 - http://www.cdc.gov/exposurereport/pdf/FourthReport.pdf>. 25 March 2010.

- Devlin, Kevin. "Top 10 Reasons Why the BMI is Bogus." *NPR*. 4 July 2009. http://www.npr.org/templates/story/story.php?storyId=106268439>. 27 December 2009.
- Drewnowski, Adam. "Obesity, Diets, and Social Inequalities." *Nutrition Reviews*. 67.1 (2009): S36-S39.
- Ehrenreich, Barbara. "Not So Pretty in Pink: The Uproar over New Breast Cancer Screening Guidelines." *Barbara's Blog*. 2 Dec 2009. http://ehrenreich.blogs.com/barbaras_blog/2009/12/>. 23 March 2010.
- ---. "Welcome to Cancerland: A Mammogram Leads to a Cult of Pink Kitsch." *Harper's Magazine*. November 2001. 43-53. http://www.bcaction.org/PDF/Harpers.pdf>. 15 March 2010.
- Evans, Nancy, ed. *State of the Evidence: What is the Connection between the*Environment and Breast Cancer?. 4th Ed. San Francisco: Breast Cancer Fund and Breast Cancer Action. 2006.

 http://www.bcaction.org/PDF/StateofEvidence.pdf> 16 March 2010.
- Evans, Bethan, and Rachel Colls. "Measuring Fatness, Governing Bodies: The Spatialities of the Body Mass Index (BMI) in Anti-Obesity Politics." *Antipode*. 41. 5 (2009): 1051-1083.
- Fernandez, Sandy. "Pretty in Pink." *Think Before You Pink: A Project of Breast Cancer Action*. June 1998.
 - http://www.thinkbeforeyoupink.org/Pages/PrettyInPink.html
- First, Do No Harm: Real Stories of Fat Prejudice in Health Care. 30 November 2009. www.fathealth.wordpress.com. 15 December 2009.

- Fosket, Jennifer. "Problematizing Biomedicine: Women's Constructions of Breast Cancer Knowledge." *Ideologies of Breast Cancer: Feminist Perspectives*. Ed. Laura Potts. New York: Saint Martin's P, 2000. 15-36.
- ---. "Constructing 'High-Risk Women': The Development and Standardization of a

 Breast Cancer Risk Assessment Tool." *Science, Technology, and Human Values*.

 29.3 (2004): 291-313.
- Foucault, Michel. *The History of Sexuality*. New York: Pantheon Books, 1978.
- Gottlieb, Robert. "Where We Live, Work, Play . . . and Eat: Expanding the Environmental Justice Agenda." *Environmental Justice* 2.1 (2009): 7-8.
- Greene, Jacob W. "Bosom-Form." Patent 401,028. 9 April 1889.

 http://www.google.com/patents/about?id=PuJOAAAAEBAJ&dq=Patent+401,0">http://www.google.com/patents/about?id=PuJOAAAAEBAJ&dq=Patent+401,0">http://www.google.com/patents/about?id=PuJOAAAAEBAJ&dq=Patent+401,0">http://www.google.com/patents/about?id=PuJOAAAAEBAJ&dq=Patent+401,0">http://www.google.com/patents/about?id=PuJOAAAAEBAJ&dq=Patent+401,0">http://www.google.com/patents/about?id=PuJOAAAAEBAJ&dq=Patent+401,0">http://www.google.com/patents/about?id=PuJOAAAAEBAJ&dq=Patent+401,0">http://www.google.com/patents/about?id=PuJOAAAAEBAJ&dq=Patent+401,0">http://www.google.com/patents/about?id=PuJOAAAAEBAJ&dq=Patent+401,0">http://www.google.com/patents/about?id=PuJOAAAAEBAJ&dq=Patent+401,0">http://www.google.com/patents/about?id=PuJOAAAAEBAJ&dq=Patent+401,0">http://www.google.com/patents/about?id=PuJOAAAAEBAJ&dq=Patent+401,0">http://www.google.com/patents/about?id=PuJOAAAAEBAJ&dq=Patent+401,0">http://www.google.com/patents/about?id=PuJOAAAAEBAJ&dq=Patent+401,0">http://www.google.com/patents/about?id=PuJOAAAAEBAJ&dq=Patent+401,0">http://www.google.com/patents/about?id=PuJOAAAAEBAJ&dq=Patent+401,0">http://www.google.com/patents/about?id=PuJOAAAAEBAJ&dq=Patent+401,0">http://www.google.com/patent-401,0">http://www.go
- Grosz, Elizabeth. *Volatile Bodies: Toward a Corporeal Feminism*. Bloomington: Indiana U P, 1994.
- Grover, Jan Zita. *North Enough: AIDS and Other Clear-cuts*. Saint Paul: Greywolf P, 1997.
- Guthman, Julie. "Teaching the Politics of Obesity: Insights into Neoliberal Embodiment and Contemporary Biopolitics." *Antipode*. 41. 5 (2009): 1110-1133.
- Guthman, Julie, and Melanie DuPuis. "Embodying Neoliberalism: Economy, Culture, and the Politics of Fat." *Environment and Planning. D, Society & Space*. 24. 3 (2006): 427-448.
- Haraway, Donna J. *Modest_Witness@Second_Millenium.FemaleMan©_Meets_ OncoMouse*TM. New York: Routledge, 1997.

- ---. Simians, Cyborgs, and Women: The Reinvention of Nature. New York: Routledge, 1991.
- Herndon, April Michelle. "Collateral Damage from Friendly Fire?: Race, Nation, Class and the 'War Against Obesity'" *Social Semiotics*. 15. 2 (2005): 127.
- Hubbard, Ruth, and Elijah Ward. Exploding the Gene Myth: How Genetic Information is

 Produced and Manipulated by Scientists, Physicians, Employers, Insurance

 Companies, Educators, and Law Enforcers. Boston: Beacon P, 1993.
- Hope, Jenny. "Thirty per cent of breast cancer 'is caused by obesity." *Mail Online*. 26 March 2010. http://www.dailymail.co.uk/health/article-1260716/Thirty-cent-breast-cancer-caused-obesity.html. 5 April 2010.
- James, Susan Donaldson. "Critics Slam Overweight Surgeon General Pick."

 **ABCNews. 21 July 2009. <a href="http://abcnews.go.com/Health/story?id="http://abcnews.go.com/Health
- Julia. "Fatness and Uplift: Not a Post about Pushup Bras." *Fatshionista: A Heady Mixture of Social Justice, Fat-Girl Memoir, and Popular Culture.* 5 April

 2008.http://www.fatshionista.com/cms/index.php?option=com_mojo&Itemid=6

 9&p= 64>. December 24, 2009.
- Julier, Alice. "The Political Economy of Obesity: The Fat Pay All." *Food and Culture: A Reader*. Ed. Carole Counihan and Penny Van Esterik. New York: Routledge, 2008.
- Kaiser Permanente. *Case Files of a Healthy Class*. Scholastic, 2007. https://members.kaiserpermanente.org/redirects/landingpages/afd/>.

- Katzman, Melanie and Susan Wooley, eds. *Feminist Perspectives on Eating Disorders*. New York: Guilford P, 1994. 212-230.
- Kedrowski, Karen, and Marilyn Stine Sarow. *Cancer Activism: Gender, Media, and Public Policy*. Chicago: U of Illinois P, 2007.
- King, Samantha. *Pink Ribbons, Inc: Breast Cancer and the Politics of Philanthropy*.

 Minneapolis: U of Minnesota P, 2006.
- Klawiter, Maren. *The Biopolitics of Breast Cancer: Changing Cultures of Disease and Activism.* Minneapolis: University of Minnesota Press, 2008.
- Knopf-Newman, Marcy Jane. "Public Eyes: Investigating the Causes of Breast Cancer."New Perspectives on Environmental Justice: Gender, Sexuality, and Activism. Ed.Rachel Stein. New Jersey: Rutgers UP, 2004. 161-175.
- Kolata, Gina. "Panel Urges Mammograms at 50, not 40." *New York Times*. 16 November 2009. http://www.nytimes.com/2009/11/17/health/17 cancer.html>. 8 April 2010.
- ---. "Study Says Obesity Can Be Contagious." *New York Times*. 25 July 2007. http://www.nytimes.com/2007/07/25/health/25cnd-fat.html>. 24 December 2009.
- Komen Foundation. "Factors that Do Not Increase Risk. *Understanding Breast Cancer*.

 2010. http://ww5.komen.org/BreastCancer/FactorsThatDoNotIncrease
 Risk.html>. March 30 2010.
- ---. "Lifestyle Risks." *Understanding Breast Cancer*. 2010. http://ww5.komen.org breastcancer/lifestylerisks.html>. March 31 2010.
- ---. "Light at Night and Shift Work." *Lower Your Risk*. 2010. http://ww5.komen.org/
 BreastCancer/LightatNightShiftWork.html>. 31 March 2010.

- ---. "Who Gets Breast Cancer." *Understanding Breast Cancer*. 2010.

 http://ww5.komen.org/BreastCancer/WhoDoesItAffect.html# Lesbians>. 31

 March 2010.
- Krieger, Nancy. "Defining and Investigating Social Disparities in Cancer: Critical Issues." *Cancer Causes and Control.* 16 (2005): 5-14.
- Latour, Bruno. We Have Never Been Modern. Cambridge, MA: Harvard U P, 1993.
- Leonard, Jenny. "Gene—Not Diet—Makes Mice Obese?." *Futurity: Discover the Future*.

 15 September 2009. http://futurity.org/healthmedicine/gene% E2%80%94not-diet%E2%80%94makes-mice-obese/>. 9 April 2010.
- Libby Ross Breast Cancer Foundation. *Programs*. 2010. http://www.thelibbyrossfoundation.com/index.php?page=programs. 7 April 2010.
- Lichtenstein, Paul et. al. "Environmental and Heritable Factors in the Causation of Cancer Analyses of Cohorts of Twins from Sweden, Denmark, and Finland."

 The New England Journal of Medicine. 343. 2 (2000): 78-85.
- Lopez, Russ and Patricia Hynes. "Obesity, Physical Activity, and the Urban

 Environment: Public Health Research Needs." *Urban Health: Readings in the*Social, Built, and Physical Environments of U.S. Cities. Ed. Patricia Hynes and

 Russ Lopez. Sudbury, Mass: Jones and Bartlett Publishers, 2009. 169-187.
- Lorde, Audre. "Song for a Thin Sister." *The Coals of Audre Lorde*. 2009.

 http://thecoalsofaudreylorde.wikispaces.com/Common+Themes>. 28 December 2009.
- ---. Sister Outsider. Berkeley: Crossing Press, 2007.
- ---. The Cancer Journals: Special Edition. San Francisco: Aunt Lute Books, 1997.

- Manderson, Lenore, and Lesley Stirling. "The Absent Breast: Speaking of the Mastectomied Body." *Feminism & Psychology*. 17.1 (2007): 75-92.
- McCoid, Catherine. "Why is Prevention Not the Focus for Breast Cancer Policy in the United States rather than High Tech Medical Solutions?" *Unhealthy Health Policy*. Ed by Arachu Castro and Merrill Singer. California: AltaMira P, 2004. 351-361.
- Megan. "Female Nominees Continue to Face Scrutiny over their Size, Weight." *Jezebel*. 15 July 2009. < http://jezebel.com/5315443/female-nominees-continue-to-face-scrutiny-over-their-size-weight>. 16 December 2009.
- Miller, Julie. "Biggest Loser Desecrates Nation's Capitol: A Photo Essay." TVLine. 4

 November 2009. http://www.movieline.com/2009/11/biggest-loser-desecrates-the-nations-capital-a-photo-essay.php>. 28 December 2009.
- Moore, Donald S., Jake Kosek, and Anand Pandian. *Race, Nature, and the Politics of Difference*. Durham: Duke University Press, 2003.
- Murray, Samantha. "Doing Politics or Selling Out? Living the Fat Body." *Women's Studies*. 34. 3-4 (2005): 3-4.
- National Cancer Institute. "Obesity and Cancer: Questions and Answers." *National Cancer Institute FactSheet*. 16 March 2004. http://www.cancer.gov/cancertopics/factsheet/Risk/obesity. 5 April 2010.
- North, Anna. "Obama's Surgeon General Pick Made Sacrifices to Treat Poor." *Jezebel*. 14 July 2009 http://jezebel.com/5314168/obamas-surgeon-general-pick-made-sacrifices-to-treat-poor>. 20 December 2009.

- Panitch, Leo, and Colin Leys. *Morbid Symptoms: Health Under Capitalism.* Pontypool: Merlin, 2009.
- Pothukuchi, Kameshwari and Jerome L. Kaufman. "Placing the food system on the urban agenda: The role of municipal institutions in food systems planning." *Agriculture and Human Values* 16 (1999): 213-224.
- Powers, Retha. "Fat is a Black Woman's Issue." Essence. 20.6 (1989): 75, 78, 134, 136.
- Press, Nancy. "If You Care About Women's Health, Perhaps You Should Care About

 The Risks of Direct Marketing of Tamoxifen to Consumers." *Effective Clinical*Practice. March/April (2000): < http://www.acponline.org/clinical_information
 /journals_ publications/ecp/marapr00/womens.htm>. 1 April 2010.
- Proctor, Robert. Cancer Wars: How Politics Shapes What We Know and Don't Know About Cancer. New York: BasicBooks, 1995.
- Rivenburgh, Hannah. "Health Without Shame: Improving Childhood Food Security."

 **Environmental Op-Ed Series*. Minnesota 2020. 30 April 2010.

 **Chttp://www.mn2020.org/index.asp?Type=B_BASIC&SEC={1A9BE856-EB28-4409-9951-D168E377A1ED}>. 30 April 2010.
- ---. "Mow Jobs, Monoculture, and Marking Turf: The Gendered and Ecologically
 Fragmented American Suburban Lawn." *Local Culture*. Ed. Nick Borchert.
 Winter 2009. 3-11. http://localculture.augustana.edu/index.php?s=
 file_download&id=6>. 30 April 2010.
- Rothman, Barbara Katz. "Cancer is (not) a Genetic Disease." *Redesigning Life? The Worldwide Challenge to Genetic Engineering*. Ed. Brian Tokar. London: Zed Books, 2001. 150-158.

- Rose, Nikolas. *The Politics of Life Itself: Biomedicine, Power, and Subjectivity in the Twenty-First Century*. Information series. Princeton, NJ: Princeton U P, 2007.
- Schiebinger, Londa. "Agnotology and Exotic Abortifacients: The Cultural Production of Ignorance in the Eighteenth-Century Atlantic World." *Proceedings of the American Philosophical Society.* 149.3 (2005) 316-343.
- Science and Environmental Health Network. *The Wingspread Consensus Statement on the Precautionary Principle*. 26 January 1998. http://www.sehn.org/wing.html. 25 March 2010.
- Sender, Katherine, and Margaret Sullivan. "Epidemics of will, failures of self-esteem:

 Responding to fat bodies in The Biggest Loser and What Not to Wear."

 Continuum. 22. 4 (2008): 573-584.
- Shell, Ellen Ruppel. *The Hungry Gene: The Science of Fat and the Future of Thin.* New York: Atlantic Monthly Press, 2002.
- Simpson, Christy. "Controversies in Breast Cancer prevention: the Discourse of Risk." *Ideologies of Breast Cancer: Feminist Perspectives*. Ed. Laura Potts. New York:

 Saint Martin's P, 2000. 131-152.
- Spence, Jean. "Flying on One Wing." *Through the Wardrobe: Women's Relationships* with their Clothes. Ed. Ali Guy, Eileen Green, and Maura Bamin. Oxford: Berg, 2001.173-188.
- Spudnik84. "Ofiong Sanders Imprisoned for Lurking." *Twin Cities Indymedia*. 6 June 2009. http://twincities.indymedia.org/2009/jun/ofiong-sanders-prisoned-lurking 25 December 2009.

- Steingraber, Sandra. Living Downstream: An Ecologist Looks at Cancer and the Environment. Reading, MA: Perseus Books, 1997.
- ---. "The Social Production of Cancer: A Walk Upstream." Reclaiming the

 Environmental Debate: The Politics of Health in a Toxic Culture. Cambridge:

 MIT P, 2000.
- Thompson, B. W. "'A Way Outa No Way': Eating Problems among African-American, Latina, and White Women." *Gender and Society*. 6. 4 (1992): 546.
- ---. A Hunger So Wide and So Deep: A Multiracial View of Women's Eating Problems.

 Minneapolis: U of Minnesota P, 1994.
- Turner, Bryan. "Citizenship." New Keywords: A Revised Vocabulary of Culture and Society. Ed. Tony Bennett, Lawrence Grossberg, and Meaghan Morris. Malden, MA: Blackwell P, 2005. 29-32.
- "US Judge Strikes Down Patent on Cancer Genes." *New York Times*. 30 March 2010. http://www.nytimes.com/aponline/2010/03/30/health/AP-US-Cancer-Patent-Fight.html?scp=3&sq=myriad&st=cse. 2 April 2010.
- Valentine, G. "A Corporeal Geography of Consumption." *Environment and Planning. D, Society & Space.* 17. 3 (1999): 329.
- Wikipedia. "The Biggest Loser: Second Chances." 27 December 2009.

 http://en.wikipedia.org/wiki/The_Biggest_Loser:_Second_Chances#Week_9.

 28 December 2009.
- Williams, Raymond. *Keywords: A Vocabulary of Culture and Society*. New York: Oxford U P, 1983.

- Winnow, Jackie. "Lesbians Evolving Health Care: Cancer and AIDS." *Feminist Review*. 41(1992): 68-76.
- Whatley, Marianne, and Nancy Worchester. "The Role of Technology in the Co-optation of the Women's Health Movement: The Cases of Osteoporosis and Breast Cancer Screening" *Healing Technology: Feminist Perspectives*. Ed. Kathryn Ratcliff. Michigan: U of Michigan P, 1989. 199-219.
- Whitley, Mary. "Absence of Immune System Gene Keeps Mice From Becoming Obese,

 Researchers Report." *The Plain Dealer*. 4 September 2009.http://www.cleveland.com/nation/index.ssf/2009/09/absence_of_immune_system_gene.html>. 18

 October 2009.
- Williamson, L. "Eating Disorder and the Cultural Forces behind the Drive for Thinness:

 Are African American Women Really Protected?" *Social Work in Health Care*.

 28.1 (1998): 61-73.
- Witt, Doris. *Black Hunger: Soul Food and America*. Minneapolis: U of Minnesota P, 1999.
- Wright, Jan and Valerie Harwood. *Biopolitics and the 'Obesity Epidemic': Governing Bodies*. New York: Routledge, 2009.
- Yadlon, Susan. "Skinny Women and Good Mothers: The Rhetoric of Risk, Control, and Culpability in the Production of Knowledge about Breast Cancer." *Feminist Studies*. 23.3 (1997): 645-677.