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THE BIOSCIENCE-INDUSTRIAL COMPLEX, RADICAL MATERIALIST AESTHETICS,
AND INTERSPECIES POLITICAL ECOLOGIES: THE UNFORESEEN POSTHUMAN
FUTURE IN MARY SHELLEY'S *FRANKENSTEIN* AND MARGARET ATWOOD'S

MADDADDAM TRILOGY

By

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Thesis

presented in partial fulfillment of the requirements
for the degree of

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in English Literature

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ABSTRACT

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English Literature

The Bioscience-Industrial Complex, Radical Materialist Aesthetics, and Interspecies Political Ecologies: The Unforeseen Posthuman Future in Mary Shelley's *Frankenstein* and Margaret Atwood's *MaddAddam* Trilogy.

Chairperson: Louise Economides

This project traces how Mary Shelley's *Frankenstein* and Margaret Atwood's *MaddAddam* Trilogy, science fiction novels from the Romantic and contemporary literary periods respectively, contest the problematic relationships between subjecthood, science, ecological health, and patriarchal, capitalist societies by crafting radical materialist alternatives to such a system and its dualistic and destructive interpersonal/interspecies relations. Through the theoretical framework of ecofeminism that recognizes the conceptual linkages between women and nature in Western systems of thought, as well as psychoanalytical feminist critiques of the masculinization of scientific epistemology, this project examines the developmental and ontological overlaps between literary "masculine" and "scientific" subjects socialized under Western patriarchal capitalism and their exploitatively destructive responses to things associated with the "feminine" (i.e. the sensual body, nonhuman animals, people of color, ecological systems, spirituality).

The second half of this thesis investigates how the environmental group of Atwood's trilogy practices a kind of radical materialist philosophy that resembles Deleuze and Guattari's notion of "becoming-animal" and Jane Bennett's apprehension of the enchanted materialism of the world of things to elucidate the inadequacy of dualist, patriarchal culture's models for lived experience. The God's Gardeners' belief system advocates practicing a curious "attentiveness," or sensual receptiveness, to nature in which an energetic, agential wilderness of nonhuman intentionality might be perceived and thereby enable a more interconnected across-species co-existence. The intercommunications between the transgenic animals, humanoid Crakers, and bizarre cult-like humans are a source of hope in that they suggest that our human-nature relation must henceforth be more carefully considerate of more-than-human interests than it has been, more biocentric in its scope as opposed to narrowly homocentric. This newfound sense of continuity helps one begin to think of nature as composed of living, breathing others with unique interests, which then propels one to engage in dialogic ethical responses to and interactions with nonhumans over the more unfortunate and historically popular dialectic between so-called free humans and mechanistic nonhuman natures. The combination of Atwood's vision of interspecies alliances, Deleuze and Guattari's politics of becoming, and Bennett's enchanted stance toward nature provide a viable model of resistance to the continued destruction of the planet.

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INTRODUCTION:

It is not just that science and technology are possible means of great human satisfaction, as well as a matrix of complex dominations. Cyborg imagery can suggest a way out of the maze of dualisms in which we have explained our bodies and our tools to ourselves.

Donna Haraway, "A Cyborg Manifesto" (1991)

This thesis is broadly concerned with tracing how Mary Shelley's *Frankenstein* and Margaret Atwood's *MaddAddam* Trilogy, science fiction novels from the Romantic and contemporary literary periods respectively, contest the problematic relationships between subjecthood, science, ecological health, and patriarchal, capitalist societies by crafting radical materialist alternatives to such a system and its dry and destructive interpersonal/interspecies relations. I am broadly concerned with comparatively tracing these novels' representations of the "scientist" and "his" ideological construction composed of the discourses of Enlightenment humanism, sociobiology, deep ecology, and transhumanism. Influenced by Val Plumwood's ecofeminism that recognizes the conceptual linkages between women and nature in Western systems of thought, as well as Evelyn Fox Keller's psychoanalytical feminist critiques of the masculinization of scientific epistemology, the first three chapters of this project will specifically examine the developmental and ontological overlaps between literary "masculine" and "scientific" subjects socialized under Western patriarchal capitalism and their destructive responses to things associated with the "feminine" (i.e. the sensual body, nonhuman animals, people of color, ecological systems, spirituality). I will elucidate the links between patriarchal and scientific constructions of subjectivity and the exploitation of feminized-others and nature in science fiction across these literary periods through an analysis of Mary Shelley's *Frankenstein* and *Oryx and Crake*, the first book of Margaret Atwood's *MaddAddam* trilogy.

In light of Donna Haraway's work, an additional part of my project is to look at the contradictory ways posthumanism can function as an emancipatory discourse, in its critique of human exceptionalism and reconfiguration of who counts as an ethical subject, as well as how it can be coopted to serve the exploitative interests of militarism and patriarchal capitalism. My fourth chapter uses Atwood's *Oryx and Crake* as a kind of case study to explore how the conceptual framework of this darker scientific enterprise contains residual vestiges of traditional humanist thought that reproduce the belief in essential differences between humans and animals, distinctions that underlie Western epistemology's logic of domination that assumes the moral superiority of the masculine-subject and justifies the consumption of so-called inferior, mechanized women, people of color, animals, and nature. Moreover, the humanist emphasis on "freedom" and perfectibility as critical to human subjectivity has left its mark in transhumanist biotechnology's transcendental drive to develop immortal, artificial intelligences and/or Bacon's "blessed race of Heroes and Supermen," which is an expression of the masculine-subject's desire to both repress and appropriate feminine "nature." I will explore how these ambitions show up in Shelley and Atwood's texts as a Freudian "father of oneself" fantasy manifested in the image of the laboratory scientist simultaneously in the throes of childbirth and rebirth à la *Frankenstein* and *Oryx and Crake*, which interestingly has many parallels with the simultaneous feminization and virilization of the male poet in his experience of the sublime in Romantic literature.

My final chapter will investigate how the God's Gardeners/MaddAddamite radical environmental group of the second and third novels of Margaret Atwood's trilogy, *The Year of the Flood* and *MaddAddam*, practice a kind of radical materialist philosophy. I will look at the way this vital materialist outlook is used to re-enchant this group's mechanized world that has been systematically stripped of agency, spirituality, sensuality, and uncertainty. This chapter will

delineate the various ways the novels do the work of re-enchantment by populating their fictional landscapes with figures of embodied desire, spiritual/communicative openness, and an almost mystical corporeal-genetic permeability/indeterminacy or “plastic” identity as represented by characters such as Shelley’s creature and Atwood’s human and nonhuman “cyborgs.” My objective is to demonstrate how these narratives employ materialist aesthetics (aesthetics that resemble Deleuze and Guattari’s notion of “becoming-animal” or “pack” affiliated, Jane Bennett’s apprehension of the enchanted materialism of the world of things, and Haraway’s interspecies camaraderie) to elucidate the inadequacy of dualist culture’s models for lived experience. I will end my discussion by using Atwood’s *MaddAddam* to think through the ways these ecological aesthetics (both critical and literary versions) might provide the grounds for deconstructing and transforming the idea of the human subject in order to form a more ontologically heterogeneous ethics and sustainable future.

In sum, this thesis project will investigate the ways in which Mary Shelley’s *Frankenstein* and Margaret Atwood’s *MaddAddam* trilogy address issues concerning the ways that biotechnology, as developed under patriarchal-capitalism, leads to the commodification and destruction of nature and feminized-others as well as to unexpected emancipatory possibilities. Shelley’s *Frankenstein* follows the degenerative trajectory of the young scientist, Victor, as his mind dissolves under his escalating obsession to discern the innermost secrets of nature, the enigma behind the animation of life. Victor’s motivation is purely based on the will to power due to the style of domestic life he develops under that encourages isolated ego differentiation for male children and the objectification of m(others). His “masculine” education continues as he trains in a science that emphasizes dominion over a female gendered nature via knowledge accumulation. He quickly succeeds in animating the “lifeless matter” of a creature that he

constructs out of the fleshly material collected from slaughterhouses and the bones from charnel houses. Horrified upon the first sight of the newly living creature, Victor abandons him to an isolated life of misery and perpetual rejection, which propels the creature to commit a series of murders to avenge the cruelty inflicted upon him by Victor. Overall, this text is read as a cautionary tale against uncritical faith in the progressivism of scientific technology as well as an attempt to call attention to the subjective “culture” of science, the pernicious problem of its saturation with the value-laden assumptions and prejudices of patriarchy.

Atwood’s *Oryx and Crake* explores the possible dystopian twenty-first century consequences for a late-capitalist patriarchal culture that, like a mutated growth, has risen out of the very domestic and scientific conditions depicted in *Frankenstein*. Atwood’s speculative future consists of a dramatically stratified world in which the technocratic elite dwell in the militantly guarded Corporation Compounds and the rest of society lives in the “pleeblands” or poverty-stricken, run-down, disease-ridden slums. The novel focuses on the socialization and unfolding of Jimmy and Crake’s personalities and professional aspirations while living in the privileged technocratic part of society whose sole purpose is to turn out as many for-profit genetically engineered organisms, diseases, cosmetic surgery options, human organs, etc. for consumption by the pleebland class as possible. Jimmy and Crake lead emotionally estranged childhood and adolescent lives bonding over torture porn, voyeuristic reality TV shows, for-entertainment live executions, and online games. Crake grows up to develop the BlyssPlus pill, a prescription advertised as a one-time swallow that works to secure its consumer youth, prophylactic benefits, and sexual ecstasy but which in reality hides a hemorrhagic, rapid-spreading virus that eradicates most of the human species. However, Crake considers the Paradise Project the crown of his lifework. The Paradise Project consists of his genetically

engineered humanoid species called Crakers who are composed of the most beautiful human, animal, and machine adaptations. The Crakers are Crake's attempt to genetically remove the most volatile aspects of human nature and are meant to replace humankind. The Crakers have a limited lifespan of 30 years. They have no understanding of racial nationalism, hierarchy, or possessive monogamy. Their diet consists mainly of invasive kudzu leaves and they can telepathically communicate with animals. Ultimately, this novel provides a similar warning to that offered in *Frankenstein*, that science under patriarchal-capitalism results in destruction and can be used by dominant power groups to exploit disempowered human and nonhuman creatures. More sinisterly, *Oryx and Crake* reveals how essentialist sociobiological beliefs, biotechnical instrumentalism, and humanist hubris, all of which originate in the patriarchal value system, can lead to apocalyptic-level tragedy.

In *The Year of the Flood*, a narrative that runs chronologically alongside the apocalyptic world of *Oryx and Crake*, Atwood introduces the God's Gardeners environmental countercultural group who live on the Edencliff Rooftop Garden somewhere within the chaos of the pleeblands. Founded, by Adam One, this group of Adam and Eves practice a faith best described as spiritual Darwinism. Their green religion teaches the "convergence of Nature and Scripture, the love of all creatures, the dangers of technology, the wickedness of the Corps, the avoidance of violence, and the tending of vegetables and bees on pleebland slum rooftops" (*MaddAddam* xviii). The God's Gardeners group prophesy the "Waterless Flood" and therefore many of them survive the pandemic Crake unleashes.

MaddAddam, the final book of the trilogy, focuses on the way these surviving Gardeners recover from their trauma and negotiate the post-apocalyptic birth of a chimeric indigenous/genetically spliced Nature. *The Year of the Flood* and *MaddAddam* suggest that the

transgenic animals, humanoid Crakers, and bizarre cult-like humans are a source of hope. In particular, the God's Gardeners' belief system advocates practicing a curious "attentiveness" to nature, a sensual receptiveness to the external world, in which an energetic, agential wilderness of nonhuman intentionality might be perceived and thereby enable a more interconnected across-species co-existence. The Craker-Animal-Human intercommunications that take place in *MaddAddam* implicitly suggest that our human-nature relation must henceforth be more carefully considerate of more-than-human interests than it has been, more biocentric in its scope as opposed to narrowly homocentric. The newfound sense of human-animal-GMO continuity helps one "begin to conceive a potential for mutual and sustaining interchange with nature," which will then propel one to engage in dialogic ethical responses to and interactions with nature over the more unfortunate and historically popular dialectic "of prejudged superiority, of deafness, of closure" (Plumwood qtd. in Warkentin 114).

CHAPTER ONE: Scientific Manifestations of Gender Development Under Western Patriarchal Culture

and dream of masculine
filiation, dream of God the father
emerging from himself
in his son,—and
no mother then.

Hélène Cixous, “Sorties” (1981)

Informed by Evelyn Fox Keller’s psychoanalytic theoretical framework, this chapter will examine the complicated origins of the hierarchical subject/object, self/other split, an understanding of the world human beings are socialized into adopting within patriarchal society according to feminist retellings of classical psychoanalysis. This section then investigates the link between this false differentiation in boys and their adoption of the Western rational worldview that promotes a scientific or “objective” approach to nature(s). This chapter argues that the combination of an unnatural and aggravated assertion of male identity at the cost of the repression and devaluation of female identity culminates in a logic of domination that results in the destruction of the self, the other, and nature.

Part I: Object Relations Theory: Individualistic vs. Mutual Selves

Feminist critics of Freudian psychoanalysis argue from an object relations theoretical framework that the failure of boys to differentiate (both to acquire a sense of autonomous selfhood and a confident and tolerant notion of one’s kinship with others) often leads to the control and domination of women and nature via violence by men in an effort to deny one’s affinity with and dependency on recognition (being affected) by the other (Benjamin 150). In other words, the procedure for forming “male” identity under the patriarchal socialization process is reduced to the hyperseparation of self from the other, to establishing complete independence and dissimilarity from the mother and nature-background associated with her

presence in early childhood. In order to deny the self's dependency on the other and assert one's hyper-independent individuality, one objectifies and dominates the other as a superior-subject over an inferior-object, which results in masculine subject's failure to recognize her (or nature) as an independent person or subject. The others (nature and the feminine-other in general) become object-instruments and vessels to signify the masculine-subject's needs, desires, lacks, and fears. This distortion in emotional and sexual development provides the substratum from which the capacity for a certain breed of scientific, "rational" thought (which shrouds the underlying posture of "masculinity", objectivity, and the desire for domination) develops (Keller, *Gender* 80). This rational posture has hitherto monopolized the epistemological field of Western philosophy from Cartesian philosophy's mechanization of, or "stripping out...of mindlike qualities such as agency and goal-directedness" from the feminized entities and the natural world (Plumwood, *Feminism* 115) to its culmination, at last, into its postmodern technocratic phase—what Donna Haraway terms the "informatics of domination."

According to Jessica Benjamin, early ego psychoanalytical theory emphasizes the infant's break from unity, the alienation from the other, and is blind to the fact that the awareness and discovery of the self and the awareness and discovery of the other are interdependent processes (147). The socialization of males within Western patriarchal society imagines the proper human development as one of a chronological "progress" where the self breaks from the matrix of the first bond and separates from the mother. In other words, this process places "the mutual functions of recognizing the other and establishing one's own autonomous identity in opposition" (147). Furthermore, it aggravates the natural individuation process or the original necessary psychological separation from the mother. Under "'good enough' social relations," or within a non-patriarchal cultural environment, the child will explore separateness and return to

the mother in cycles whereupon both “members of the dyad . . . learn to let go of the early bond without rejecting the other” (Flax 252). This separation-individuation period is marked by intense ambivalence as the child “both wants to return to the symbiotic state and fears being engulfed by it” (252). After a precarious time the child should develop a capacity for reciprocal relations and a secure sense of self.

Evelyn Fox Keller confirms the importance and delicate nature of this individuation process or what she interprets as the development of the child’s sense of objectivity or the “capacity . . . for delineating subject from object . . . by which the child’s sense of self is formed” (80). She defines objectivity as the ability to distinguish “self from not-self, ‘me’ from ‘not me.’” In other words, establishing selfhood by a sense of difference from the other followed by a separation manifested in the newfound consciousness of self-boundaries is not inherently pathological. Keller argues that it is not the comprehension of difference that causally brings forth dominating attitudes toward women and the environment, similar to how ecofeminist Val Plumwood claims that “a relation of dichotomy, difference, or . . . a simple hierarchical relationship” does not necessarily result in a sinister or colonizing outcome for nature (*Feminism* 47). Keller affirms a cautious use of difference when she says “the extent to which one can maintain clarity about the difference between self and other” is key to one’s autonomy but on the other hand “the maintenance of continuity between self and other provides a check against the . . . desire to hurt or destroy” (100).

Ultimately, in a healthier cultural context other than that offered by the patriarchal landscape, the child establishes what Keller calls “dynamic autonomy” or a sense of self that is “both differentiated from and related to others, and a sense of others as subjects with whom one shares enough to allow for a recognition of their independent interests and feelings—in short for

a recognition of them as other subjects” (99). This allows for a more reciprocal relation with the mother and gives rise to a perception of the world as full “of interacting and interpersonal agents with whom and with which one feels an essential kinship, while still recognizing, and accepting, their independent integrity” (Keller 99-100). Similarly, Plumwood advocates creating the conditions in which a “mutual” or “relational self” might form. These conditions consist of encouraging “intersubjective interactions” in which the self recognizes the other as its own center of needs and limitations but also recognizes he is changeable by the other and capable of transforming the other (*Feminism* 156). One must grasp a sense of self and of other that is secure enough to allow for ambiguity between the boundaries of both without “threatening the loss of either” in order to participate in a fully creative, perceptive, and affectionate life (Keller 82). Overall, the writings of various object relations theorists propose that the individual maintain a finely balanced tension between self and other, one’s desire for intimacy and independence for “the attempt to delineate absolutely between self and other represents a miscarriage in development...that inhibits growth and perception as well as genuine self esteem and the capacity to love another” (101).

However, under patriarchy it is impossible to achieve this synthesis of mutuality and similarity on the one hand, and a sense of separateness and difference on the other (Flax 252). For the majority within the Western patriarchal society it is our fathers who we identify with as masculine-subjects and “our mothers who provide the emotional context out of which we forge the discrimination between self and other” and this “inevitably leads to a skewing of our perceptions of gender” in the sense that male qualities are praised over feminine ones (85). To add to this problem, the masculine identity is pressured to fashion itself in “opposition to what is both experienced and defined as feminine” (88). Masculine selfhood is acquired by rejecting and

creating dissimilarity and difference from the mother-natural background, which leads to the scripted failure of the individual to recognize the mother “as an independent person, another subject” but rather she is viewed as “Other: as nature, as an instrument or object, as less-than-human” (Benjamin 148). This tendency to see the mother as an object extends to the entire natural world because early in life the world of objects blurs and overlaps with the mother’s image. Because of one’s early experiences he associates the mother with original unity and separation as negation of the mother as the first object.

Indeed, this precarious separation-individuation process or the formulation of the boy child’s sense of objectivity (the ability to distinguish between subject/object, self/other) becomes problematically gendered (and manifests itself in scientific attitudes, discourses, personalities, and language) when masculine-biased cultural forces interfere during the Oedipal stage of the child’s development within patriarchal societies (Keller 87). During the individual’s first sense of his hard won, nascent, and fragile selfhood, the father figure comes to stand for a beacon of protection against the individual’s fears of “reengulfment” or ego disintegration, psychic death. He is taught implicitly to identify with the qualities of the “objective” external father of rigid autonomy and separateness while denying all of the characteristics within himself associated with the maternal feminine. Individuation and differentiation, objective reality itself, is personified by the father and so our “earliest experiences incline us to associate the affective and cognitive posture of objectification with the masculine, while all processes that involve a blurring of the boundary between subject and object tend to be associated with the feminine” (87). Clearly, a certain strain of Western science that “has been premised on a radical dichotomy between subject and object...simultaneously reflects and perpetuates” the gendered associations, between women and nature as threatening boundary blurring objects and men as objective

subjects, one makes during his early emotional and sexual development under the subtle influence of sociocultural duress.

On the other hand, female children are encouraged to identify with the mother and therefore tend to merge with her identity and sacrifice their independent subjectivity: “The small girl’s experience is often that she develops continuity and sameness at the expense of difference and independence” (Benjamin 148). Society discourages females from differentiating from the mother and instead encourages the blurring of their boundaries thus leading to their internalization of the status of an object. The girl child “becomes in her own mind object, instrument, earth mother” recognizer but unrecognized as “she serves men as their other, their counterpart, the side of themselves they repress.” In this way each gender represents one malformed part of a hyperpolarized whole. Neither falsely differentiated gender develops true autonomy nor learns the necessary art of maintaining a tension between the cultivation and knowledge of the self and recognition and appreciation of the similarities and differences of and dependence on the other.

According to Plumwood, a child who grows under this distorting pressure in which he is unable to recognize the mother as a subject he both shares a symbiotic kinship with and is distinct from results in a politics of incorporation or a “breakdown of differentiation” in which “other is assimilated to self” and in the case of the girl child, who sees herself as object-other, “self is assimilated to other” (Jessica Benjamin qtd. in Plumwood, *Feminism* 157). The boy is only able to see the other as an extension of the self’s mental omnipotence where the other is simply a part of the self, which “leads to domination and instrumentalization, the erasure of the other as an external limit on the self and its reappearance as a projection of the self.” He will fail to “encounter the other as independent other” and instead see her “only in the image of [his] own

desires or needs, which [he] imposes on [her]” (Plumwood, *Feminism* 158). Alternatively, the subject will unconsciously engage in a project of hyperseparation in which the other is imagined as a hostile, alien-other (threatening to one’s ego-boundaries) who is “utterly different by nature and a[-] part of a separate, lower, or exceptional sphere (Freud’s ‘dark continent’), thus denying continuity” and the common claims of intrinsic value (161). The masculine subject, or “master identity” is only able to recognize the other as a “colonized” of radical alterity under the psychic organizing principle of hyperseparation or as assimilated to the self’s “empire of the same” under the impulse to incorporate a world that threatens to separate from the self and challenge its absolute atomistic sovereignty by making it feel vulnerable. Overall, his pathway to hyperseparated subject formation ultimately stems from a conceptualization of both feminized-others and nature as “neutral, indifferent and meaningless, with no interests or significance of [their] own [...]; any significance or value [they] might have for humans is an arbitrary product of human consciousness” (110). And, once this boundary between self and other is secured “every-*thing* other than the Self is seen as... a thing to have and possess,” utterly mute, inert, and non-creative “standing reserve” entirely void of provoking an ethical response from “humanity” (Hiltner 23).

Part II: The Materialization of Domination in Sexual Sadism and Scientific Discourse

How is the hyper-objectivity (the problematic patriarchal formulation of the subject/object, self/other split) of the rigidly autonomous masculine subject linked to the domination of others and how are both of these related to the objectifying, instrumentalizing, and exploitative domination of human and more-than-human natures by science? Keller has noted the potential links between the development of the estranged identity in boys, their conditioned capacity or socialized attraction to a scientific or objective approach to the world, and the

conceptualization of power as the domination over the other (Benjamin 148). The rational posture that results from this false differentiation, ultimately leads to what Benjamin calls “rational violence” and domination. The patriarchy demands that the individual deny his dependence on the “inferior” and threatening other but this delusion is psychically isolating and impossible. According to Benjamin, in order for the self to split from the other and also not be alone, the self “resolve[s] the problem of dependency by possessing or controlling the other” (150). In the self’s attempts to deny its “sameness, dependency, and closeness with another person” and fight off the consequent feelings of loneliness, it becomes “different and individual by making the other person an object, [and]...seeks autonomy by dominating the other person” (Benjamin 150). She claims that any act of domination contains within it the potential for violence. Violence is a way of expressing control over another: “aggression is mobilized to distance oneself from the object and then to overpower it” (Flax 253). Similarly, Susan Griffin sees the act of objectification itself as a violent act for the “soul was not made to dwell in a thing; and when forced to it, there is no part of the soul but suffers violence” (49). The subject’s fantasized and real acts of violent domination function as a desperate method of ensuring both possession of and separation in type from an object-other.

Similar to Benjamin’s explanation of domination above, Keller also associates the hyperseparation of self from other with a defensive and desperate need to dominate and control the other in order to alleviate fears of dependency and isolation. However, she emphasizes that domination is not just the result of the struggle for hyper-autonomy. While domination is a response to a fear of dependency and affinity, “it arises most critically out of the psychological assimilation of autonomy with external authority” or the desire to be the omnipotent father in contradistinction to being the impotent, dependent child of the mother (Keller 97). Benjamin’s

summary of Hegel's explanation of the master/slave dynamic posits that the reason that domination is chosen by the master-identity over the act of mutual recognition is because the "nascent self wants to be omnipotent, or rather, has the fantasy that its mental process is identical with the world," with external authority, arguably also a desire of science (152). The patriarchal self wants to be alone and independent in the world, to exist objectively, control everything and to allow the "other to exist only as an object inside itself" (152). In other words, in order for the self to repress its fears of psychic death (ego boundary blurs) and dependent vulnerability, it pursues a sense of omnipotence through acts of domination which work in an aesthetic dimension to "symbolize man's combat with nature—a nature that is constantly threatening to engulf him from without and from within" (Alain Renaut qtd. in Ferry 51). Domination as the "submission of brute nature to man's...will" works as a kind of ritual reenactment of the masculine subject's "'breaking away' from [the] natural state of which the animal [and all feminized-others] remain prisoner" as well as his subsequent arrival at the realm of masculine omnipotence or the "authentically human" (Ferry 51).

Violent domination is also associated with eroticism in Western culture. According to Freud, the self is uncomfortably forced to realize its dependency on the other when it experiences "animal desire" which is associated with psychic death because the sex act causes a lack of boundaries; merging threatens continuity or a reunion with the undifferentiated sea of the mother one worked so hard to break away from (Benjamin 153). In the patriarchal world that emphasizes hyper-individuality and the maintenance of the "law of discontinuity," the boundary loss inherent to the erotic act is feared and must be avoided at all costs. If the individual had undergone an alternative process of differentiation from that condoned by patriarchy the self might accept and even actively seek periods of oneness without feeling threatened. One would be able to

temporarily transcend the isolated self through love and experience the “delight [in] such an intense interruption of accustomed being” (Sandilands 186). In the world of patriarchy, the individual perceives love and similarity as threatening to selfhood and trades it for the power and safety of domination or sadistic sexual expression just as certain representations of the scientist show “him” as unaffected and at a distantly removed location from the writhing object of his study. Sadistic sexual expression is described as “not mutuality but mastery, ...not loss of boundaries of the self but affirmation of the self. [...] The sexual subjugation of the other becomes erotic by demarcating the self from other in such a way as to channel contempt and fears of impotence (as well as ego loss) away from the self to the other” (Keller 105). Through sadistic fantasy, the other is constructed as helpless and the self as all-powerful, which is similar to nature’s construction as passive or malleable in the discourse of modern science. Acts of domination reflect the individual’s anxiety of losing their alienated selfhood and sense of power. Ultimately, the domination of others occurs when one is reminded of one’s dependency on the other or feels threatened by the “specter of difference dissolving” (Keller 106). Domination is a way of both creating and maintaining the object and its identity as different, which is required for the construction and maintenance of the delusion of the self-governing autonomous personae.

The desire to dominate human others is linked to the “ambition to dominate nature, and hence to a particular set of commitments in science” because of patriarchy’s conflation of power and control with knowledge and fear of the unifying feminine, love, and nature (Keller 114). The early childhood investment in radically differentiating from feminized-others and the sexual adult’s ritualistic performance of this differentiation via domination gets projected onto the scientist’s engagement with feminized-others and nature. The aggression within scientific discourse reflects the enforced lack of connection with the mother and the natural objects

originally connected to her, a malicious effect of the patriarchal splitting process where domination arises out of an anxiety of dependence, affinity, and ego loss (Keller 124).

One can also see a related link between the aggressive discourse of science and male psychic development in that the “the dream of dominion over nature, shared by so many scientists, echoes the dream that the stereotypic son hopes to realize by identifying with the authority of the father” (Keller 124). The son’s identification with the father reflects the son’s wish to achieve an omnipotent Godliness and, correspondingly, the ability to completely deny his connection with the mother-born body of nature. At first the “polymorphously perverse” boy simultaneously identifies with the mother and father. As discussed above, the boy later identifies with the father as an attempt to negate impotent dependency and the original fusion with the mother in accordance with external social pressure. This identification with the father occurs during the Oedipal stage where the boy first experiences the primal scene, which is an event in which the child, who is still “mourning a damaged oneness with his mother,” stumbles onto the stage of his parents’ act of coitus (Kerrigan 164). This scene stimulates so-called “proper” ego differentiation in the child, a shift from the anxiety of separation to the anxiety of castration and finally resolution. In other words, in a patriarchal society the child slips from unity with the less powerful, boundary blurring mother, to a rivalrous, voyeuristic position towards the father, and finally to an identification with the father in his competitive stance to possess and rule over the mother. In the child’s identification or projection of himself “into the role of the father, the father occupies the slot he has vacated – watcher, discoverer, and in this position, punisher” (164). In other words, the ego submits to the surveillance of the superego or the internalized father. Not all egos submit to this expelled, surveying superego-father and instead become “father of

themselves” in occupying their father’s old position with the mother and simultaneously the new, third position as omniscient, omnipresent, and omnipotent.

The boy secures an illusion of complete self-sufficiency through this fantasy of being father to himself and therefore sees himself, in the mode of Descartes, as completely transcendental to the body of maternally associated infancy (Bordo 107). Being one’s own parent allows one to deny having been born from that helpless, original state of union with the mother. Instead, he fantasizes he possesses her as a subdued sexual object of conquest that is fully under his control and therefore need not worry over the pain of separateness or dependency (107). In this way, the subject can satisfy his desires for re-unification by objectifying and internalizing the mother-object while simultaneously denying his association with the mother (the feminine nature) of his original bond. Even so, the “polluted” trace of the original identification with the mother remains a part of the boy’s fragile psychic landscape. Rather than only “positively” identifying with the father, the child exposed to the primal scene also at times experiments by “negatively” projecting himself into the submissive position of the mother. In this case, the developing ego marries rather than internalizes the fatherly superego. Within a patriarchal culture that demands the child gravitate to one or the other of the parental figures, these early childhood traumas manifest in a variety of contradictory impulses and self-expressions.

Keller illuminates how this early childhood hermaphroditic identification appears in Francis Bacon’s scientific discourse in which he attempts to secure omnipotence by “an identification with the father, which allows simultaneously for the appropriation and denial of the feminine” (41). Bacon thinks through his scientific praxis through the metaphoric images of sexual hermaphroditism, rape, and childbirth. Indeed, Keller points out how there is a kind of acquisition of or assistance from the feminine in Bacon’s desire for the impregnation of his mind

by divine illumination. He imagines that he must purge himself of the atavistic errors of the old science, taught by the impotent and “feminine” ancients, in order to be “filled” with the virile new scientific principles. First, the scientist must purify his mind to a virginal state by purging the “old science” from its depths and transforming the mind into a receptive, submissive womb. God then is able to penetrate and transform the mind from female to male. Once the scientist’s mind is clean of its feminine miasma, God floods the worthy vessel with His phallic-light, which gives the scientist the creative inspiration or seminal thrust to forcefully inspect and fuse with nature in order to produce his own knowledge-child (Keller 38). In other words, after becoming “potent,” the scientist is to pursue nature by hounding, conquering, and subduing her in forced sexual union in order to reveal her secrets and “secure an increase beyond all the hopes and prayers of ordinary marriages, to wit, a blessed race of Heroes and Supermen” (Bacon qtd. in Keller 36). One must rape nature in order to access her instrumental riches. Bacon denies the female as subject and his affinity with her while coopting the female reproductive mode (Keller 41). Keller reads this appropriation of the feminine, in the face of the patriarchal call to hyper-separate, as necessarily garnering an especially aggressive repudiation of the female subject and things associated with the feminine as reflected in his horrifying scientific discourse of female violation. Interestingly, Keller also notes that this necessary impregnation of the scientific mind by God as conceived by Bacon has been replaced in modern secular times by a thoroughly independent mind in that the “scientist himself has assumed the procreative function that Bacon reserved for God: his mind is now a single entity, both phallus and womb. However, his kinship with Bacon survives in his simultaneous appropriation and denial of the feminine” (42).

To sum up, scientific ideologies that promote a “cool and objective remove from the object of study” or that “promise[-] power and the exercise of domination over nature” reflect the

emotional and sexual needs and desires of the masculine subject (Keller 124). Indeed, as we will see, the scientists and masculine-subjects from Margaret Atwood's *MaddAddam* trilogy embody the ambition to father the self, the hermaphroditic mode of domination over nature. As discussed in the next chapter, Mary Shelley's *Frankenstein* also critiques how the distortions of our infantile and early childhood desires, fears, and anxieties by patriarchy "continue to reverberate throughout adult life" as reflected in the discourse and projects of the scientific subject at the expense of all his feminine objects (Flax 254).

CHAPTER TWO: Destructive Science and Subversive Creatures in Mary Shelley's *Frankenstein*

Ecofeminists¹ argue that the causes of ecological problems originate in the conceptual conflation and domination of women, animals, and the environment by patriarchal cultures (Plumwood 18; Warren 260). As discussed, feminist psychoanalytical accounts of masculine socialization within patriarchal culture locate the origins of this destructive domination in the denial and repression of early experience, the masculine repudiation of its affinity with and dependence on the feminine object world. They argue that because the mother/female is associated with the external world of things in early human development, this initial rejection of the feminine extends into the destruction of “nature” and general abuse of the other as an instrumental object – a conspicuous posture materialized in masculine scientific attitudes and projects. The Romantic period is noted as a time of social upheaval in which the hierarchical categories of identification, including gender, class, race, and species, began to come under scrutiny and discussion. These fiery debates manifested themselves in the scientific research of the period, the French Revolution, abolitionism, and the push for the enfranchisement of women and animals. Promising rescue from the period’s existential feelings of instability and vulnerability, eighteenth and early nineteenth-century science, loyal to its masculine gender performativity, sought the patriarchal ideals of independence, progress, truth, and control in its

¹ Ecofeminism theorizes that within Western intellectual and cultural traditions there are important historical interconnections among the unjustified patriarchal and colonial dominations of women, human others, and nonhuman others (Warren 260). Oppressive ideological frameworks within Western language reinforce and perpetuate the domination of women, nature, and people of color. For example, hierarchical value dualisms such as man/woman, mind/body, rationality/animality, self/other, etc. provide the conceptual basis for the superior half of each dyad to dominate the constructed inferior dyad (Plumwood 45). Ecofeminists note that cultural representations of the other in Western androcentric literature and language silence and associate women and people of color with the “inferior” half of these binaries claiming that they are more natural, while men, the “master identity,” or the colonial “Self” is analogous with “culture, reason, and the realm of the mental” and is thought of as superior to and separated from nature and the physical realm (Warren 258). This perceived moral superiority of the masculine-self is defined as endowed with certain qualities (i.e. rationality, “freedom,” whiteness, objectivity) while the moral inferiority of the feminine-other is defined by its supposed “lack” of these very qualities. The superiority of the Self justifies the subordination and objectification of the other (Gaard 116). Ecofeminists explore how the constructed devalued qualities of the other are policed and inscribed upon the bodies of women, people of color, animals, and nature thus mutually reinforcing these groups’ inferior status, subordination, and colonial exploitation.

ambition to forcibly “unlock the elementary forms of [a] nature” that was figured female (Saunders 500). Critics have noted Romantic women writers’ apprehension of the dangers of an “eighteenth-century science made by men for (gentle)- men” supported by a culture whose knowledge production was based on misogynistic gender metaphors and the perpetuation of the hyper-estranged self (Mellor, “Feminist” 89; Saunders 501).

Mary Shelley’s 1831 version of *Frankenstein* anticipates feminist psychoanalytical critiques of the patriarchal socialization process. Overall, the novel works as a critical commentary on patriarchal society’s making of human beings, which is a kind of masculine parthenogenesis in its repressing of the feminine and praising of the ambitiously hyperseparated and delusively independent master-male individual. Shelley explores the dangers of this estrangement to both the self and the natural world of object others through her representation of a masculine science based on scientists’ desire to control, manipulate, and ultimately subdue and destroy the feminine and nature. Shelley critiques the cultural values associated with the penetrating and destructive treatment of nature by Father-Science. Additionally, Shelley constructs the creature to challenge the patriarchal establishment of self and the appropriation and domination of the feminine other for self-elevating purposes that manifest in the metaphors and descriptions of Victor’s science. She uses the creature to subvert and block the experiences of the “phallic authoritarian sublime” to draw attention to how it, like the metaphors of science, masters and appropriates the feminine and nature in order to “transform awe or fear into...imaginative empowerment” (Pipkin 600).

Part I, The Violent Metaphors of Masculine-Gendered Science, of this chapter argues that *Frankenstein* explores the malign results of patriarchal socialization on individual identity and romantic and familial relations. This section also looks at how human development within this

toxic context manifests itself in particular scientific attitudes (embodied by Victor's probing masculine gendered science that conspicuously expresses a disconnected superiority and a fear of and desire to appropriate the feminine). Part II, Mary Shelley's "Feminine" Appropriation of the "Masculine" Sublime, argues that the creature anticipates Donna Haraway's cyborg-revolutionary subject. The creature appears to threaten patriarchal structures of the self much in the same way the masculine sublime threatens the annihilation of the masculine-self in that this self is confronted with an aspect of "nature's" unruly, inassimilable difference, that highlights his vulnerable smallness and unholy hybridity (blurred identity) as well as his overwhelming, repressed desire for oceanic merger with this representative of the m(other). However, the sublime response the creature invokes in the characters significantly offers no chance of transcendence or empowerment, the second moment of the sublime directly proceeding the masculine-subject's disheveled confrontation with radical alterity where he "succeeds" in the maintenance of "borders by subordinating difference and by appropriating rather than identifying with that which presents itself as other" (Freeman 4). Instead, the creature firmly embeds the masculine-subject in his material conditions and undermines his discrete categories of being.

Part I: The Metaphors and Violence of Masculine-Gendered Science

The narrative behind the development of Victor Frankenstein's scientific personae begins with an exaggeratedly delineated description of the self's "natural" gravitation toward "hard" penetrating science versus the feminine-other's predictable and stronger affiliation with the identifying, interconnected soft womb of ecological thinking. Victor describes feeling "deeply smitten" with the desire "to learn the hidden laws of nature" and feels "gladness akin to rapture" as nature is "unfolded" to him (Shelley 22). These lines imply the scientist self as actively and aggressively revealing a coyly covered nature. In contradistinction, Victor describes Elizabeth as

preoccupied by the “majestic and wondrous scenes” which surround their “Swiss home—the sublime shapes of the mountains, the changes of the seasons, tempest and calm, the silence of winter, and the life and turbulence of...Alpine summers.” These lines juxtapose Victor’s intervening, masculine gaze against Elizabeth’s more gentle and gratuitous feminine inspection of nature.

Victor’s above account of his interests resembles Bacon’s sexual imagery in which he conquers, subdues, and shakes nature to her foundations for “the nature of things betrays itself more readily under the vexations of art than in its natural freedom” (qtd. in Keller 36). Victor’s budding identification with the scientific impulses of the masculine-self, which is rooted in the detached alienation and desire to dominate the other, becomes clear when he hints at his vicious childhood disposition: “My temper was sometimes violent, and my passions vehement; but by some law in my temperature they were turned not toward childish pursuits but to an eager desire to learn, and not to learn all things indiscriminately” (23). Child-Victor’s violent impulses originate in his unnatural splitting and repudiation of the maternal-other, which then fosters an interaction with the world reminiscent of the rational scientific sensibilities.

The masculine socialized individual who is attracted to a science that “advertises itself as revealing a reality in which subject and object are unmistakably distinct may perhaps offer special comfort” to someone whose identity depends on the rigid policing and maintenance of barriers against the return of the repressed feminine (Keller 90). And indeed, Victor’s mother teaches him from a very young age to objectify women and therefore the nature he associates with her identity. His mother’s careless language causes Victor to consider Elizabeth as his object and gift: “And when...she presented Elizabeth to me as her promised gift, I, with childish seriousness interpreted her words literally and looked upon Elizabeth as mine” (21).

Furthermore, she is so much his object she is a reflection or extension of Victor himself: “All praises bestowed on her I received as made to a possession of my own.” This is an additional indication of Victor’s growing potential to identify with the scientist-self who aggravates the distance between himself and the other-object of his study. He will soon learn from his natural history professors: “[The] self is the One who is not dominated [...]. To be One is to be autonomous, to be powerful, to be God; but to be One is to be an illusion, and so to be involved in a dialectic of apocalypse with the other” (Haraway, *Simians* 177). Once this self is established “he” must aggressively police the chasm between the one who prods at the known and the one who receives the prodding.

After Victor’s discovery and appropriation of Cornelius Agrippa’s works he more fully internalizes the “dedication of techno-science to militarized and systematically unjust relations of knowledge and power” as indicated by his increasingly dominating language (Haraway, “Otherworldly” 79). In language that conspicuously mirrors Bacon’s, he describes himself to Walton as having been “imbued with a fervent longing to penetrate the secrets of nature” and in a mixture of admiration and impatient contempt describes Agrippa as having only “*partially* unveiled the face of Nature, but her immortal lineaments were still a wonder and a mystery” (25; my emphasis). With each consecutive day of study, Victor becomes more familiar and fluent with the language and logic of domination over nature.

At the age of seventeen it is decided that Victor will separate from his family and pursue his scientific studies at Ingolstadt and further develop into the masculine ideal of the autonomous, estranged individual. Here the separation he acquired as a child is aggravated as he is “taught to see nature ‘objectively,’ as something separate from [himself], as passive and even dead matter—that can and should be penetrated, analyzed, and controlled” (Mellor, “Feminist”

110). Further, the scientists conflate this passive dead matter with the female sex in order to use nature for their own ambition for glory as indicated by Victor's excited proclamation that he "will pioneer a new way, explore unknown powers, and unfold to the world the deepest mysteries of creation" (33). In this way, Victor the scientist, "who analyzes, manipulates, and attempts to control nature unconsciously engages in a form of oppressive sexual politics" (Mellor, "Feminist" 112). The male child's socialization under patriarchy ultimately produces a certain kind of knowledge production based on dominating and exploiting nature and the feminine.

Prior to Victor's departure to school his mother dies, emblematic of the psychoanalytical account of the son's repudiation of the mother in order to establish the self. Interestingly, Elizabeth is described as acquiring all of Caroline Beaufort's maternal attributes as the newly minted object-instrument without interests of her own: "She indeed veiled her grief and strove to act the comforter to us all. She looked steadily on life and assumed its duties with courage and zeal. She devoted herself to...her uncle and cousins" (29). Elizabeth's conflation with the mother is later maliciously resolved in her murder by the creature who critics such as Anne Mellor argue embodies Victor's own desire. Victor's desire for her murder is played out in his dream, which significantly occurs right after he gives life to the creature who functions as a kind of surrogate or avatar for the deepest drives of his id: "I embraced her, but as I imprinted the first kiss on her lips, they became livid with the hue of death...and I thought that I held the corpse of my dead mother in my arms" (43). Elizabeth, as second mother, represents the return of Victor's own repressed feminine side that took the form of repudiating the original mother. Elizabeth's eroticism also serves as a threat to Victor's individuality by linking him to the maternal undifferentiated sea by the boundary merging sex act that is a kind of psychic death. Both female

figures threaten his false differentiation or masculine selfhood and therefore his comfortable estrangement from nature. Only when the threatening feminine is transformed into mechanistic and inert matter can its presence be tolerated and enjoyed.

Victor begins his studies at Ingolstadt having internalized the desire of the masters of science “[who seek] immortality and power” by lawfully wedding and then violently “penetrat[ing] into the recesses of nature [to] show how she works in her hiding-places” (32). Victor’s mentor M. Waldman deploys such rhetoric to inspire his students, words that resemble Keller’s description of the Baconian metaphor of the scientific practice as sexual domination over female nature. Victor’s desperate desire to emulate M. Waldman’s grandiose description of science’s command and penetration into the workings of nature manifests in his drive to create the creature (33). Victor’s schoolboy reverence for the paternal professor resembles Bacon’s promise of sexual dominion over nature to his apprentice as documented in Benjamin Farrington’s *Temporis Partus Masculus: An Untranslated Writing of Francis Bacon*: “My dear, dear boy, what I plan for you is to unite you with things themselves in a chaste, holy, and legal wedlock. And from this association you will secure an increase beyond all the hopes and prayers of ordinary marriages, to wit, a blessed race of Heroes and Supermen” (qtd. in Keller 36). The goals of the scientists are to exploit and dominate nature’s resources so as to create a kind of independent self-serving mirror self for it is they who want to sire and be Supermen (Mellor, “Feminist” 112).

Keller notes an overlooked complementary part to the master metaphor of penetrating a female nature. She finds a kind of feminine receptivity and responsiveness in Bacon’s language: “For man is but the servant and interpreter of nature [...]. [N]ature [can only] be commanded...by being obeyed” (qtd. in Keller 36). This passage reveals the paradoxical

assertion that the scientist must be both domineering and submissive. The scientist must be receptive and permeable to the piercingly seminal knowledge of God to become endowed with the ability to penetrate into nature and sire a Hero. Bacon claims that the “older science represented only a female off-spring, passive, weak, expectant, but now a son was born, active, virile, generative” (qtd. in Keller 38). This statement reveals the rejection of the feminine from the self and aspiration toward the father. M. Krempe confirms this sentiment when he exclaims that Victor “[has] burdened [his] memory with exploded systems and useless names [...]. My dear sir, you must begin your studies entirely anew” (31). According to Bacon and M. Krempe, Victor must begin his studies anew in order to birth the masculine virile science by “cleansing...the human mind of ‘false preconceptions,’ so as to facilitate receptivity” (Keller 38). After the mind is cleansed, “the mind can be impregnated by God and, in that act, virilized: made potent and capable of generating virile offspring in its union with Nature” (Keller 38). Henceforth, the scientific Mind is male and can sire male progeny with female Nature by force via the penetration of her secrets in a mode that resembles rape.

Accordingly, Victor is made to repudiate the ancient “feminine” science in the same way he repudiated identification with the mother and instead studies modern natural philosophy under the guidance of M. Waldman. Indeed, Victor’s mind is restored back to its feminine virgin pureness and God’s rays of light hungrily penetrate his mind and leave him heavy with the virile knowledge needed to couple with female nature and yield “Heroes and Supermen”: “The moon gazed on my midnight labours, while, with unrelaxed and breathless eagerness, I pursued nature to her hiding-places” (39). After the aggressive interaction with nature, Victor’s mind “conceives” the product of this forced union, namely, he “discover[s] the cause of generation and life” and becomes “capable of bestowing animation upon lifeless matter” (37). Keller perceives

that behind the hermaphroditic nature of the scientific mind is a mark of Freud's description of the male child's sexual fantasy. The child originally identifies with both the mother and father but then is socially pressured to identify with the "race of fathers who can give birth" and deny the mother, which gives him the power to assert the self in a delusion of "omnipotent self-sufficiency" (Keller 41). The child achieves omnipotence by "giving birth to himself" while both appropriating and denying the mother. Victor does repress the maternal in his fantasies of Elizabeth's murder and appropriates it in his womb-like laboratory, his "workshop of filthy creation," a "female space" (Youngquist 347) where the embryo-creature's "intricacies of fibres, muscles, and veins" develop to maturity like "toil in the mines" or in a "solitary chamber, or rather a cell" until the "moon gaze[s] on" the "midnight labours" of Victor's "breathless" birthing event that causes his "eyeballs...[to] start[-] from their sockets" (39, 41). Overall, the masculine self who aspires to independence and alienated omnipotence first denies and then assimilates the feminine into the male self, represented by female genocide within *Frankenstein* and Victor's new reproductive capacities.

The patriarchal colonization of the feminine and science's denial of the other's subjecthood leads to nature's attempted instrumentalization and women's dehumanization, all participants ultimately culminating in destruction. Conceptualizing the other as an object to be entirely consumed and transformed into an extension of the self leads to oppressive gender politics and the ruination of nature. Mary Wollstonecraft argues from a similar perspective in her essay "A Vindication of the Rights of Women" that the treatment of women as subordinate disgraces masculine characters, leading to moral decay. What she says of women is applicable to any disenfranchised group including non-human others: "They may be convenient slaves, but slavery will have its constant effect, degrading the master and the abject dependent"

(Wollstonecraft 212). Resembling the previously discussed theories of psychosocial development, Wollstonecraft believes that “English men have been forced to assume the social role of the master and thus taught to be demanding, self-indulgent, arrogant, tyrannical. Treating their women as inferior dependents has undermined men’s ability to understand the needs of others, to act justly or compassionately” (Mellor, “Revolution” 37). As discussed, the feminine is indeed both degraded and destroyed in the novel represented by the metaphors of science and symbolic deaths of Elizabeth and his mother, all an effect of patriarchal socialization.

The feminine within Victor is also deadened due to his patriarchal socialization. Victor is poisoned in his inability to identify with the mother and perform as the recognizing subject or “parent” for he only hears the creature mutter “some inarticulate sounds” and declares that the creature “might have spoken, but I did not hear” before abandoning him (43). Victor is also afflicted by patriarchy as the “charms of nature” become imperceptible to him during his experiment as do the affections of his family, decaying under the “attack by the fatal passion” that leaves him isolated with a “slow fever, . . . and nervous to a most painful degree” (47). If the creature is indeed an attempt to sire oneself, Victor’s flight also implicitly suggests his continued unhealthy suppression of the knowledge that he too requires recognition by and is dependent on the other. Overall, the agitated subject-object split harms both nature and its inhabitants as they purge themselves of an affiliation with the feminine and thereby the natural world.

Shelley’s implicit critique of the damaging project of repudiating, dominating, and appropriating nature and the feminine by nineteenth-century scientists of a polarized hermaphroditic mind parallels the use of females and nature in Romantic literature in general. For example, in “The Eolian Harp” Samuel Taylor Coleridge uses a feminine figure that displays flirtatious prudery toward her lover to represent his idea that the “intellectual breeze” of

Nature/God must ravish the human consciousness in order to inspire the imagination to flighty poetic visions. Perhaps Shelley took notice of and desired to critique the “role that gender plays in masculine Romanticism...[where] the poet [is seen] appropriating whatever of the feminine he deems valuable and then consigning the rest either to silence or to the category of evil” (Mellor, “Gender” 27). Upon a surface glance, Victor and Elizabeth’s early relationship is described as a balance of complementary gendered opposites, an image consistent in Romantic poetry:

“Harmony was the soul of our companionship, and the diversity and contrast that subsisted in our characters drew us nearer together” (23). Eventually, this harmony fails and the feminine is murdered in alignment with the self’s need to repudiate the feminine. In fact, each character that is read as Victor’s feminine half or acts in a feminine manner is initially described as in balance and harmony with Victor’s own masculine identity but each feminine figure or character that dabbles in femininity is ultimately destroyed. For example, Elizabeth having internalized her status as object, earth mother teaches Clerval, who “might not have been so perfectly humane, so thoughtful in his generosity, so full of kindness and tenderness amidst his passion for adventurous exploit,” the feminine art of beneficence and good service in substitute for the masculine ambition he clearly had been socialized into internalizing (24). Due to Elizabeth’s feminine socialization of Clerval, he later serves as Victor’s nurse and also seems to house a stronger feminine connection with nature. Ultimately, Clerval is destroyed by the creature in a continuation of the symbolic rampage of killing all that is feminine within the self.

According to Mellor, feminine qualities are colonized and then appropriated in much of masculine Romantic love poetry as in the poet’s search for the ideal woman in “Alastor” when the speaker says, “Her voice was like the voice of his own soul” (P. Shelley 153). No doubt Shelley noticed the incorporation and instrumentalization underlying the praise of harmonizing

the sexes in much Romantic poetry. In other words, she noticed how the male poet “rather than embracing the female as a valued other, ... [often] effaces her into a narcissistic projection of his own self” (Mellor, “Gender” 25). Mellor believes that the female beloved the male Romantic poet extols is but “self-love: he ignores her human otherness in order to impose his own metaphors, his own identity, upon her, to render her but a clone (or soul mate) of himself” much like Baconian hermaphroditic science appropriates the feminine to sire the self (“Gender” 27). Ideas of harmony are founded on the same problematic and oppressive masculine/feminine binaries that dissolve and unify back into a single masculine form.

Part II: Mary Shelley’s “Feminine” Appropriation of the “Masculine” Sublime

In having Victor form the boundary blurring, feminine, and sublime creature who ultimately refuses incorporation or complementary subjecthood, Mary Shelley seems aware of the “[g]reat riches for feminists in explicitly embracing the possibilities inherent in the breakdown of clean distinctions... structuring the Western self,” how categorical collapse “cracks the matrices of domination and opens geometric possibilities” (Haraway, *Simians* 174). While Shelley is clearly sustaining a powerful critique against the hubris and dominating aspects of some branches of the patriarchy’s nineteenth-century scientific enterprise, arguably, she also is keenly aware of the liberating potential of the biological sciences especially in the Romantic-era’s newly formed natural histories. Specifically, one could read Erasmus Darwin’s proto-evolutionary theory that the “whole is *one family* of one parent” whose members share “mutual bonds and... affections” as an egalitarian reconceptualization of the proper place of women as a node within an intricate and hypervolume, circular rhizome rather than above the animals and below God and man on the Great Chain of Being (qtd. in Fosso 2). As Mellor notes, Shelley implicitly condones observational scientific research that attempts to “describe accurately the

functionings of the physical universe” and opposes that “which attempts to *control* or *change* the universe through human intervention” (“Feminist” 90). However, upon further reflection the text does not offer such a clear delineation between the sciences she either accepts or rejects. It seems Shelley entertains the possibility of biotechnology’s liberating potentials and uses her knowledge of the science of her time to construct a powerful and sublimely, subversive creature who is tragically socialized and ostracized by the patriarchy and thereby destroyed.

Victor’s creature is more than a surface warning against interfering and transgressing against nature in the form of irresponsibly power-motivated experiments doomed to failure. The creature is also (ironically) a short-lived feminist celebratory hope for escape from the roles forced onto female embodiment in patriarchal culture, according to Paul Youngquist’s reading, as well as an alternative to the so-called harmonized sexes which is, to put it crudely, a male figure with a swallowed female inside. Shelley purposely constructs Victor as passionately devoted to and obsessed with the success of his scientific project. He is wrapped up in the pleasure of his narcissistic anticipation of glory and a species that would “bless [him] as its creator and source” so that his failure is felt as that much more devastating to the patriarchal program that wishes to subordinate and objectify nature and the feminine into self-interested use value. Rather than altruism or a sense of service to his community, Victor whole-heartedly pursues his work for the “glory [that] would attend the discovery” (26). Rather than searching for the connections and understandings between humans and nature, in a mode of selfish ambition Victor and his brother-scientists attempt to “ascend into the heavens” and “acquire[-] new and almost unlimited powers” to “command the thunders of heaven, mimic the earthquake, and even mock the invisible world with its own shadows” (33). The complex hubristic mixture of too serious tragic heroism, delusions of omnipotence, mastery, derision, and a glut for power are

what thrive in this description of the scientific agenda, which Shelley pleurably thwarts through the creature.

The goal of science in the text is to dominate and control nature as commodities and services but Victor fails and falls unspeakably far from this idealization in setting loose the uncontrollable embodiment of sublime nature without the hope for masculine transcendence or inspiration. In contradistinction, from the perspective of feminism the creature is not a failure at all but in actuality the ironic formation of the liminal other, the “cyborg monster” that challenges the “political possibilities and limits from those proposed by the mundane fiction of Man and Woman” and Nature (Haraway, *Simians* 180). Victor fails to truly comprehend M. Walden’s naïve yet prophetic consolation that “[t]he labours of men of genius, however erroneously directed, scarcely ever fail in ultimately turning to the solid advantage of mankind” in that he has created a revolutionary figure that will not submit to its incorporation by the patriarch as nature and the feminine have been made to do (34).

The monster is a liberating image in the sense of Haraway’s cyborg in that he helps “redefine the...politics of embodiment” (179). First, it is important to note that the post-gendered world of the cyborg differs from Mary Wollstonecraft’s androgynous ideals. The cyborg is embodied as a kind of polymorphously perverse binary collapse while Wollstonecraft’s androgyne is a disembodied, floating brain in the public space but loyal to his or her appropriate gender role in the private sphere as assigned to female and male anatomies by the colonizing hegemonic master narrative. Furthermore, the monster-cyborg is different from the way Romantic writers have idealized the gender poles by calling for their harmonization in a pursuit of mythic wholeness. This dualistic vision of harmony often maintains an oppressive distinction between culture/nature and man/woman whereas the revolutionary creature’s monstrosity de-

natures/mutates sure binaries. The creature is a proto-cyborg revolutionary figure because he dwells on the boundaries distinguishing sacred and profane, natural and unnatural, and forces one to acknowledge one's proximity to inanimate matter and animality. He queerly reveals that all life forms, including the stable, rational subject, are actually a "*mesh*, a nontotalizable, open-ended concatenation of interrelations that blur and confound boundaries at practically any level: between species, between living and nonliving" (Morton, "Queer Ecology" 276). He denies the self's delusion of firm boundaries and homocentric superiority as he is fashioned from human and animal materials taken from charnel houses and slaughterhouses. The creature mixes gender roles and interests in that he femininely delights in the "sight of flowers, the birds, and all the gay apparel of summer" (112). He is also cultured in the Western literary canon, thus becoming the most rationally male character in the novel in the Romantic sense. Yet he is also "like a wild beast...ranging through the wood with a staglike swiftness" as well as being eloquent, reasoning, and sincere (116).

Because the creature is made rather than born, he undermines the patriarchal myth of original unity "represented by the phallic mother from whom all humans must separate...with its inescapable apocalypse of final return to a deathly oneness that Man has imaged to be the innocent and all-powerful Mother, freed at the End from another spiral of appropriation by her son" (Haraway, *Simians* 176). This is the myth that interpellates scientists and poets into repudiating and assimilating the feminine and nature in their work and it is also the medical narrative used to account for and justify male estrangement, domination, and objectification of nature and the feminine. Instead the creature is human created, defying rigid definitions of human authenticity and "naturalness," and so *potentially* immune to such poisonous self-fulfilling prophesy. Finally, as the cyborg realm is a "monstrous world without gender," meaning

an escape from gender performativity and prescription, Shelley too fantasizes “female independence from the biological fate of motherhood” (Youngquist 353). She imagines freedom from compulsory reproduction and oppressive gender roles as represented by the creature’s total disregard to the norm of maintaining the integrity of identity categories as well as the hope embodied by the new medical technologies that artificially generate the creature that suggest unprecedented bodily autonomy. Shelley both critiques Victor’s destructive parthenogenesis while also taking advantage of its liberating potential. The creature represents the fantasy of an escape from patriarchal hierarchical identities and their stagnant corresponding fates.

The creature stimulates feelings in the characters of an overwhelming sublime nature in his challenge of patriarchal definitions of self while also blocking the usual accompanying inspiration and transcendence, thus presenting a subtle critique of the masculine sublime. Victor wanted to create a tame species of slaves to nurse his ego and instead forms the sublime proto-cyborg, the revolutionary subject, the epitome of transgression against the master narratives of colonizing science and patriarchal family politics for which Victor stands. No wonder Victor feels “the beauty of the dream vanish[-], and breathless horror and disgust fill[-] [his] heart” as he gazes upon the “being [he] had created” and decides to flee the scene of his blasphemy (42). Upon the opening of the “dull yellow eye of the creature” Victor stands vis-à-vis with the sublime and subversive figure, shocked to learn that nature is “[n]either mother, nurse, lover, nor slave, nature is not matrix, resource, mirror, [muse], nor tool for the reproduction of that odd ethnocentric, phallogocentric, putatively universal being called Man” (Haraway, “Otherworldly” 70). Perhaps sensing the “boundary-maintaining images of base and superstructure, public and private, or material and ideal never seem[ing] more feeble” (Haraway, *Simians* 165), Victor ambiguously exclaims, “Beautiful! Great God!” before describing the creature’s mixture of

beautiful and horrific features much like the sublimity one would feel on the edge of a craggy precipice (42). Victor's mission was to dominate and control nature and thereby ascend to heaven much like the creative process one undergoes as a part of the male transcendental sublime. The male poet's experience of the sublime is described as beginning in a desire to control the alienating and threatening natural world with the hope that "through transcendence" he might "escape the confines of the physical world in order to rejoin, on a 'higher' spiritual/intellectual level, an idealized nature that he has subdued" (Pipkin 599). The aesthetics of the transcendental or "masculine" sublime begins with a debilitating and humbling sense of fear and awe in the insignificance and smallness of "man" in the face of an intimidating aspect of nature. However, the subject quickly recovers from this humiliating experience in his desire to control the nature world through transcendence where the "subject's mind and/or imagination is exalted above nature, transcending anything it encounters in the material world" (Economides, "Sublimity" 89). Instead, Victor sets nature free gaining an unwanted glimpse of the true image of and humanity's affinity to the nonhuman and the so-called feminine as multiform, blurred, and uncontrollable. The creature represents the experience of the sublime as the disruption of traditional culture – he is the image of the revolutionary who decides that his fate "shall not be the submission of abject slavery" (124).

Shelley seems to subtly invert Romanticism's "identification of the sublime with...masculine empowerment" and instead constructs the sublime as the horrifying experience of the destabilization of the patriarchal sense of self and its appropriating tendencies through the image of the creature (Mellor, "Domesticating" 91). She refuses to satisfy the "masculinist sublime that seeks to master, appropriate, or colonize the other" by first "femininely" and passively submitting to the overwhelming forces of nature before being impregnated with an

epiphany in order to actively transform fear into poetic empowerment (Pipkin 599). A method aesthetically similar to this is used in the previously discussed account of scientific hermaphroditism in order to repudiate the female while fathering the self and virile sons. Instead, Shelley seems to appropriate and parody the masculine sublime by forming the creature who sabotages patriarchal projects of transcendence, glory, and stable selfhood. For example, Victor's journey to the village of Chamounix to climb to the peak of Montanvert is at first in complete conformity to the masculine construction of the sublime. He tells Walton that the "view of the tremendous and ever-moving glacier" filled him with a "sublime ecstasy that gave wings to the soul and allowed it to soar from the obscure world to light and joy" (79). However, the creature serves as a kind of blockage to this experience of transcending one's physical limitations for the "presence of another would destroy the solitary grandeur of the scene." Indeed, the moment Victor experiences the overwhelming sublimity of nature the creature approaches him provoking more horrific and monstrous images of the sublime: "He bounded over the ice...sight tremendous and abhorred!" (80).

Earlier in the novel the first glimpse that Victor gets of the creature since its animation in his feminine-appropriating laboratory is at the site of William's murder amongst a torrent of sublime lightning. The moment he realizes that the creature is the harbinger of death to patriarchal selfhood the lightning illuminates the creature "hanging among the rocks of the nearly perpendicular ascent of Mont Salève" (60). This image aligns the creature with a subversive sublime. The image of the creature amongst the sublime weather and landscape momentarily shocks Victor into recognizing his mortality, his identity as a "being of nature" whose existence is entirely wrapped up in others and forces greater than he, all of which runs counter to his patriarchal conception of alienated selfhood and delusion of omnipotence (Hitt 607). For

example, the creature provokes Victor to ponder the interconnectedness of life signified by the vulnerability of his family: “I considered the being whom I had cast among mankind and endowed with the will and power to effect purposes of horror...nearly in the light of my own vampire, my own spirit let loose from the grave” (60). Moreover, these lines suggest both Victor’s identification with the creature as his sired self and a reading of the creature’s subversive potential as horrifying to the integrity of patriarchal structures. It is atop the sublime mountain that Victor again momentarily sympathizes with the creature after the creature’s narrative: “I compassioned him and sometimes felt a wish to console him” (126). The creature provokes Victor to cross his constructed anatomical boundaries and to acknowledge the similarities between the self and other that is not an extension of the self. Victor comes close here to learning that to truly love the natural, “not as a mirror of our mind but as sheer otherness, would be to love what is least subjective about it,” what is strange, “ugly,” and disconcerting (Morton, “Dark Ecology” 266). The creature invites him to step out of his solitary and sterile existence but he “cannot bear so much reality” and responds to such a sublime prospect in unrelieved and unproductive horror (Randel 528).

All of the characters that come into contact with the creature respond to him with the same exclamation of “Great God!” This horror signifies a Burkian sublimity, which is experienced as the threat of annihilation of the self on a psychic-level, but only here also, Shelley offers no opportunity for patriarchal empowerment. The sociocultural context that the characters inhabit is not a “cyborg world...in which people are not afraid of their joint kinship with animals and machines, not afraid of permanently partial identities and contradictory standpoints” (Haraway, *Simians* 154). These blurred identities threaten patriarchal selfhood. Even the liberal egalitarian De Lacey family of harmonized masculine and feminine opposites cannot tolerate the

monstrous “breach of nature and culture,” the transgression of the boundary between human and animal, life and death, artificial and natural (152). The old man De Lacey requests that the creature confess his story: “I am blind and cannot judge of your countenance, but there is something in your words which persuades me that you are sincere. I am poor and an exile, but it will afford me true pleasure to be in any way serviceable to a human creature” (Shelley 114). These sentences reveal the body as a map of social relations. They reveal De Lacey’s allegiance to gender conformity and definitions of man as of culture, not of nature or animal disposition. According to Jonathan Bate, the De Lacey’s treatment of the creature can also be considered “speciesist” (53) where speciesism, like racism and sexism, is defined as the discrimination “against an other based only on a generic description and not on what we actually know about its needs, interests, and capabilities” (Wolfe, *Animal Rites* 34). Indeed, it is Felix’s shallow response to the creature’s outward, alien appearance that leads to his condemnation not his internal merits or concerns. And so, upon the family’s entrance the creature begs for protection whereupon the old man exclaims, “Great God!...Who are you?” and the family falls apart in sublime horror (115).

The horrified inquiry into the identity of the creature is significant, suggesting an awareness of the creature’s unlawful hybridity. Felix responds with violence forcing the creature to the ground and striking him “violently with a stick” (115). They cannot tolerate the heterogeneous multiplicity of themselves they see reflected back at them in the form of the creature and respond by dominating, an attempt to repress the creature back into conformity as the proper image of the object other to secure their senses of self. Furthermore, the text emphasizes again the creature’s alignment with the sublime when the creature remarks that he “could have torn [Felix] limb from limb, as the lion rends the antelope.” The characters’ fear of

annihilation corresponds to the sublime representation of the socially destabilizing and overwhelming presentation of a more accurate and “meshed” version of the human: post-gender, post-reproduction, animalistic and cultured, uncontrollably passionate, reasonable, and godless.

Likewise, Victor later creates a female creature who embodies the “meshed” notions of unlawful hybridity above so thoroughly that she is prematurely and violently destroyed prior to animation. Victor responds to the sublime potential of his female creature with horror and aggression similar to the way the De Lacey family responded to his first male creature. His aggression and horror is a deep-seated fear of the transgressive, uncontrollable subject, the proto-cyborg that collapses his logic of domination and source of power by undermining gender roles, species boundaries, and the nature/culture divide. Furthermore, the female creature threateningly embodies more sublime connotations rather than the beautiful as prescribed by Burke who believes the category of the beautiful “demarcates the limits of the sublime, maintains the social order by transforming lust into love, distinguishes feminine from male characteristics” (Pipkin 605). The cyborg-female-monster “defies that sexist aesthetic that insists that women be small delicate, modest, passive, and sexually pleasing” (Mellor, “Possessing” 360). Victor reasons that, much like Mary Wollstonecraft, the female creature, “who in probability was to become a thinking and reasoning animal, might refuse to comply with a compact made before her creation” (144). He senses that his creatures stand for a restructuring of family, race, sex, and class in that they challenge the defined limits of the patriarchal self and other. The female creature wakes him to the notion that there is “nothing about being ‘female’ that naturally binds women. There is not even such a state as ‘being’ female, itself a highly complex category constructed in contested sexual scientific discourses and other social practices” (Haraway, *Simians* 155). Victor conceives of the female creature as a being who “threatens the very foundation of patriarchal power” and

his own definitions of the self, so he violently destroys a creature who “might assert her own integrity and the revolutionary right to determine her own existence” apart from the consciousness forced upon her by colonizing patriarchy (Mellor, “Possessing” 360).

Like the female monster, the illegitimate proto-cyborg creature has no fertile ground to cultivate his wisdom of liminal multiform existence. This picture of the creature was perhaps informed by Wollstonecraft’s solitary fight, a woman who was slandered as a hybrid, monstrous “hyena in petticoats” and doomed as a female body with an “unnatural” genius. The creature is seduced and falls prey to fulfilling the patriarchal apocalypse as Wollstonecraft was destroyed by the toxic fate of compulsory femininity and reproduction. Early in the text Victor frames a foreshowing of the tragedies to come when he begs Walton, “[I]earn from me, if not by my precepts, at least by my example, how dangerous is the acquirement of knowledge and how much happier that man is who believes his native town to be the world, than he who aspires to become greater than his nature will allow” (38). These lines simultaneously warn against human hubris as well as possibly expressing Shelley’s desire for the ignorance of feminine conformity and acceptance of her biological fate that her mother made impossible. Shelley seems to warn that the way is barren and long for the isolated revolutionary subject often ending in failure.

Haraway interestingly points out how Victor’s creature falls short of her cyborg ideal in that he still exhibits a neurosis of false consciousness and aspires toward patriarchal self-assertion and social acceptance: “[T]he cyborg does not expect its father to save it through a restoration of the garden; that is, through the fabrication of a heterosexual mate, through its completion in a finished whole, a city and cosmos” (Haraway, *Simians* 151). The creature fails in his revolutionary potential because of the lack of guiding cyborg feminist authority and his self-education that consists of patriarchal origin myths. Felix unknowingly instructs the creature in

“the strange system of human society...the division of property, of immense wealth and squalid poverty, of rank, descent, and noble blood” (Shelley 100). The creature reports that the “words induced me to turn toward myself” stimulating him to narcissistically reflect on his own identity and void status (Shelley 100). These lines suggest the creature is stirred to the aspiration of a patriarchal identity that he knows he will never be able to acquire. Moreover, he comes to idealize patriarchal society’s desire for father-identification, the self-sacrifice of mothers, autonomy, and gender difference: “Other lessons were impressed upon me even more deeply. I heard of the difference of sexes,...how all the life and cares of the mother were wrapped up in the precious charge” (101). Learning the supposed “proper” formulation of the nuclear heterosexual family, the creature goes on to lament his lack. He acknowledges his own social conditioning by remarking that the “patriarchal lives of my protectors caused these impressions to take firm hold on my mind” and comments that if he had been exposed to more revolutionary perspectives he might “have been imbued with different sensations.” Human nature is not determined but instead it is learned. His secret education persuades him to live out the patriarchal apocalypse of Oedipal warfare whose conclusion ultimately is self-annihilation in a symbolic return to the mother as represented by his preconceived fiery death engulfed by the frozen maternal sea. While the creature’s tale ends in a predictable patriarchal tragedy, Shelley has still planted a cryptic yet subversive seed.

Mary Shelley’s account of Victor’s patriarchal maturation process and corresponding socialization into a scientist anticipates feminist psychoanalytical critiques of human development. This development entails the establishment of selfhood at the cost of objectifying, rejecting, dominating, and instrumentalizing the other of the first bond and nature. Additionally, the text reveals the appropriation of the feminine by the masculine mind as outlined in Victor’s

apprenticeship, figuratively, a scientific-sexual maturation process. The dangerous consequences of these gender politics, which encompass the domination and repression of a multiform nature, are reproduced by the patriarchal family and manifested in science. They are implicit in the gruesome murders of the female characters and Victor's own physical and mental deterioration. Furthermore, while the text offers a critique of both the patriarchal socialization process and its mirror within the scientific enterprise, Shelley also figures biotechnological endeavors as potentially liberating. She revises the masculine notion of the sublime as overwhelming yet ultimately empowering by creating the sublime creature, that in many ways mirrors feminine nature, to subversively disrupt and even transform reified identity categories and defy subordination and incorporation by the masculine-poetic-scientific mind.

CHAPTER THREE: The Domination of Women and Nature by Biotechnological Patriarchal-Capitalist Culture in Margaret Atwood's *Oryx and Crake*

Humanity had to inflict terrible injuries on itself before the self—the identical, purpose-directed, masculine character of human beings—was created, and something of this process is repeated in every childhood.

Max Horkheimer & Theodor Adorno, *Dialectic of Enlightenment* (1944)

Margaret Atwood's *Oryx and Crake* updates for our own time Mary Shelley's interrogation of her nineteenth-century society. Atwood explores how the "masculine" pathology that is nurtured within twenty-first century Western middle-class capitalist families is implicated in the destruction of human and nonhuman "nature" as exemplified in the objectification of animals and women by the scientific communities and within the consuming milieu of the pleeblands. Specifically, Atwood looks at how the technoscientific-capitalist patriarchal environment shapes the scientist Crake's masculine subjectivity and problematic life aspirations to ultimately critique the masculinization of science and its dangerous consequences for women, animals, and the health of the planet in general. The laboratory animals and Oryx epitomize the for-profit products of late-biocapitalism, what Haraway terms the "informatics of domination," while Jimmy and Crake represent its horrifying orchestrators.

Part I, *Interpersonal Distortions and Technocratic Hegemony as Products of Human Development within Western Patriarchal Culture*, argues that *Oryx and Crake* explores the process and malign results of patriarchal socialization on individual identity as well as romantic, fraternal, and familial interpersonal relations through the experiences of Jimmy, Crake, and their families. The novel also looks at how human development within this context manifests itself in particular scientific attitudes (embodied by Crake's probing masculine gendered science that reeks of a disconnected superiority and a fear of and desire to appropriate the feminine). Part II,

Life as “Other” within the Technocratic Hegemony, briefly looks at how these technocratic cultural values and projects culminate in tragic consequences for humanity and nature as well as for women in *Oryx and Crake*.

Part I: Interpersonal Distortions and Technocratic Hegemony as Products of Human Development within Western Patriarchal Culture

As discussed in the previous chapters of this thesis, boys develop hyper-independent detached individualities and girls selfless, object-instrument personas in patriarchal households in which women mother. Moreover, the estranged masculine subject is associated with controlling and dominating relational capacities while the undifferentiated, continuous feminine object lacks individuality, self-boundaries and performs the interpersonal role of “abject dependency, the inability to tolerate separation and aloneness” (Benjamin 160). Nancy Chodorow has illustrated in her essay “The Sexual Sociology of Adult Life” these “[d]iffering relational capacities and forms of identification prepare women and men to assume the adult gender roles which situate women primarily within the sphere of reproduction in a sexually unequal society” and men in the general labor force or scientific and technical workforce (265). Indeed, a similar occurrence is explored in the postmodern dystopian society of the novel *Oryx and Crake* where sexually polarized psychodynamics conditions men and women for their appropriate place within a “strongly bimodal social structure, with the masses of women and men of all ethnic groups, but especially people of colour, confined to a homework economy, illiteracy of several varieties, and general redundancy and impotence, controlled by high-tech repressive apparatuses ranging from entertainment to surveillance and disappearance” (Haraway, *Simians* 169). In the novels, women socialized under patriarchy in both classes “lead[-] an existence that always borders on being obscene, out of place, and reducible to sex” (166). The

men either assume submissive lower level jobs that require obedience and conformity (a posture that reveals the boy's dream of total union/merger with or envelopment by the m(other) as the faulty response to the original separation) or they assert themselves in controlling or domineering positions of power such as those advertised by science (a father-identifying, mother-repudiating posture). Thus, though Oryx is conditioned for and confined to the homework economy while Sharon, Jimmy's mother, is primed for the technocratic private home² they operate in the same fashion as exploitable and selfless object-instruments of subservience in accordance with their socialization under patriarchy. Jimmy takes a less "masculine" position as an advertisement producer, and Crake pursues the stereotypic male dream of dominion over nature, as they aspire to their contradictory projects of reunion with and denial of the maternal respectively.

Benjamin describes the dominating male and submissive female roles as defensive responses linked to false differentiation originating in the precarious separation-individuation period. Under patriarchy, when the child begins to feel himself separate from the mother (and understand neither he nor his mother to be omnipotent in their original unity with nature) he often defensively responds by denying his anxiety and loss and instead turning it into confidence and mastery: "the child seeks mastery over the frustrations of separation and lack of gratification through assertion of self against the mother and all that she represents and a rejection of all dependency on her" (Bordo 107). In an attempt to carve out a self from the mother matrix or "place the other outside the sphere of mental control of omnipotence," the infant inflicts

² Jimmy's mother eventually decides to rebel against the expectation that she will perform according to the tradition of the self-sacrificing female by abandoning her family to join an underground resistance movement. However, it is important to note that the toxic patriarchal environment leaves her with two desperate and ultimately unfulfilling, life-stealing options, namely, to quietly conform to her role as object that she was conditioned to assume or perpetually mourn the unavoidable separation from her children and meet an untimely death as a "treasonous" revolutionary. Regardless, she has to fall into the despair of the isolation of the domestic sphere, the female space she was created to manage where she socializes Jimmy under the patriarchal definitions of masculinity and femininity, before she realizes that the dismantling of her totalitarian corporation-run state would beneficially impact more people potentially than if she were to remain with her children or in a situation where she could keep her life. While Sharon is transparent about her contempt for the unethical treatment of scientific test subjects and uncritical, profit-driven biotechnological manipulations of nature, it is not clear whether her motives for resistance center around a desire to undermine gender prescriptions and relations, a project essential to the success of social and environmental justice movements.

aggressive acts upon the mother in the hopes of colliding with the “other’s resistance . . . to establish her or his solid, independent presence,” to place her outside his field of omnipotence (Benjamin 164). It is important that the mother recognize these acts so as to give “her or him the feeling of meaningful selfhood and relations with others.” If the mother does not set a limit, respond in a way that asserts her own independent subjectivity, the child will fail to place the other outside the self and fail to understand boundaries. In the case of failure “the act of placing the other outside is converted to assertion of control or possession over her . . . , in a denial of one’s own dependence” (166). The result is a male child for “which the outside world is seen purely as a creation of and an object for the self” (Flax 260). The other is felt purely as an object and instrument and the subject is eternally frustrated by the need for recognition and separation. Therefore, the child, depending on its gender socialization, spends life either denying its dependency and need for recognition by controlling, objectifying, and instrumentalizing the other to establish an acute distance and dissimilarity or relinquishing selfhood in the “female posture [which] disposes [one] to accept objectification and control in order to flee separation, both as aloneness and as self-assertion” (Benjamin 167). Interestingly, the male personality remains hazardously balanced between falling back into its longing for symbiosis with and maintaining its suffocating separation from the other. As a result, “one’s own wishes, body, women, and anything like them (nature) must be partially objectified, depersonalized and rigidly separated from the core self in order to be controlled” (Flax 261). Thus Jimmy’s developmental trajectory moves from symbiosis to the violence of maternal separation by the pressure to identify with the father and ends in an anxious desire for reabsorption as well as a subtle wish for omnipotence. In contradistinction, Crake’s professional and sexual personality wishes to “possess the mother as a fantasy of ‘becoming the father of oneself’ where his sexual and

professional activities “become[-] a means of denying the actual passivity of having been born from that original state of union into ‘a body of limited powers, at a time and place [one] never chose’ ...at the mercy of the now-alien will of the mother” (Bordo 107). He chooses separateness and the pleasure of control and mastery over those whom he denies being dependent upon: feminized-others, women, and nature.

Safely tucked within the OrganInc technoscientific Compound, Jimmy’s socialization into masculine objectivity and detachment is first evidenced in the discussion of animal feelings at a bonfire functioning to dispose of “bioterrorist” infected cow and sheep carcasses. Young Jimmy, outfitted in rubber boots with duck prints on the toes, is told to walk through a pan of disinfectant. When he expresses worry for the animals pictured on his boots he is told that the cartoon ducks “weren’t real and had no feelings, but he didn’t quite believe it” (*Oryx and Crake* 15). There is no congratulatory sigh at his misplaced compassion to quietly guide him into the realm of reciprocity (as would have potentially occurred if he had been female). Instead, in his mind, he is stranded in a strange deceptive world of parental authority indifferent to the suffering of certain objects. Indeed, the masculinization process “begins with beating the tenderness and empathy out of small boys and directing their natural human curiosity and joy in affecting the world around them into arrogant attitudes and destructive paths” (King 409).

Later his mother and bioengineer father get into a fight whereupon the mother, Sharon, retreats to the bedroom and his unnamed father (coolly anonymous as the “invisible” scientist reflecting on the known as distant and separate knower) fills Jimmy in on women and the “[h]otness and coldness, coming and going in the strange musky flowery variable weather country inside their clothes – mysterious important, uncontrollable. [...] But men’s body temperatures were never dealt with; they were never even mentioned. [...] Why nothing about

the hot collars of men?” (*Oryx and Crake* 17). These lines allude to the misogynistic stereotype that women are unpredictable, passionate, uncontrollable bodies much like volatile weather systems. On the other hand, men enjoy existence within the presumed homeostasis of “controlled” masculinity or their identities are more radically disassociated from their embodiment. Additionally, falsely differentiated, these lines demonstrate that Jimmy’s father sees the world “divided into two parts—the knower (mind [– self]) and the knowable (nature [– other]). [...] The scientific mind is set apart from what is to be known, that is, from nature, and [his] autonomy...is guaranteed” (Keller, *Gender* 79). Likewise, Jimmy’s father’s silence on the “male” condition is consistent with a psychology and sensibility that strives for pure detachment, objectivity, and complete independence from the feminine world of passionate affect. Similarly, Jimmy’s adult brain, having been molded within a highly scientific environment, believes that Oryx is a “casketful of secrets. Any moment now she would open herself up, reveal to him the essential thing, the hidden thing at the core of life, or of her life, or of his life – the thing he was longing to know” (314). All of the above lines reveal the masculine anxiety of the threatening other as interiorly indecipherable, a view that has been known to culminate into aggressive attempts by scientists to penetrate into “female” secretive caverns. Keller argues that this desire to “expose female interiority, to bring it into the light, and thus to dissolve its threat entirely,” is a distinguishing mark of modern science and especially molecular biology’s reductionist obsession with discovering the “secret of life” (“Making Gender” 457).

Jimmy’s relationship with his mother and nature is initially one of union. For example, Jimmy becomes upset over the prospect of consuming the transgenic pigeons used to grow human organs: “[H]e was confused about who should be allowed to eat what. He didn’t want to eat a pigeon, because he thought of the pigeons as creatures much like himself. Neither he nor

they had a lot of say in what was going on” (*Oryx and Crake* 24). Jimmy’s concern for the pigoons demonstrates his initial identification with disempowered “objects” (both animals and women in his society). Jimmy’s natural progression from mother-child unity to a healthy sense of autonomy becomes distorted by the toxic domestic context within the patriarchal-capitalist culture. His scientist mother decides to quit her job and reasserts her position as stay-at-home-mom, a thing that “was held out to him like a treat” (30). She is presented as an object of pleasure for his utilitarian desires. Later the reader finds out her return home is not merely based on a selfless mother stereotype to perpetually serve her son but rather due to her ethical qualms with the scientific experimentation going on at OrganInc Farms. She is lethargic, apathetic, and despondent at home, hardly the “recognizer” Jimmy needs to develop into a wholly differentiated person endowed with a dynamic autonomy. In fact, neither of Jimmy’s parents are described as fulfilling the essential role of recognizer: “About the different, secret person living inside [Jimmy] they knew nothing at all” (58). Sharon’s helpless object-attitude quickly causes Jimmy to pursue sadistic projects in his relations with his mother: “As he grew older and more devious, he found that on the days when he couldn’t grab some approval, he could at least get a reaction. Anything was better than the flat voice, the blank eyes, the tired staring out of the window” (32). After upsetting Sharon to the point of chokes and cries, Jimmy reports that he feels sorry “but there was more to it: he was also gloating, congratulating himself, because he’d managed to create such an effect” (33). Jimmy inflicts pain upon his mother so that he can feel some sort of bounded self to stave off the threatening void. Her helpless and emotionally dead behavior is the product of an oppressive social structure that confines one either to the dominating projects of technoscience (a location she is psychically not conditioned for) or the submission of home. Jimmy’s father uses this knowledge to his empowered argumentative advantage when she tries to

critique his research: ““Anyway it’s been paying for your room and board, it’s been putting food on your table. You’re hardly in a position to take the high ground”” (57). To which she tragically responds, “Believe me, that is one thing I really do know. Why can’t you get a job doing something honest? Something basic.” These lines reveal that Sharon is aware of her impotent entrapment within the cannibalistic system. Jimmy learns while his mother knows, one either assumes the position of eaten object or eating subject within the informatics of domination.

Jimmy’s pressure into identifying with the masculine posture of the father continues throughout his childhood. He reflects that his “father was always giving him tools, trying to make him more practical. In his father’s opinion Jimmy couldn’t screw in a lightbulb” (*Oryx and Crake* 37). Moreover, Jimmy’s father explains to him, after transferring to a better job at NooSkins where they develop youth rejuvenating “skin-related biotechnologies,” that “[t]he rewards in case of success would be enormous...doing the straight-talking man-to-man act he had recently adopted with Jimmy” (55). There is no mention of the “ravaged hopefuls who had volunteered themselves as subjects, paying no fees but signing away their rights to sue, [that] had come out looking like the Mould Creature from Outer Space – uneven in tone, greenish, and peeling in ragged strips.” The message to Jimmy from his father is clear: masculinity within the informatics of domination involves capitalizing on the less fortunate by adopting instrumentalist and unfeeling attitudes of estranged distance from the object world, which disturbingly includes “feminized” human beings.

Jimmy effectively satirizes and thereby dismisses the truth of this unfortunate situation when he creates the caricatures Evil Dad and Righteous Mom:

Evil Dad blustered and theorized and dished out pompous bullshit, Righteous Mom complained and accused. In Righteous Mom’s cosmology, Evil Dad was the sole source of hemorrhoids, kleptomania, global conflict, bad breath, tectonic-

plate fault lines, and clogged drains, as well as every migraine headache and menstrual cramp Righteous Mom had ever suffered. (60)

These distorted parental lessons result in Jimmy's false differentiation, which manifests itself in contradictory yet unsurprising ways. The hyper-autonomous (dependency denying) objectifying side of himself is made evident in his puberty when he starts "having sexy dreams...about girls a lot in the abstract, as it were – without heads" (59). Simultaneously, his closest companion Killer, who is a spliced raccoon/skunk hybrid called a rakunk, ("the only person he could really talk to") reflects his anxious and secret longing to submerge back into unity with the maternal realm (59). Rather than dissecting or mutilating living creatures in the mode of an emotionally detached stereotypical boy, Jimmy relishes the absolute symbiotic and affectionate dependency between himself and his pet. Furthermore, his relationship with the rakunk illustrates that he is not persuaded of the object-status of disempowered others, bioengineered or not.

One can also read the little rakunk as a "transitional object" that Jimmy employs in his attempt to become a parent to himself in order to assuage his feelings of helpless dependency on his mother. According to Bordo, the transitional object functions as the child himself wherein "cuddling...the object, the child is actually playing at self-parenting, at being his own baby. Such self-parenting allows the child to feel less precariously at the mercy of the mother, more in control of his or her own destiny" (107). Indeed, when Sharon performs the ultimate separation from Jimmy by abandoning him she also "liberates" Killer³ who represents Jimmy's own psychic state as evidenced when he exclaims: "Killer was his! And Killer was a tame animal, she'd be helpless on her own, she wouldn't know how to fend for herself, everything hungry

³ "Killer" is an ironic name for Jimmy to give his rakunk, given he is projecting his own sense of vulnerability and helplessness onto the animal. Jimmy intends to call the animal "Bandit" but is dissuaded by the ridicule of his mother. He settles on the name "Killer" perhaps to compensate for his discomfort with dependence and to overcome the humiliation of his mother with some kind of display of power. Giving the rakunk the name "Killer" represents his attempt to psychically construct himself as a strong, masculine-subject instead of a weak child whose feelings are vulnerable to the mother's cruel whims. Moreover, there is a subtle suggestion that choosing the name Bandit is not red-blooded or manly enough. Jimmy subconsciously knows the desire to call his pet "Bandit" does not conform to masculine gender performativity while "Killer" is clearly the "all boy" name choice.

would tear her into furry black and white pieces” (*Oryx and Crake* 61). It seems Jimmy projects his own dependency and helplessness onto his little rakunk as many such exotic animals succeed just fine in a feral state. This apprehensiveness at reliance resurfaces in his adult aspiration to become untouchable, in his effort to be “himself, alone, unique, self-created, and self-sufficient” (176), the omnipotent father of himself and one who “never dreams about his mother, only her absence” (277). Additionally, one can see his complementary childhood desire for symbiosis in his adult fantasy of Oryx as “legion,” a descriptor that associates her with the ubiquitous character of nature or the maternal realm. In this fantasy he imagines she might “glide into his body and be present with him in his flesh, and his hand on himself will become her hand” (110). Jimmy unconsciously reflects on his strange dual impulses as he licks Oryx’s food soiled fingers: “This was the closest she could get to him without becoming food: she was in him, or part of her was in part of him. Sex was the other way around: while that was going on, he was in her. *I’ll make you mine*, lovers said in old books. They never said, *I’ll make you me*” (315). He eternally battles himself in his dual endeavors to engulf the world as his own omnipotent mind and submit to reengulfment by the other. Clearly, socialization under patriarchy results in the perverted polarization of the individual and collective consciousness.

Crake’s developmental processes are not explicitly delineated in the novel. However, because he grows up in a patriarchal household within the biotech Compound environment it is safe to assume his unfolding follows a similar trajectory to Jimmy’s. Rather than choosing Jimmy’s more ambivalent set of defensive responses to the separation-individuation processes of childhood, Crake seems to wholly identify with the objectifying father persona. As evidence of his choice to deny and distance himself from the original relation by objectifying and dominating the other, the reader is given a chilling glimpse of Crake’s affectless response to his mother’s

horrific death by a transgenic staph infection, which the text later suggests may have been transmitted to her by Crake himself. There is much in the text to suggest that this murder may have been motivated by the affair Crake's mother had with his "uncle" suggesting a violent desire to control women's sexuality in patriarchy that foreshadows Crake's later jealous murder of Oryx as she glides into Jimmy's arms after her nightly visitations to Crake. As a scientist looking through a microscope at his specimen, he is able to coolly view his mother through the isolation room window where she is "frothing" as the bioform eats through her:

His mother was supposed to be able to speak her last words to him via the mike system...but there was a digital failure; so though he could see her lips moving, he couldn't hear what she was saying. 'Otherwise put, just like daily life,' said Crake. He said anyway he hadn't missed much, because by that stage she'd been incoherent.

Jimmy didn't understand how he could be so nil about it – it was horrible, the thought of Crake watching his own mother dissolve like that. (177)

Keller cites many studies of scientists that have found those who entertain a "distant relation to the mother" couple this stance with "open or covert attitudes of derogation" toward their mothers, which is certainly true of famous scientists such as Newton (*Gender* 91). In addition to Crake's mother-objectifying nature, he identifies with his dead scientist father who he romanticizes as the benevolent colonizing master with his "head in the clouds [who] believed in contributing to the improvement of the human lot" (183). Furthermore, Chodorow has noted how "boys in father-absent and normally father-remote families develop a sense of what it is to be masculine through identification with cultural images of masculinity and men chosen as masculine models" (266). If we accept this as possible, given Jimmy and Crake's consumption of child pornography and excessively violent media, in addition to the influence of their parental figures, then the boys hardly have a chance at developing into anything other than subjects prepared to participate in an objectifying, dominating, sadistic, and ethically indifferent

nonrelational world: “The same repressions, denials of affect and attachment, rejection of the world of women and things feminine, appropriation of the world of men and identification with the father that create a psychology of masculine superiority also condition men for participation in the capitalist work world” and in Crake’s case in particular, the biotechnological work world (Chodorow 268).

Given his upbringing and analytical skills, Crake enters Watson-Crick, one of the most prestigious technocratic universities within the novel. Crake’s attraction to this institution may stem from its valorization of “[a] science that advertises itself as revealing a reality in which subject and object are unmistakably distinct,” which “offer[s] special comfort to those who, as individuals (be they male or female), retain particular anxiety about the loss of autonomy” (Keller, *Gender* 90). Indeed, Crake describes the students populating Watson-Crick as fully endowed with a strident capacity for objectivity but lacking the skills for reciprocal relations when he says they have “single-track tunnel-vision minds...[and] a marked degree of social ineptitude” (*Oryx and Crake* 193). Keller has also cited studies that report that scientists “tend overwhelmingly to have been loners as children, to be low in social interests and skills, indeed to avoid interpersonal contact” (91). On the romantic side of things “young scientists are typically not very interested in girls” which reflects a personality interested in keeping the feminine object at a comfortable remove (91). Crake professes his fear of the boundary loss inherent to eroticism when he reduces it to a simplified and unthreatening biological impulse and activity of revulsion in one stroke: “Falling in love, although it resulted in altered body chemistry and was therefore real, was a hormonally induced delusional state [...]. In addition it was humiliating, because it put you at a disadvantage, it gave the love object too much power” (193). Crake’s philosophy on

love reflects the false differentiation of his childhood in which the “emphasis on separating and drawing boundaries excludes and defends against merging and identifying” (Benjamin 167).

The vestiges of the masculine desire for control and domination (as a defensive response to threats of dependency, looming reabsorption, or reminders of affinity) are most conspicuous in the sociobiological and biodeterministic theories of human nature conceived of by Crake. These theories ease the scientist’s apprehension of an unpredictable, chaotic, mysterious female cosmos while simultaneously simplifying the complex world to illuminated mechanism, whereby “the nightmare landscape of the infinite universe...become[s] the well-lighted laboratory” (Bordo 99). For example, Crake explains to Jimmy, ““As a species we’re in deep trouble, worse than anyone’s saying. [...] Demand for resources has exceeded supply for decades in marginal geopolitical areas, hence the famines and droughts; but very soon, demand is going to exceed supply for everyone”” (*Oryx and Crake* 295). In response to this chaotic situation Crake suggests that the problem lies in the “ancient primate brain” and the solution lies in his BlyssPluss Pill that will sterilize the human population while his bioengineered Crakers, who lack the “hard-wiring that had plagued humanity,” slowly replace the human species (305). The Compound environment, where the technocratic class lives, also reflects this need for control as indirectly indicated by Jimmy’s coveting of the chaotically feminine pleeblands on the bullet-train: “Everything in the pleeblands seemed so boundless, so porous, so penetrable, so wide-open. So subject to change” (196). Overall, Crake’s beliefs and the technocratic Compound architecture reflect the unconscious anxieties and deep psychic structures of patriarchy, even though Crake himself is tragically blind to his social conditioning, chalking it up to hard-wired “biology.”

Crake’s falsely differentiated mind, which thinks all things sprung from his being to serve his purposes, sees the world only in terms of dehumanized objects and instruments: “The other is

not seen as a unique individual bound to the self by specific ties. It is related to as a universal rather than a particular, as a member of a class of interchangeable items which can be used as resources to satisfy the master's needs" (Plumwood, *Feminism* 54). As mentioned, this conceptualization of the outside world as merely objects created by and for the self can be traced to one's "reaction and defense to the discovery of separateness" during early infantile experience (Flax 260). The falsely differentiated child must deny and repress any original associations with the mother and in order to do this he must objectify and internalize her and the world that was immersed in her being, a response that creates a "solipsistic isolated self with delusions of omnipotence" (260). Thus the scientists of the Compounds, who do a lot of "fooling around" for as an "after-hours hobby," profess that the game "create-an-animal was so much fun [because]...it made you feel like God" (51). A further example of the engulfing ego's self-extending, world objectifying, and controlling impulses is exemplified by the student scientists' development of an algae-based "Smart Wallpaper that would change colour on the walls of your room to complement your mood" (201). Crake also sees the outside world as a creation that exists merely for his benefit and his God-like approval or disapproval. For example, Crake requests that Jimmy take care of the Paradise Project (the Crakers) if anything were to happen to him. Jimmy wonders why Oryx is not the chosen Godmother of the humanoids to which Crake responds: "If I'm not around, Oryx won't be either" (321). Jimmy scoffs and inquires whether she will immolate herself on his funeral pyre to which Crake responds in the affirmative with a grin; "Which at the time Jimmy had taken both as a joke and also as a symptom of Crake's truly colossal ego" (321). But in fact, Oryx, in Crake's mind, is merely an object created by and for him to do with as he pleases as indicated when he murders her during his assisted suicide.

After the rogue hemorrhagic hidden within the BlyssPlus Pills is released and devastates humanity, Jimmy angrily realizes Crake's narcissism and play at being God the Father when he ponders over the fact that Crake had been "[s]itting in judgment on the world . . . but why had that been his right?" (341). In fact, Crake's Paradise Project seems to be a physical expression of infantile father-of-oneself fantasies where he can enjoy the delusional privilege of being the Self. Indeed, many feminist critics of science are of the "view that the ultimate aim of the reproductive and gene industry is to create 'immortal man' capable of reproducing himself (sic) without women" through the mechanism of cloning, for example (Klein 159). We can see the inheritance of Bacon's hermaphroditic legacy in Crake's simultaneous appropriation and denial of the feminine. Crake's bubble-dome, which is likened to an egg in Jimmy's mythology, is his prosthetic womb where he houses his bioengineered Crakers, his aggrandized, super embryos. Unlike Bacon, Crake does not need God to prime his mind in order to father these "Heroes and Supermen;" rather he is phallus and womb, an end in himself. Crake as a scientist identifies with "the race of fathers who can give birth" and thereby asserts his independence from and denies his dependency on the maternal realm. In this act of starting humanity anew he seems to be revoking his detestable childhood that originated in an immersion within maternal nature in order to feel himself irrevocably separate as God, as father of self (Bordo 108). However, in order to secure this ultimate separation from the realm of nature he must exert one finalizing and total act of objectifying sadism by destroying humanity in an apocalyptic pandemic. As Plumwood has wryly pointed out, the "sadodispassionate Hero," the one who identifies with the "ideals of detached rationality," will ultimately "choke[-] the life from his planetary partner in his final sadistic act of mastery" (*Environmental* 22). To be sure, it is "Crake's resentment of his mother [that] causes the apocalypse, and Jimmy's grief at his mother's desertion [that] makes him

unable to prevent it” (Watkins 126). These devastating actions by Crake and the willful inaction chosen by Jimmy are the “abstract expression[s] of...deeply felt dilemma[s] in [their] psychological development under patriarchy,” the physical manifestations of the violent internalization of a distorted subject/object dichotomy during childhood maturation (Flax 261). Crake pursues total transcendence over nature while Jimmy relinquishes control in order to warmly disintegrate into Crake’s apocalypse and reunite with his “phallic mother” (Haraway, *Simians* 151).

Part II: Life as a “Feminized-Other” Under the Technocratic Hegemony

The quality of life for feminized-others, women, and animals within this patriarchal society, bent on cultivating “mental traits attuned to the needs of capitalistic materialism [and scientific reductionism], namely utilitarian rationality and aggression,” is unsurprisingly bleak (Banerjee 242). The association of women with the despised nature of childhood has led to an increasingly violent dialectic between man-culture and woman-nature in the masculine subject’s aspiration to forget and overcome his link with nature in order to “achieve manhood and transcendence” (King 409). Every female character in *Oryx and Crake* is reduced to an object with no self boundaries or limits to what can be done to her person by the masculine subject in his frenzied attempt to objectify the natural world to drastically delineate self from other, with Oryx serving as the epitome of this situation. While the late-capitalist biotechnological culture may have put the “dichotomies between mind and body, animal and human, organism and machine, public and private, nature and culture” all into question ideologically, the original subject and object dualism is reified and secure (Haraway, *Simians* 163). In fact, the masculine scientist subject uses the conflation of these traditional binaries to his advantage for now the culture conceives that “[n]o objects, spaces, or bodies are sacred in themselves,” but rather are

eternally reducible to code and commodity (163). Contrary to Haraway's subversive cyborg politics, biotechnology's boundary blurring genetic reductionism in the Compounds props up the capitalist project of homogenizing the object-world into faceless consumers and replaceable slaves; it's desire is to erase all difference with the exception of the supremacy of the subject, an aim rooted in the distorted developmental scheme under patriarchy. In the novels, biotechnology is both used directly to dominate and exploit feminized-others as well as indirectly in providing the ontological justification for the capitalist's corrupt utilitarianism.

The novel perpetuates a distinction between subject and object, discrete self and the faceless masses of others. For example, the students at Watson-Crick, where Crake goes to school, refer to "other students in their own faculties as their conspecifics, and to all other human beings as nonspecifics. It was a running joke" (209). Plumwood notes, "the dominated class must appear suitably homogenous if it is to be able to conform to and confirm its [inferior] 'nature'" (53). This dangerous inferiorization through difference and homogenization of the masses by the hegemonic class has a far reaching internalization power as evidenced in Jimmy's aloof and uncritical surprise that the "pleebland inhabitants didn't look like the mental deficientes the Compounders were fond of depicting, or most of them didn't" (288). One glimpses a particular sinister effect of homogenization of the pleeblanders by the dominating class, stemming from the falsely differentiated subject/object split, in the exploitative and conscienceless way Crake discusses the test subjects for his BlyssPluss Pills. He tells Jimmy that he got them "[f]rom the poorer countries. Pay them a few dollars, they don't even know what they're taking. Sex clinics, of course – they're happy to help. Whorehouses. Prisons. And from the ranks of the desperate, as usual" (296). In Crake's mind, "the colonized are all alike, and are not considered in personal terms or as individuals" (Plumwood 55). Crake's treatment of his test specimens reveals how the

patriarchal conceptualization of the world through a subject/object split capitalizes off of the homogenization of objects and their constructed inferiorized difference from subjects.

The scientist's work within the Compound environment is solely about controlling and dominating nature as an instrument or object, transforming it first into manipulable code and then desirable commodity. They genetically modify pigs into balloon-like pigoons, *sus multiorganifer*, who grow extra organs and human neocortex tissue under the farce that the motivation for such a project is to help stroke victims. Sharon immediately spots the deception of her husband's work when she says, "You hype up your wares and take all [your medical patients'] money and then they run out of cash, and it's no more treatments for them. They can rot as far as you and your pals are concerned" (*Oryx and Crake* 56-57). Later, when Jimmy and Crake are slumming through the pleeblands, Crake explicitly aligns the capitalist and scientific projects. For instance, while Jimmy window-shops through the homogenized pleeblands Crake tells him, "'So this is where our stuff turns to gold. [...] You have no idea how much money changes hands on this one street alone'" (288-89). The Watson-Crick students do not even bother disguising their materialistic motives for their bioengineering projects. For example, they specifically culture meat that they market as "ChickieNobs," a product for which Crake notes "[i]nvestors are lining up around the block" (203). Additionally, they create rocks called Rockulators that absorb and release water depending on drought conditions, Wolvogs, an aggressive dog splice to protect the Technocratic Compound-Castle, and most profitable of all, new illness varieties. Indeed, Crake confirms this sinister revelation when he says to Jimmy the "best diseases, from a business point of view... would be those that cause lingering illness. Ideally – that is, for maximum profit – the patient should... die just before all his or her money runs out. It's a fine calculation" (211).

Likewise, Women are also reduced to the status of insecure consumers and simultaneously, fetishized objects within *Oryx and Crake*'s patriarchal technocracy. Scientists cannot refrain from this mode of thinking because a "constant stream of eager or anxious women consumers – and [their] body parts – is a far too profitable industry" (Klein 160). For instance, while ruminating over his stepmother Ramona's aging features, Jimmy prophesizes that "[p]retty soon it would be the NooSkins BeauToxique Treatment for her – Wrinkles Paralyzed Forever, Employees Half-Price – plus in say five years, the Fountain of Yooth Total Plunge, which rasped off your entire epidermis" (*Oryx and Crake* 175). Indeed the overarching function of the patriarchal subject/object split seems to be the former's exploitative advantage over the latter. The homogenized and objectified status of nature, women, and nonhuman others (the original blur of mother with the external objects she is connected to) allows for their instrumentalization.

Women are also directly rendered as controllable, consumable objects. Oryx knowingly performs her role as the object-instrument of men almost flawlessly: apart that is, from the few hints of defiant agency she throws at Jimmy. Oryx and many other Southeast Asian village girls are sold into the sex trade and passed from hand to hand like unwanted pets. They are treated like animal object-resources as indicated by the description of them being "lifted up into the back of the truck and locked in, and it was dark and hot and they got thirsty, and when they had to pee they had to do it in the truck because there was no stopping. There was a little window though, up high, so some air got in" (*Oryx and Crake* 137). The masculine subject thinks of the girls as consumable meat-objects, "delicious midgets" and "soulless pixies" (90). Jimmy dreams of girls whose sole purpose is to recognize and serve him, as he hoped his mother would: "They'd look at him, they'd look into him, they would recognize and accept him... *Oh honey, I know you. I see*

you. I know what you want” (261). These female objects are the servants, recognizers, and the mirrors of the repressed masculine self.

Ultimately, however, as we’ve seen, the masculine-subject must participate in “escalating dominations of abstract individuation, an ultimate self untied at last from all dependency, a man in space” (Haraway, *Simians* 151). He must dominate and objectify woman and nature out of existence in order to achieve pure transcendence over the “dank prison space of chthonian nature” (Paglia 104). Indeed, in *Oryx and Crake* the masculine-subject seems to succeed in his death drive as indicated by Crake’s paramount genocide, murder of Oryx, and the ecological destruction within the novel: “[A]s time went on...the coastal aquifers turned salty and the northern permafrost melted and the vast tundra bubbled with methane, and the drought in the midcontinental plains regions went on and on, and the Asian steppes turned to sand dunes” (*Oryx and Crake* 24). Despite the rigid and powerful control the masculine subject’s biotechnology attempts to exert over the planet, nature’s ultimately aleatory and unpredictable character resists this control in the last two novels of Atwood’s trilogy. There are hints within *Oryx and Crake* of the subversive natures hidden in presumably domesticated ecologies and feminized-others. For example, Jimmy’s mother’s rebellious desertion gives him a dark feeling: “the same sense of the forbidden, of a door swinging open that ought to be kept locked, of a stream of secret lives, running underground, in the darkness just beneath his feet” (216). Perhaps this hidden subversive potential is symbolized most explicitly by Oryx’s laugh of amused contempt like “a cold breeze on a moonlit lake” (119). This laugh speaks a “ruthless wisdom” that makes Jimmy “feel light-headed, precariously balanced, as if he were standing on a cliff-edge above a rock-filled gorge, and it would be dangerous for him to look down” (255). As we will see in the final chapter of this thesis, Crake’s belief that if one were to “[b]reak the link in time between one generation and

the next,” it would be “game over forever” may ironically refer to the extinction of the masculine-subject socialized under late capitalist-patriarchy rather than humanity, feminized-others, and the more-than-human world (223).

Overall this chapter has explored how Margaret Atwood’s *Oryx and Crake* critiques late-capitalist patriarchal biotechnological projects and their grisly consequences through Jimmy and Crake’s patriarchal maturation processes and Crake’s corresponding socialization into a scientist. This development entails the establishment of selfhood at the cost of objectifying, rejecting, dominating, and instrumentalizing the other of the first bond and nature. Additionally, the text reveals the appropriation and denial of the feminine by the masculine mind desiring to father the self as outlined in Jimmy’s use of the transitional object and Crake’s Paradise Project. Ultimately, these gender politics that encompass the domination and repression of nature are reproduced by the patriarchal family and manifested in science. The consequences of this particular individual and collective psychic structuring are implicit in the gruesome murders of humanity, the dehumanized treatment of scientific test subjects, laboratory animals, and female consumers as well as the objectification of Oryx and Sharon and the destruction of the natural environment.

CHAPTER FOUR: The Intersecting Discourses of the Biological Sciences and Enlightenment Humanism

This chapter will give a brief overview of the historical development of contemporary scientific thought paradigms and examine epistemological overlaps between Enlightenment humanist, transhumanist, and biological discourse. This section will then give an overview of the philosophies of Ruth Hubbard, Jane Bennett, Deleuze, and Guattari at play in Atwood's texts that challenge and defamiliarize the reader's understanding of the world and its potentialities developed by the aforementioned traditional schools of thought.

Part I: The Problems of Mechanism, Biological Reductionism, and Essentialism

As discussed in the previous three chapters on psychological development under patriarchy, the causes of ecological crises can be argued as originating from a failure of the imagination caused by the way social forces obscure humans' ability to recognize their interdependency, affinity, and pleasurable attraction to feminized-others, animals, and the environment. Significantly, this toxic posture toward matter and animated life consequently leads to a blindness of the material world's vitally active nature and obstructs, with dire consequences, sensual and communicative contact between human animals and the natural world in itself. Indeed, the way modern culture and science has come to perceive and make sense of nature as withdrawn from "both our speaking and our senses" (Abram 92), as a feminized-body estranged from the mind (as the material realm separated from the thinking subject), is a product of its history as it has unfolded under these congealed patriarchal structures that are psychically reproduced in the domestic space.

Various thinkers have marked the course of Western culture's historical representations of human/nature relations that originate in its citizens' childhood traumas. Some focus on how this false differentiation manifests in a human/nature split, especially in "Plato's philosophical

derogation of the sensible and changing forms of the world – his claim that these are mere simulacra of eternal and pure ideas existing in a nonsensorial realm beyond the apparent world” (Abram 94). Others see the human/nature dyad mapped onto the mind/body pair in the Christian rejection of the soul-imprisoning body in favor of the supernal realm (Hiltner 77; White 10). According to Carolyn Merchant, up until the sixteenth century, Western culture’s ideological frameworks were informed by the “idea of nature as a living organism” or a living maternal figure, a philosophical perspective which encouraged a more ethical, sensual, and interactive relationship with the environment and its creatures (1). This view and treatment of the earth was gradually displaced by the Scientific Revolution with its mechanized and rationalized picture of the earth, which helped to justify Western society’s exploitative employment of new technologies toward its goals of commercialism and industrialization (2). Merchant traces the historical development of this shift in thinking of the earth as organic mother, to the Baconian treatment of nature as a justifiably sexually interrogated witch, to its final culmination in Cartesian thinking that describes all of physicality as made of inert and entirely predictable mechanical objects. She argues all of these portrayals of nature reflect the evolving socioeconomic interests of the periods. The development of mechanism as a worldview saw the “death of the world soul and the removal of nature’s spirits” as necessary to prevent “any scruples that might be associated with the view that nature was a living organism” so that society could continue “progressively” profiteering from the planet (227).

Moving into the contemporary period, late-capitalist culture’s uncritical adoption of the theories of sociobiology, a form of biological reductionism that sees human and animal behavior as absolutely genetically determined by tried and true evolutionary pathways (“resistance is futile”), is the historical product of the above mentioned seventeenth-century mechanical

framework that imagined nature as “more...predictable...and thereby manipulable” (Merchant 227). As Haraway confirms, the mechanistic, clockwork models of nature gave way to the “translation of the world into a problem in coding” at the end of the twentieth century (*Simians* 164). Haraway says this new biotechnological science is born of the current patriarchal-capitalist-informational matrix or the “informatics of domination.” This biotechnological science functions under the assumption that human nature and the “corpuscular world” are infinitely reducible to decipherable, malleable, and commodifiable code. This militant-corporate form of scientific mythology ostracizes and denies the sensual knowledge, intrinsic value, and vitality of both the human body and the sentient environment eclipsing any hope of reciprocal and joyous communion with the earthly realm in itself. Rather, this reductionist view imagines the planet as a vacuous space full of inert and silent objects ripe for manipulation (genetic “improvement”) prior to an exploitative and immensely profitable harvest.

Aspects of Enlightenment humanist ideology and several seemingly antithetical sciences (i.e. mechanism, sociobiology, and biotechnology) combine in the scientist Crake’s philosophy in Atwood’s *Oryx and Crake*. To demonstrate this, first, it is important to examine the ways in which these philosophies overlap and build off of one another. Sociobiology, with its investment in the notion of biological hardwiring that supposedly cannot be altered by cultural forces (a perspective social ecologist Murray Bookchin describes as “crude as Descartes’s machine-like view of the body” [*Re-Enchanting Humanity* 39]), and the new biotechnological science of the “informatics of domination” (that sees organisms as “code” that *can* be altered artificially), collaborate together in strange and unfortunate ways. First, according to Haraway, the informatics of domination adopts the sociobiological theories that purport to describe the various genetic essences of human nature but recasts them into the “curable” medical terms of pathology.

Coloring aspects of human nature as pernicious justifies biotechnology's project of researching into the "nature of things" and propels its program of "optimization" for society by redesigning the individual by changing those supposed negative or flawed and fixed characteristics of human nature (*Simians* 67). For example, sociobiologists "explain the existence of crime on the basis of a 'criminal personality' and believe that criminals behave the way they do because they have diseased brains, too much or too little of certain hormones or other critical substances, or defective genes" (Hubbard 28). The ironic name of Crake's research facility (the "RejoovenEsense" Compound) is emblematic of this medical drive to rejuvenate or artificially improve/enhance the essences of human nature. This is the quintessence of the logic behind Crake's "ideal of human progress through human engineering" (Haraway, *Simians* 13) that he sells to the public in the form of the "BlyssPluss Pill...designed to take a set of givens, namely the nature of human nature, and steer those givens in a more beneficial direction than the ones hitherto taken" (*Oryx and Crake* 293).

Moreover, both Enlightenment humanism's emphasis on rationality, agency, and the freedom to progress and perfect the self as essential parts of *human* subjectivity as well as this humanism's underlying essentialism (expressed in the belief in an unbridgeable gap in kind between animal nature and human culture)⁴ surprisingly unite in the biotechnological logic within the cultural climate of the informatics of domination. On the one hand, humanism's well-intentioned emphasis on freedom, perfectibility, and the "progressive" transformation of the self, (which then extends into an improvement of society at large) becomes a mutated goal when a part of the informatics of domination. The "freedom" to guide nature(s) to perfection becomes a tyrannical form of unchecked genetic redesign and environmental manipulation in its "call" to

⁴ These two essentialisms (human identity as rationally free and a supposed radical difference in kind between humans and animals) are interdependent insofar as nonhuman others come to stand as negatives against which to posit humanity's (so-called) essences. Therefore animals are "irrational," controlled by mindless instinct, slaves to their bodily drives, etc.

“create more fecund gardens than Eden itself” (Bookchin qtd. in Eckersley 111) in the hopes of accumulating “power and profit” (Eckersley 111). According to Cary Wolfe, in his book *What is Posthumanism?*, ideological vestiges of Enlightenment humanism appear as this very kind of biotechnological drive to “guide” nature(s) and can intensify into a form of “transhumanism.” Transhumanism is a form of posthumanism that sees the method of becoming “human” as “achieved by escaping or repressing not just [humanity’s] animal origins in nature...but more generally by transcending the bonds of materiality and embodiment altogether” (*Posthumanism* xv). Wolfe provides an excellent example of how Enlightenment humanism, transhumanist biotechnology, and sociobiology in the form of social Darwinism (Herbert Spencer’s misreading of evolutionary theory) combine into a lethal project of variegated reasoning. In this hodgepodge philosophy (an outlook Crake on the surface seems complicit in) one finds “the paradoxical figure of an evolution which has to extract humanity properly so-called (that is, culture, the technological mastery of nature – including the mastery of human nature: eugenics) from animality” but by an approach characteristic of “animality (the ‘survival of the fittest’) or, in other words, by an ‘animal’ competition between the different degrees of humanity” (Étienne Balibar qtd. in Wolfe *Posthumanism* xiv). In perfect harmony with “his” Enlightenment predecessors, the transhumanist biotechnologist desires total control over the body, engineered “perfection,” a bioengineering project successfully executed only under the social conditions of “might makes right.” Indeed, Jimmy describes Crake’s “might” metaphorically as “alpha wolf, the silverback gorilla, the lead lion” (*Oryx and Crake* 300).

Additionally, Enlightenment humanism’s underlying essentialism (the state of being “free” as an essential quality of the “authentically” human that animals are by definition excluded from) can be deployed by biotechnologists at will “to justify oppression” because they,

alongside their capitalist investors, “control the discourses and institutions that reduce [feminized and animalized] human beings to the status of objects” (Wolfe, *Animal Rites* 38). As Wolfe smartly points out in his critique of Luc Ferry’s humanism of “freedom,” the definition of the human that serves as the basis for humanist philosophy is relationally defined against the “animal” that is ““programed by code which goes by the name of instinct”” (Ferry qtd. in Wolfe, *Animal Rites* 32). In contrast, the human is entirely free of natural essences, the body; s/he is not dictated by “natural codes” (Ferry 11). Ferry’s humanism is grounded on the notion of humans as *essentially* free and animals as *essentially* determined by nature. Ferry’s humanism is characterized by his attempt to make “a *single* and defining characteristic (“freedom”)” as both the “categorical distinction between the human and nonhuman animal” as well as the only worthy “criterion for ethical consideration” (Wolfe, *Animal Rites* 35). Historically, worldviews, philosophies, or ethics that have “propose[d] a single capacity...for being owed moral consideration” or admittance into the category of the “human” have been criticized for being “essentialist,” racist, and sexist (Slicer, “Your Daughter” 108). The chilling problem with this humanist essentialism is that a culture can conceptually withhold whatever “single capacity” (“freedom”) from any entity that it decides supposedly shares the animal’s “state of nature” and thus systematically animalize this being for exploitative purposes. Using the criterion of “freedom” to buy one membership into the realm of cultured humanity is the same conceptual move employed by Western cultures that have historically used the benchmark of “rationality” to build the privileged “human” realm of the masculine public, which has also worked simultaneously to construct women and other feminized-others as morally inferior because of their supposed lack of rationality (Warren 258). And indeed, as Val Plumwood argues in her book *Feminism and the Mastery of Nature*, those that belong to the sphere of the rational define

what is authentically human while those that belong to the sphere of the merely irrational, natural animal (women) play an instrumental role in the service of the sphere of the rational, as *things* rather than ends in themselves. Certain biotechnological scientists who are born into the privileged class, sex, and race intersectional category, might see themselves as “free,” godlike *humans*, and the rest of “nature” (the feminized and animalized poor, women, people of color, animals, etc.), at best, as limited and faulty abortions of nature in need of radical, genetic “cleansing” or, at worst, as entirely valueless apart from the entertainment and profit one makes from transforming them and the world they inhabit into the chimeric shadows of one’s mind, like Jimmy’s world becomes “piece[s] of a bad dream that Crake is dreaming” (*Oryx and Crake* 352).

Part II: Crake’s Lethal Philosophy

The scientist Crake from Atwood’s *Oryx and Crake* clearly subscribes to sociobiology’s essentialist descriptions of genetically predisposed human and animal subjects and supports the capitalist agenda in its efforts to homogenize these groups through these reductive descriptions for the purposes of “behavioral intervention,” control, and exploitation. According to Ruth Hubbard, sociobiologists “claim that it is possible to identify the fundamental elements of human nature... whatever their cultural or historical differences, and selected animals as well” (29). Many feminist critics of science argue that because scientists are cultural products they “peer through the prism of everyday culture, using the colors so separated to highlight their questions, design their experiments, and interpret their results” (Fausto-Sterling 9). In other words, born within a capitalist milieu, this means scientists often “portray as natural the competitive and hierarchical capitalist societies in which men dominate women and a small, privileged group of men dominates everyone else” (Hubbard 36). Predictably, Crake sees hierarchy or the “king-of-the-castle hard-wiring that plague[s] humanity” as a part of the natural structure of “neural

complexes” within the human brain (*Oryx and Crake* 305). Haraway has also warned of the implications for gender and social politics that arise from this new informational paradigm influenced by sociobiological theory: “The close ties of sexuality and instrumentality, of views of the body as a...utility-maximizing machine, are described nicely in sociobiological origin stories that stress a genetic calculus and explain the inevitable dialectic of domination of male and female gender roles” (*Simians* 169). Indeed, Crake believes that humans are “hormone robots” with “monkey brains” but “faulty ones” who foully indulge in rape and the “sexual abuse of children” (*Oryx and Crake* 165-66).

As a further example of this problematic “genes as essence” reasoning that has been historically employed in eugenics practices condoned by the militant American nation-state (Mottier 85), sociobiologists claim that “Man’s natural sexuality sends him in search of many sex partners, making him an unstable mate at best, while woman’s biological origins destine her to keep the home fires burning, impelling her to employ trickery and deceit to keep hubby from straying” (Fausto-Sterling 4). Crake molds the gender roles for his humanoid species in a similar way to his own toxic patriarchal culture, mistakenly believing that the impulses to rape, murder, property grab, wage war, etc. originate in the same “removable” genes that allow for the human practices of art, idol worship, and funeral rituals. While the Craker men serve the purpose of imposing a protective urine circle around their community, the women “tend[-] the central fire; others squat around it, warming themselves” and breastfeeding (*Oryx and Crake* 158). The difference between Crake and sociobiologists is that Crake employs a more transhumanist and transpeciesist praxis in his desire to change the human nature described by reductionist biology supposedly for the better, while sociobiologists tend to simply justify the status quo. Overall, while both essentialist sociobiology and “life-improving” biotechnology are motivated by the

“quest to comprehend phenomena according to what they *are* in some absolute ontological sense,” the latter is also invested in exploring “what they have the capacity to *become*” (Economides 1). And what one *is* or could *become* matters inasmuch as it remains consistently exploitable.

As demonstrated, Crake claims not to believe in the need to maintain the integrity of any “Nature” and seems to have no ethical qualms (in principle) with using technology to dominate both animals and feminized, “othered” groups of human beings. However, a closer examination of Crake’s complex psychology reveals a latent ecological consciousness monstrously tainted by his patriarchal conditioning. The scientist Crake’s strange “green” sensibility begins when he is still the boy “Glenn” who plays violent computer games, watches live executions, and varieties of fetish pornography with Jimmy. It is during one of these afternoons, while exploring “HottTotts, a global sex-trotting site,” that the two boys are arrested by the penetrating and contemptuous gaze of the little girl Oryx sadly situated “in front of the standard gargantuan Gulliver-in-Lilliput male torso” (90). Crake immediately freezes the frame of her face and prints out a hard copy. Jimmy’s emotional discomfort, perhaps his debilitating sense of empathy for Oryx, is quite obvious: “Jimmy felt burned by this look – eaten into, as if by acid” (91). He quickly considers using substances to numb the “pain of the raw torn places, the damaged membranes where he’d whanged up against the Great Indifference of the Universe” but concludes that his guilt is irreparable because he feels “culpable” and “wrong” for enjoying this “entertainment” that he justified as permissible because it was “far beyond his control” (91).

Adolescent Jimmy and Crake, for the first time since their early childhoods, are forced to acknowledge the reality of the feminized-other as human, as a subject forced into the status of a thing. Jimmy’s feelings of disorder in response to Oryx’s gaze point toward the boy’s refusal to

“recognize” the mother during early childhood. According to his social conditioning, the m(other) is the object who averts her eyes and “recognizes” the power of his subjecthood by writhing under his desirous gaze. But here, Jimmy and Crake are uncomfortably “fixated in the gaze” of Oryx’s “threatening otherness” because it “indicates [a] threatening reciprocity...that is too revealing...to view directly” (Young 26). Her gaze crumbles the scaffolding supporting the patriarchal distinctions between self/other, man/woman, human/nature (animal). Her eyes speak to Jimmy *and* Crake’s repressed desires for the beauty of a vulnerable dependency that comes along with true intimacy with another being of equal status rather than the sadistic and narcissistic reduction of the beloved to the status of an object to glut one’s need for power.

The impact of this little girl’s gaze on Glenn, who transforms into the mad scientist Crake, becomes clear as the novel progresses. During the boys’ next rendezvous, Glenn interrupts business-as-usual, “surfing the Net,” to introduce Jimmy to a new gaming interest of his called “Extinctathon” (80). To play this game Jimmy and Glenn have to pick codenames of extinct animals in order to enter a chat room devoted either to the “Kingdom Animal” or “Kingdom Vegetable.” Jimmy picks “Thickney” and Glenn picks “Crake,” both named after Australian birds. Crake’s nickname sticks with him from this point forward. Once in the chat room players proceed to narrow down the extinct creature vaguely proposed (“Begins with, number of legs, what is it?”) by looking at “Phylum Class Order Family Genus Species, then the habitat and when last seen, and what had snuffed it (Pollution, habitat destruction, credulous morons who thought that eating its horn would give them a boner)” (81). Jimmy is unamused by the tedium of this activity, while Crake takes quite a liking to it. Later, as a developing scientist at Watson-Crick Institute, Jimmy discovers Crake has mastered the game and, in fact, the game is a kind of countercultural meeting platform for a bioterrorist group (reminiscent of the radical

environmental group Earth First!) called MaddAddam⁵: “*Adam named the living animals, MaddAddam names the dead ones. Do you want to play?*” (214). Jimmy is horrified to see Oryx’s face as one of the “lily-pad” folders for entering the MaddAddam bioterrorism site: “It was the picture of Oryx, seven or eight years old, naked except for her ribbons, her flowers” (215). Crake’s use of this picture after all of the years since they had originally witnessed Oryx’s “contemptuous, knowing look” suggests that her existence also made an irreversible impact on his psychic landscape and emotional health. Indeed, as an adult Crake tells Jimmy their traumatic adolescence was a “definitive time[-]” (300)⁶.

Crake’s ecological consciousness seems to be subconsciously linked with Oryx. Perhaps, in the mode of ecofeminism, his mind unconsciously associates the destructive consumption of various animal species with the oppression and consumption of women. Oryx’s cool stare (which speaks to his repressed desire to honor the m(other) through reciprocal, loving interactions) experienced in such close proximity to a game that floors one with its extensive documentation of the havoc that humans have wrought upon natural systems and life forms propels the development of Crake’s ecological consciousness but also taints it inasmuch as it becomes symptomatic of a kind of (quasi) deep-ecological misanthropy. To demonstrate this, it is important to give a brief overview of the main ideas behind deep ecological philosophy.

As described by Bill Devall and George Sessions, the notion of self-realization and biocentric equality are the main concepts or “ultimate norms” behind deep ecology’s ideological force. Self-realization refers to the individual’s recognition of his or her place as merely one

⁵ The MaddAddamites are originally part of the God’s Gardeners pacifist group. However, because their leader Adam One disapproves of ecoterrorist methods in the subversion of their Corporation-run system, his brother Zeb and his followers leave the group and use the Extinctathon chatroom as a secret communication platform.

⁶ Later, the novel seems to imply that Crake’s apparent collusions with the MaddAddamite bioterrorists is to eventually blackmail them into working on his BlyssPluss and Paradise Projects. Like the property-sabotage operations of Earth First!, the MaddAddamites are not interested in doing “any people numbers,” but Crake in contrast becomes very much interested in human obliteration (217).

corporeal member of an active assemblage of many others, a “self-in-Self” where ‘Self’ stands for [the] organic interrelated wholeness” of an interspecies “nurturing nondominating society” (Devall and Sessions 67). They call for an “unfolding of the self” which is in opposition to the “isolated ego striving primary for hedonistic gratification” (i.e. capitalist consumer subjectivity) but rather “includes not only me, an individual human, but all humans, whales, grizzly bears, whole rain forest ecosystems, mountains and rivers, the tiniest microbes in the soil, and so on” (67). On the other hand, their concept of biocentric equality involves the notion that “all things in the biosphere have an equal right to live and blossom and to reach their own individual forms of unfolding and self-realization within the larger Self-realization. This basic intuition is that all organisms and entities in the ecosphere, as parts of the interrelated whole, are equal in intrinsic worth” (67). Humans would indeed step much lighter on their paths, perhaps even increase the sum of happiness on the earth, if they adopted such norms.

However, many critics of deep ecology have duly noted the potentially troubling authoritarian politics that might come to fruition from such beliefs, especially in the face of their implicitly militant “principles” (Ferry 68) that “the flourishing of human life and cultures is compatible with a substantial decrease of the human population” and that true believers are obligated to “implement the necessary changes” (Devall and Sessions 70). In his book *Re-Enchanting Humanity* Murray Bookchin argues that deep ecology’s holistic notions of self-in-Self functions as a kind of self-effacement and promotes a society of mass disempowerment composed of individuals who have lost their identity in their merge into the “larger cosmic whole” (99). However, some thinkers are sympathetic to deep ecology’s vision of the resistance of the ego to the aggressive differentiation of the self from all others in its description of the ego’s boundaries expanding outward to encompass all earthly things. But as Plumwood has

deftly illustrated, deep ecology's unifying impulse is usually a mask for the incorporating or assimilating impulse from early childhood development, which is unable to "affirm difference" and therefore "denies the other through the attempt to incorporate it into the empire of the self" (*Feminism* 179). She also points out that deep ecology's desire to transcend the personal and particular with an eye to the greater whole "reflect[s] the familiar masculine urge to transcend the concrete world...in preference for something more enduring and abstract" (Marti Kheel qtd. in Plumwood, *Feminism* 181).

Crake's troubling scientific ideologies discussed above combine with his ecological consciousness, which encompasses all of these concerns about deep ecological belief and praxis, to exert truly monstrous effects in the world. One of the first instances in which the reader witnesses Crake's skewed "biocentric" values is when he expresses outrage at the Happicuppa Corporation (the equivalent of the modern day Starbucks Coffee Company) for ruining rainforests in order to plant genetically modified coffee. Crake is indifferent to the fate of the "small growers" and "their labourers" who have been thrown "out of business" and are "reduced...to starvation-level poverty" (*Oryx and Crake* 179). He reasons that the "guys killing" the peasants should be "whacked," but not because "of the dead peasants, there's always been dead peasants. But [because] they're nuking the cloud forests to plant this stuff," the latter being obviously more valuable to his mind. Jimmy comments that the peasants would cause the same amount of rainforest destruction if endowed with the technological power and Crake responds that "they don't have half a chance" of acquiring that kind of power. Jimmy asks if he is taking sides and Crake says, "[t]here aren't any sides, as such," a comment that suggests Crake doesn't see this as a political issue involving a clash of different interests. Instead, it is a matter of essential (biological) flaws in homo sapiens. Crake's opinion that he can defend neither the

Happicuppa Corporation nor the peasants ultimately reveals his disturbing belief that “natural” humans, without the aid of his bioengineering vision, are irreparably damaged and destructive to the world’s life forms and systems as a whole.

A further affiliation of Crake’s mindset with mutated forms of deep ecological thinking is in his flattening of human/animal ontological divisions expressed through his constant conflation of human and animal behavior. For example, Crake reduces the human impulse to create art to a “stab at getting laid,” a behavior analogous to the mating behaviors of “sneaker male” frogs who use drain pipes to amplify their calls and attract mates who might not be naturally attracted to their small stature much like what evolutionary psychologists say about art (168). Crake also expresses a complete disregard for the individual or part and instead praises the value of the whole or system. For instance, Crake wonders whether “a single ant [can] be said to be alive, in any meaningful sense of the word, or does it only have relevance in terms of its anthill?” (371). Crake’s philosophical “conundrums” bring to mind Bookchin’s worry that various posthuman schools of thought (i.e. sociobiology, deep ecology, etc.) that “[v]iew[-] human beings as merely another animal species – such as fruit flies – create[-] an ideal setting for thinking about how their numbers can be reduced by foul means as well as fair” (*Re-Enchanting* 59). As an example of misanthropic versions of deep ecological thinking taken to its logical conclusion Bookchin cites a disturbing statement by the leader of Earth First!:

‘When I tell people how the worst thing we could do in Ethiopia is to give aid – the best thing would be to just let nature seek its own balance, to let people there just starve there, they think that is monstrous. But the alternative is that you go in and save these half dead children who will never live a whole life. Their development will be stunted. And what’s going to happen in ten years time is that twice as many people will suffer and die.’ (David Foreman qtd. in Bookchin 107)

This statement reveals a number of things, namely, Foreman’s (and Crake’s) egomaniacal belief that he has the right to decide what constitutes and who is permitted to lead a full life, what

nature's "balance" descriptively looks like, and the utilitarian tendency to privilege the whole over the individual. Crake demonstrates a similar line of reasoning in his failure to comfort Jimmy's disgust with the market for child slaves and prostitutes in the Southeastern Asian village of Oryx's childhood: "Jimmy, look at it realistically. You can't couple a minimum access to food with an expanding population indefinitely. *Homo sapiens* doesn't seem able to cut himself off at the supply end. He's one of the few species that doesn't limit reproduction in the face of dwindling resources" (120). In response, Jimmy sadly remarks that humanity is doomed, to which Crake says "cheerfully," "[o]nly as individuals" (120). Crake's miscalculated deep ecological idea, as summed up by Oryx, that "[t]here are too many people and that makes...people bad," that humans are inherently damaged, in combination with his Enlightenment humanist/transhumanist belief that he "has found the problems" and can "make the world a better place" leads to the intentional eradication of the modern human species (322). The unusual combination of philosophies that compose Crake's mindset make it impossible for him to adopt the more healthy aspects of the humanist ideal, namely, a faith in humanity's aptitude to transcend and actively revise the social conditions which threaten to reduce him or her to a thing. Crake reduces the social justice and ecological crises suffered in his world to a "genetic deep structural" problem rather than focusing on the "social roots of our ecological dislocations" (Bookchin, *Re-Enchanting* 109).

Part III: Toward an Ecology of Sensuality and Becoming

In sum, most reductionist scientists see genes as the "keys to the 'secret of life' or blueprints of the organism" (Hubbard 27). Ultimately, as discussed above, these scientists see genes as the direct cause of particular behavioral and physical phenotypes. Feminist critics of science's absolute devotion to the "genetic deep structure" as predictive of one's essential core,

resist reductionist characterizations of human and animal nature by appealing to more ecological descriptions of the loosely embedded subject and emphasizing the potential for bodily and psychic transformation. They point out that “in a complex system of reactions...which requires many components and conditions that must work together...and that are often interdependent, it is wrong to single out any one substance or event as the cause” (Hubbard 43). Hubbard usefully develops this more ecologically framed argument more fully to point out how the organism is in constant conversation with its environment, which challenges the biotechnological scientist’s beliefs that they have complete control over their project-organisms and the consequences of their manipulation:

[The] genes [that] participate in the functioning of multicellular organisms...involve large numbers of interacting metabolites and pathways as well as interactions between cells and tissues and between the organism and environment. Genes are only part of this story, and their roles are not sufficiently well understood to predict what will happen if one or another of them is changed, replaced, or even just moved from one position to another on the chromosome. (48)

Analogously, various anti-reductionist scientists and social theorists, such as Anne Fausto-Sterling, argue that an “individual’s capacities emerge from a web of interactions between the biological being and the social environment. Within this web, connecting threads move in both directions” (7). In direct opposition to the reductionist view of nature, Hubbard points out that one cannot “predict the structures and functions of proteins [and the traits they express mediated by a multitude of somatic and external forces] from the properties of the amino acids of which they are composed” (33). Instead she sees the world from a kind of interactive or “transformationism” model where “biological and environmental factors can change an organism so that it responds differently to other, concurrent or subsequent, biological or environmental changes than it would have done otherwise. Simultaneously, the organism transforms the

environment, which of course, includes other organisms” (33). Overall, these feminist thinkers emphasize the unpredictability of “multidirectional acts of association” between various life forms and their environments (Haraway, *Companion* 31).

These ecofeminist theories of interconnected transformation are conspicuously similar to Gilles Deleuze and Félix Guattari’s notions of becoming. According to Louise Economides in her study “Romantic Individualism, Animal Rights, and the Challenge of Multiplicity,” these thinkers’ “phenomenology of becoming entails an understanding of how entities are, of necessity, always already interconnected with other entities in novel configurations that cannot be reduced to the dualistic paradigms” valorized by essentialist sociobiological discourse (1). Deleuze and Guattari argue that every entity (conceived of by reductionist models as a stable, autonomous subject or object) is in fact a boundless multiplicity, a pack, or rhizomatic structure (a mini ecological system haphazardly connecting, disconnecting, and reconnecting to an infinite number of other propagating, evolving ecosystems, universes within universes) that is “already composed of heterogeneous terms in symbiosis, and...is continually transforming itself into a string of other multiplicities” (249). The pack is also the “reality of becoming-animal of the human being” or what is irreducibly withdrawn, unpredictable, and mutable, distinctly counter to modernity’s essentialist dualisms and its “institutions of the family and the State apparatus” (242). Similar to Fausto-Sterling’s above account of the individual and its environment’s seesawing impacts on one another, these thinkers describe a “Universe fiber” that “stretches from a human to an animal...from molecules to particles...across borderlines [that] constitute a line of flight or of deterritorialization...[and therefore] carries the transformations of becoming or crossings of multiplicities” (249).

Additionally, these thinkers conceive of some kind of “contagious affect” or a sensual apprehension of the “power of the pack that throws the self into upheaval and makes it reel” (240). This sensation of radical nonhuman becoming, a decentering of one’s bounded individuality, transforms or turns one’s awareness over to the fact that s/he is part and parcel of a swarming agential ontologically heterogeneous multiplicity of “unnatural⁷ participations,” symbiotic *alliances*. The new assemblages that form from these “lines of flight” from the norms dictated by hegemony “are interkingdoms,” becomings that are “in the domain of *symbioses* that bring into play beings of totally different scales and kingdoms, with no possible filiation” (238). Moreover, in contradistinction to a certain kind of scientist’s faith in the predictive powers of essentialist and biologically determined thought paradigms, ecological bodies, assemblages and rhizomatic networks are inherently unpredictable, ungovernable, and recalcitrant:

[N]o one, not even God, can say in advance whether two borderlines will string together or form a fiber, whether a given multiplicity will or will not cross over into another given multiplicity, or even if given heterogeneous elements will enter symbiosis, will form a consistent, or cofunctioning, multiplicity susceptible to transformation. No one can say where the line of flight will pass. (Deleuze and Guattari 250)

Ultimately, these thinkers suggest a compelling plasticity and fluidity inherent to the world of things, a “becoming-animal [that] takes the form of a . . . rupture with the central institutions” that seek to stabilize the Western myths of fixed wholeness, unity, and Oedipal Man (Deleuze and Guattari 247). It is Deleuze and Guattari’s colorful model of an unforeseen political cross-species

⁷ Calling such interspecies “pack” formations “unnatural” is an interesting label given the prevalence of such assemblages in the biosphere. An obvious example of this type of non-filial “partnership” includes plant and fungal intertwinements, organisms that come from entirely different taxonomic categories. Perhaps a more striking example consists of stories about a bird called the “honeyguide” who moves oddly and makes noise to get an “assistant” nonhuman or human mammals’ attention in order to lead them to a bee hive whereupon the mammal who is interested in possessing the honey breaks open the hive leaving the beeswax and larvae exposed for the hungry bird: “In view of this mutual benefit, it is not surprising that humans and the honeyguide have developed an elaborate interspecific communication system” in many African countries (Isack and Reyer 1344). To my mind, Deleuze and Guattari’s “unnatural participations” refer to the above bio-assemblages and a similar type of unpredictable cross-species, gender, class, and race mutualistic dance that is spontaneously produced by the random alliance of entities with similar interests always in perpetual metamorphosis and exchange. These non-hereditary unions are counter to ideals of the “natural” within Oedipal-capitalist culture insofar as the entities involved have no loyalty to or investment in the maintenance of a stable, heteronormative State made of essentialized, absolute identities closed off from alien symbioses, the ephemerality of identity and the rainbow of ontologies.

aggregate (“the becoming-animal of men, packs of animals, elephants and rats, winds and tempests, bacteria sowing contagion” (243)) that Atwood’s army of Toby, the pigeons, and the Crakers formulate in a symbolic representation of the “true” structure of an interdependent coalitional ecosystem. Such an aggregate suggests the possibility of formulating a new ethical interspecies relation based on cooperation and an invested effort in communicating and understanding radically alien cultures.

Jane Bennett also recognizes the essentialist and reductionist tendencies of the shortsighted Western philosophical project that wields the formidable weapons of demystification and life/matter, subject/object dualism that “tend[-] to screen from view the vitality of matter” (xv) or mute the energetic “call” of the thing (*Vibrant Matter* 4); they numb the ability for one to sense the “incredible feeling of an unknown Nature—*affect*,” the power and contagion of the pack (Deleuze and Guattari 240). Like Deleuze and Guattari, Bennett works to show the unpredictable and “irreducibly strange dimension of matter, . . . [its] ‘intangible and imponderable’ recalcitrance” (*Vibrant Matter* 3). She wishes to “people her desert” with animate and vital things because she believes that the “image of dead or thoroughly instrumentalized matter feeds human hubris and our earth-destroying fantasies of conquest and consumption” (ix). She argues that Western philosophy has deadened the world and thereby humanity’s ability to sense and perceive the “nonhuman powers circulating around and within human bodies,” which has resulted in humanity’s spiritually and corporally alienated and unsustainable relation with the world of things (ix). She highlights the “curious ability of inanimate things to animate, to act, to produce effects dramatic and subtle” in order to distribute agentic capacity, vitality, and value across a wider diversity of types with the goal of invoking a greater sense of kinship between things and humans and therefore a heightened ecological sensibility (6).

Inspired by Deleuze and Guattari's description of the viral assemblage, Bennett describes her notion of the assemblage in similar terms as "living, throbbing confederations...[with] uneven topographies" (24); animal, vegetable, human, machine, viral, pharmaceutical, cultural, geological, and atmospheric particulates circulating, aligning, or extinguishing devoid of a unifying center, non-harmonious. She argues that it is important to acknowledge these assemblages as public collectives or polities, political ecologies composed of human and nonhuman elements with significant impacts on human and nonhuman lives. In order to argue for the existence of "ontologically heterogeneous" eco-publics, Bennett points out that "conjoint action is the agency behind the emergence of a public" and that often "some acts of conjoint action originate in nonhuman (natural and technological) bodies" (95). Bennett proposes that a public is an association of bodies joined together in conjoint action "not so much by choice" (100). Rather they are "provoked to do so by a problem," often one that revolves around a "shared experience of harm" (100). Similarly, Deleuze and Guattari assert that "[b]ands, human or animal proliferate by contagion, epidemics, battlefields, and catastrophes" and that in these heterogeneous publics/packs, "unnatural participations or nuptials are the true Nature spanning the kingdoms of nature" (241). Ultimately, Bennett argues that the importance of expanding the definition of who/what participates in a public lies in the possibility of understanding more comprehensively a problem affecting humans and therefore achieving the ability to generate a web of solutions. Additionally, she argues that that if we accept "nonhuman bodies as members of a public" we might be better able to detect "instances of harm to the (affective) bodies of animals, vegetables, minerals, and their ecocultures" (*Vibrant Matter* 103). She is trying to open the reader's mind to the idea of including nonhuman actants within a political body and therefore the necessity of devising "new procedures, technologies, and regimes of perception that enable

us to consult with nonhumans more closely, or to listen and respond more carefully to their outbreaks, objections, testimonies, and propositions” (108). She believes that democratization should be broadened for the sake of the “health of the political ecologies [the packs, assemblages, or rhizomes] to which *we* belong” (108). In *The Year of the Flood* and *MaddAddam* Atwood reveals how capitalist culture has relegated the nonhuman to speechless, apolitical, disenfranchised objects and how if one learns to listen (or if civilization comes crashing down and one can finally hear through the noise) one might be congenially propelled (or pressured by angry Pigoons) to add nonhuman voices to a reimagined democratic body.

CHAPTER FIVE: Perceptive Practices, Recalcitrant Natures, and Interspecies Political Ecologies: The Unforeseen Posthuman Future in Margaret Atwood's *The Year of the Flood* and *MaddAddam*

I came to explore the wreck.
The words are purposes.
The words are maps.
I came to see the damage that was done
and the treasures that prevail.

Adrienne Rich, "Diving into the Wreck" (1973)

Critics have suggested Margaret Atwood's *MaddAddam* trilogy can be read as a fatalistic dystopia that bleakly warns of unavoidable apocalypse due to malevolent, fixed flaws in human nature (Glover 59). Moreover, much Atwood criticism has been unquestioningly informed by anthropocentric theoretical paradigms in which concern with "human" survival in the novels is central (Rozelle 2). These readings assume the existence of a fixed, essential human subject and express great apprehension at its potential "loss" due to culture/nature boundary blurs instigated by the new "posthuman" sciences and technologies in the texts. However, a less reactionary and homocentric analysis might read the posthuman realities of the rogue humans (Toby and the God's Gardeners/MaddAddamites) and cyborgs (the bioengineered Crakers and the pigoons) as exhibiting hope, liberation, and revolutionary potential through responsive practices that enable the discernment of the enchanted vitality underlying the more-than-human world as well as the unpredictable genomic capabilities of these posthuman characters that spin webs of community between unlikely forms.

This chapter specifically looks at how the exploitative late-capitalist regime within the novels provokes a countercultural opposition whose ideology and praxis are informed by philosophies that resemble Jane Bennett's vital materialism and Gilles Deleuze and Félix Guattari's notion of "becoming-animal." Moreover, the collapse of a humanist, stable system opens up a space in which the nonhuman and human "products" of biotechnology are free to

behave in unexpected ways to further “confuse” modernist boundaries between human/animal and subject/object which help to develop new ethical, perceptive responses toward the feminized-other and a new world of interspecies relational possibility. In the post-apocalyptic setting of the novels, the God’s Gardeners’ reality of ecological systems composed of vibrant material actants becomes joyfully evident and thereby works to propel the transformation of the human subject into a more pack-minded collective in Deleuze and Guattari’s sense. The irreducibly aleatory, emancipatory and oddly collaborative quality of the agential forces and recalcitrant natures housed in the rogue humans, bioengineered creatures, and native species also becomes compellingly apparent as they synergistically react to shape a flexible cross-species body politic as represented by the Craker-pigeon-human alliance. Overall, the novels highlight the “natural” recalcitrance of things and their insurgent potentialities (latent interspecies political ecologies), the “becomings-animal” that lay dormant within the various “potent and taboo fusions” of so-called once discrete binaries poised to erupt in violent reaction under the right conditions. For Atwood’s readers, these figures represent the necessary deconstructions and transformations of the ideas of the human subject and the so-called object world if the human species wants to try and form a more ethical and ontologically inclusive ecological future “grounded in concern for others” (Rozelle 1).

In “A Cyborg Manifesto” Donna Haraway points out that in late-capitalism’s new era of communications sciences and biotechnologies, the reduction of the world into a simple problem of code has caused the boundaries between humans and animals, and machines and organisms, as well as the physical and non-physical to become exceedingly fluid and blurry. The effects of this have been problematic in the extreme as evidenced in instrumentalist attitudes toward all living things (the reduction of all subjects to discrete “objects” and finally to the level of manipulatable

information) and the totalitarian use of surveillance technologies, militant eugenics discourse, unethical bioengineering experiments, and oppressive sociobiological interpretations of gender, among many other dominating uses of the new technologies. Be that as it may, perhaps, according to vital materialist Jane Bennett, if the “difference between subjects and objects [is] minimized . . . the status of the shared materiality of all things [will be] elevated. All bodies become more than mere objects, as the thing-powers of resistance and protean agency are brought into sharper relief” (*Vibrant Matter* 13). Complementarily, Haraway perceives how “biotechnologically mediated gene transfers redo kin and kind at rates and in patterns unprecedented on earth” with the potential for creating new and powerful species alliances (*When Species Meet* 18). For example, she sees the “protean transformations” (emergent “kinds of unity across race, gender, and class” and the “fusions with animals and machines”) instigated by the new sciences and technologies as hopeful sites for revolutionary metamorphoses and motely polity coalitions that are in stark opposition to Western Man and “His” static and essentialist agendas (“Cyborg” 173). Moreover, Haraway (like Deleuze and Guattari in their book *A Thousand Plateaus*) recognizes that the boundaries between organic discrete categories have always been unstable and fluid in a continuous becoming (*Companion* 16). Similarly, eco-phenomenologist David Abram describes the “boundaries of [the] living body [as] open and indeterminate; more like membranes than barriers, they define a surface of metamorphosis and exchange” (46). Finally, Bennett, in combination with Deleuze and Guattari (in a mode analogous to Haraway’s affinity politics), emphasize the recalcitrant thing-power of non-human entities, the powerful affect of multiform packs (neither of which mind the bounds of modernist divisions or predicted trajectories) that have the interpellating potential to penetrate the permeable bodies of the world and propel them to form ecologically-oriented, ontologically

heterogeneous polities that include a wider range of actants and potentially ethical subjects. These thinkers also offer several techniques for perceiving the enchanted and participatory nature of things, for recognizing and responding to others, which they claim will provoke restorative political action and more loving, livable relations with the world. Margaret Atwood, in *The Year of the Flood* and *MaddAddam* envisions such a “Nature” in which none of its inhabitants can maintain self-contained integrity but rather constantly participate in a self-other “dance of interaction” in which the “self” (human or nonhuman) comes into contact with “someone else’s needs and reality, creating an interactive process in which each transforms and limits the other” (Plumwood 156).

Part I of this chapter, Pre-Apocalyptic Countercultures and Perceptive Practices, explains how the God’s Gardeners’ eco-societal aesthetic and spiritual practices resemble Bennett’s suggested techniques for apprehending enchanted materialism to formulate a more sensual and collaborative interaction with the world and Deleuze and Guattari’s notions of drug use as a deterritorializing practice exercised to create new modes of being counter to state institutionalized norms. This section also looks at how the God’s Gardeners’ beliefs productively undermine modernist divisions between humans and animals. Part II, The Enchanted Materialisms and Recalcitrant Natures of the Post-Apocalyptic World, of this chapter looks at how the “waterless flood” clears the way for a more effortless and accessible apprehension of the vibrant, uncontrollable, and agentic qualities that issue both from “natural” and bioengineered entities. This newfound comprehension and susceptibility to thing-power and the “contagion” of the pack, in a sense, primes many of the characters to enter the world of becoming. Part III, Emergent Publics/Packs, will argue that these recalcitrant natures provide unexpected sources of hope and liberation as they collapse speaker/silent, human/animal, and subject/object binaries.

They propel the various characters to join in a new kind of coalitional unity in experiential affinity as exemplified by the Pigoon-Craker-Human war against the Painballers whose aftermath results in a Pigoon-Human political alliance/pack. This section will argue that despite this event's satirical nature, it challenges one to question/widen one's definitions of subjecthood and how and whose "voices" should be included in an ecological democracy. Part IV, Ethology (or Degrees of Affect) Versus Biocentrism as a Foundation for a Cross-Ontological Ethics, will conclude the discussion by briefly looking into the anxiety of blurring boundaries, some of the pitfalls in reading and celebrating the cross-species alliances depicted in the novels as advocating biocentrism, and the necessity of a more ecological assessment of "who" and "what" matters in an ontologically heterogeneous ethics.

Part I: Pre-Apocalyptic Countercultures and Perceptive Practices

It is important to replace the images of human, animal, and environmental natures portrayed in humanist epistemologies and sociobiological, biodeterminist discourses because they are not scientifically accurate nor do they promote sustainable or ethically livable worldviews. Bennett believes this replacement may be possible if one develops "the ability to discern nonhuman vitality, to become perceptually open to it" (*Vibrant Matter* 14). She explains that practicing vital materialist aesthetic exercises and techniques ("self-criticism of conceptualization, a sensory attentiveness to the qualitative singularities of the object, the exercise of an unrealistic imagination – an exercise of utopian thinking that embraces the possibility that the energetic presence of things occluded by our concepts and secular disposition might still be felt – and the courage of a [naïve and foolish] clown") will open one up to the vitality of systems and things and encourage one to practice "ameliorative political action" (15). She emphasizes the importance in developing a bodily and sensual receptive attentiveness to the

moment of resistance, the instant of perceiving the vital power in things. This newfound perceptiveness could encourage wondrous moments of fearful and pleasurable discovery in which “human being and thinghood overlap,” thus rejuvenating the human animal’s sense that “we are also nonhuman and that things too are vital players in the world” (4). Restoring the body’s anticipatory readiness and “perceptual style open to the appearance of thing-power” could also help to promote the creation of a more responsible and inclusive socio-ecological polity as mentioned above (5). Similarly, Deleuze and Guattari see the bodily practices and aesthetic techniques of painting, writing, music, mind-altering drugs, and an attentive fascination for the “pack” or the multiplicative and contagious assemblage as conducive to deterritorialization or as fostering a line of flight to enter into an understanding and identification with a subversive nonhuman becoming in stark opposition to late-capitalist culture (239-240). Recognizing the necessity of developing a sense of this intimate affinity with the nonhuman world, Toby and the Gardeners in *The Year of the Flood* and *MaddAddam*, develop the set of bodily practices and aesthetic techniques delineated by Bennett, Deleuze, and Guattari that foster a sensual perceptiveness toward the earth’s enchanted materialism and pack affects, sensations which encourage the subversive state of becoming-animal and “allows to come into being entities that would otherwise remain concealed” (Donovan 92).

Bennett describes Theodor Adorno’s concept of “nonidentity” as a lack of fit between a concept and a thing, the way the underlying resistance of the thing exceeds one’s definitions (*Vibrant Matter* 15). She suggests that the “discriminating man...both subjects his conceptualizations to second-order reflection and pays close *aesthetic* attention to the object’s ‘qualitative moments’, for these open a window onto nonidentity” or the vitality of things (15). Adam One, the founder and the leader of the God’s Gardeners eco-society, enacts this perceptual

practice of critical reflection when he says “Science is merely one way of describing the world” (*The Year* 359). While preaching in the Sewage Lagoon, Adam One tells the crowd, “Like you, I thought Man was the measure of all things...In fact, dear Friends, I thought measurement was the measure of all things! Yes – I was a scientist...I thought that only numbers could give a true description of Reality” (40). Here one can see Adam One is explicitly critiquing humanist and rationalist (emphasis on quantitative truth) reductionism in an effort to see something closer to the thing in itself (or at least a more ecological construction of the world) and encourage the public to “cultivate the ability to discern nonhuman vitality, to become perceptually open to it” (Bennett, *Vibrant Matter* 14).

Toby is one such member of the public that comes to cultivate her sensual and perceptual skills. After Adam One rescues Toby from her abusive employer Blanco, she climbs atop the God’s Gardeners Edencliff Rooftop Garden and gazes “around it in wonder...Each petal and leaf was fully alive, shining with awareness of her” (*The Year* 43). She experiences her first glimpse of the underlying vitality of things. Both Adam One and her substitute mother and mentor, Pilar, encourage Toby to exercise the vital materialist techniques of an unrealistic imagination (the creative envisioning of the thing-power “obscured by the distortion of conceptualization” (15)) and the courage of naiveté (to postpone the interpretation of thing-power as social construction) so that she might apprehend more skillfully and consciously the inexplicable energy of things. After Adam one requests that Toby accept a position as Eve Six of Garden Botanics and Edible Weeds, Toby informs him that she cannot accept because she is unsure she believes any of the Gardener teachings: “She’d never managed to repeat the moment of illumination she’d felt on her first day with the Gardeners” (168). Adam one assures her that because she has been acting as if she believes she should continue to live in moments of naivety accordingly and “belief will

follow in time” (168). Pilar further taxes Toby’s imagination with her folk myths: “[B]ees [are] on good terms with the unseen world, being messengers to the dead...[while] [m]ushrooms [are] the roses in the garden of that unseen world, because the real mushroom plant [is] underground. The part you could see – what most people called a mushroom – [is] just a brief apparition. A cloud flower” (100). This description fits the elusive nature of the sensible world’s miracles of expression. The cloud flowers, bees, and underground natures can also be read as a symbolic description of the unseen (molecular or imperceptible) interconnected symbiotic nature of multiplicities, potential becomings connected by a “subterranean stem” that makes a rhizome or a cofunctioning ecological body composed of humans and nonhumans (Deleuze and Guattari 251). Finally, in a further stretch of the naïve imagination, Pilar instructs Toby that she must ask permission from the Queen to extract honey and tell the bees the news each day. Toby is told she must speak out loud to bees that she believes are inertly mechanistic and thoughtlessly instinctive and “[s]o Toby did speak, though she felt like a fool” (100).

Later, Toby goes to the garden to inform the bees of Pilar’s death. She thinks they can tell her grief from fear and wonders, “Were they listening? Perhaps. They were nibbling gently at the edges of her dried tears. For the salt, a scientist would say” (181). Toby’s scientific dismissal of the bees behavior is problematic in that she is not practicing critical reflection and in that it resembles what Bennett labels as the “strong tendency among modern, secular . . . humans to refer such signs back to a human agency” (*Vibrant Matter* 17) as she does when she imagines her own insanity as producing the delusion of listening bees. Bennett claims that the vital materialist will instead

try to linger in those moments during which they find themselves fascinated by objects, taking them as clues to the material vitality that they share with them. This sense of a strange and incomplete commonality with the out-side may induce

vital materialists to treat nonhumans—animals, plants, earth . . . —more carefully, more strategically, more ecologically. (17-18)

Indeed, after a time of following the naïve and imaginative tenets of vital materialists Adam One and Pilar, Toby begins to see the entire world as animate and agentic, not mechanical or reflexive. When she has to leave the paradise of the Edenclyff Rooftop Garden due to a threat of sabotage by Blanco, she goes to tell the bees goodbye. She notes that she will miss the bees and believes that the bees that alight on her face are in fact, rather than gathering salt, “exploring her emotions through the chemicals on her skin,” discussing her, and hopes they will forgive her for tipping their hives earlier to save herself from an attack by Blanco (257). Clearly, Toby has cultivated the special sensitivity of a thing-power materialist and is able to ascertain the agency and sensuality of the nonhuman world. Yet, it is not just that Toby learns to appreciate thing-power; she also has to revise her definition of communication as information sharing that can take place as an exchange of chemicals⁸. She forgoes the assumption that language and intentionality are purely human prerogatives and instead begins to imagine the natural world as “a vast network of signifying possibilities across innumerable species” (Clark 53). Toby realizes that by “denying that . . . animals have their own styles of speech, by insisting that the river has no real voice and that the ground itself is mute, we stifle our direct experience” (Abram 263). By denying the communicative gestures and vitality of “earth others” we cut ourselves off from lively interactions and various experiential pleasures (both literary and “real” world) and them from ethical consideration.

⁸ Plants also employ chemicals to communicate. For example, certain species of plants when under attack by “insect herbivores” will exude “volatile compounds” that “attract both parasitic and predatory insects that are natural enemies” to the insect wreaking havoc on the plant (Pare’ and Tumlinson 1). This release of chemicals by the plant under attack by insect herbivores also often causes a defensive response in neighboring plants. Scientists call “[s]uch chemicals, which function in communication between and among species, as well as those that serve as messengers between members of the same species. . . semiochemicals.” This is also an example of a kind of “unnatural participation” in Deleuze and Guattari’s sense as well as nonhuman intentionality.

The God's Gardeners also seem to practice the kind of strategic anthropomorphism and affinity groping that Bennett advocates. Bennett defines anthropomorphism as the "interpretation of what is not human or personal in terms of human or personal characteristics" and believes this is a useful strategy for thinking about the more-than-human world because one might "at first...see only a world in [his or her] own image, but what appears next is a swarm of 'talented' and vibrant materialities (including the seeing self)" (*Vibrant Matter* 99). Indeed, Pilar projects the human notion and ability to love on the bees when she asserts, "They know they're loved" (*The Year* 100). After this habitual treatment has time to sink into Toby's skin, she does come to see the bees as consciously directed, "talented" entities. For example, when she goes to persuade a swarm of wild bees to come live at the MaddAddamite Cobb House she interprets their landing on her face as an intelligent investigation that will culminate into a conscious acceptance or rejection of her: "Several of the scout bees fly down and land on her face. They explore her skin, her nostril, the corners of her eyes; it's as if a dozen tiny fingers are stroking her. If they sting, the answer is no. If they don't sting, the answer is yes" (*MaddAddam* 303).

Additionally, a projected affinity onto things can help to "catalyze a sensibility that finds a world filled not with ontologically distinct categories of beings (subjects and objects) but with variously composed materialities that form confederations," that reveal "similarities across categorical divides" (Bennett, *Vibrant Matter* 99). For example, Adam One points out that that "knots of DNA and RNA...tie us to our many fellow creatures" and that one should "accept in all humility our kinship with the Fishes, who appear to us as mute and foolish; for in Your [God's] sight, we are all mute and foolish" (*The Year* 197). Perhaps more strikingly, Adam One cautions his Gardener congregation that humans are "inclined to overlook the very small that dwell among us; yet, without them, we ourselves could not exist; for every one of us is a Garden

of sub-visual life forms” (160). Each of these lines ask the human subject to recognize his or her interior “thing-hood,” to “reach out across the Species gap” (*MaddAddam* 189), and perceive that each “human is a heterogeneous compound of wonderfully vibrant...matter” thus minimizing categorical differences between subjects and objects and thereby bestowing a sense of kinship and value more widely (Bennett, *Vibrant Matter* 13). Moreover, these descriptions defy the humanist conception of the sovereign, atomistic subject in favor of Man as Multiplicity, as “an aggregate whose elements vary according to its connections, its relations of movement and rest, the different individuated assemblages it enters” (Deleuze and Guattari 256).

Similar to Deleuze and Guattari’s philosophies, not only do the God’s Gardeners challenge (through critical reflection) science and humanist monopolies on apprehending the world and understanding subjectivity, they also suggest that “psychic aids” and diverse forms of “art play[-] a critical ‘deterritorializing’ role in [their] particular method[s] of creating ‘lines of flight’ away from the...state philosophy’s meta-narratives” (Economides 2). Deleuze and Guattari clearly describe the politics of becoming-animal as an expression of “minoritarian groups, or groups that are oppressed, prohibited, in revolt, or always on the fringe of recognized institutions” (247). Indeed, this particular countercultural minority wishes to separate from “recognized institutions” that valorize and produce atomistic selves hyper-estranged from the more-than-human and human world and instead affirm pack alliances, heteroglossia, and multiplicities. During the Gardeners’ Feast of the Serpent Wisdom, Adam One tells the reader it “is the Serpent Wisdom we long for – this wholeness of Being,” the way “it feels the vibrations of Divinity that run through the Earth, and responds to them quicker than thought” (*The Year* 235). In other words, the Gardeners desire the affective state of becoming-animal and a sensitivity to the power of things. They wish to “endow [their] own elements with the relations

of movement and rest, the affects, that would make [them] become [snake]” (Deleuze and Guattari 258): “May we greet with joy the few moments when, through Grace, and by the aid of our Retreats and Vigils and the assistance of God’s Botanicals, we are granted an apprehension of [becoming-Serpent]” (*The Year* 235). Moreover, such views regarding snakes reject religious traditions that cast them as “evil” thereby rejecting a major influence on the humanist devaluations of animals.

Through the aid of “botanicals” the Gardeners try to “explore affective states that strongly resemble what Deleuze and Guattari characterize as the experience of ‘multiplicity’ or ‘becoming-animal’” (Economides 2). For example, Toby’s first Vigil is spent in an attempt to “mind-meld with a plantful of green peas. The vines, the flowers, the leaves, the pods. So green and soothing” (*The Year* 99) and later in a locked gaze with a liobam or what her reductionist thinking rationalizes is the “effect of a carefully calibrated blend of plant toxins” (171). Toby at this moment might not see any significance in her vision but according to Deleuze and Guattari these experiments nevertheless open up lines of flight, opportunities for new becomings and aggregate formations:

[T]he experimentation with drugs has left its mark on everyone, even nonusers . . . it change[s] the perceptive coordinates of space-time and introduce[s] us to a universe of microperceptions. . . All so-called initiatory journeys include these thresholds and doors where becoming itself becomes, and where one changes becoming depending on the ‘hour’ of the world, the circles of hell, or the stages of a journey that sets scales, forms, and cries in variations. From the howling of animals to the wailing of elements and particles. (Deleuze and Guattari 249)

In other words, Toby’s drug-use can be read as a kind of subversive act in that it “not only disrupts, it disrupts in such a way as to change radically what people can ‘see’: it repartitions the sensible; it overthrows the regime of the perceptible” (Bennett, *Vibrant Matter* 107). Toby will later experience the equivalent of Blake’s idea in his visionary poem *The Marriage of Heaven*

and Hell that “[i]f the doors of perception were cleansed every thing would appear to man as it is, infinite. / For man has closed himself up, till he sees all things thro’ narrow chinks of his cavern” (155). Additionally, like Blake’s *Thel* glimpses the underworld, Toby will be able to see the “world as we organically experience it in its enigmatic multiplicity and open-endedness” prior to its rigid conceptualization, the deeper more unitary network of relations that exists underneath our codified cultural lenses (Abram 40). Furthermore, these lines emphasize the mutable or adaptive nature of becoming, how it shifts as circumstances shift, implying the necessity of changing affiliations, politics, and packs depending on ever-changing environmental conditions. Indeed, as we will see, Toby’s above nascent *Vigil* creates a “line of flight” for new pack formations in which human collectives fuse into nonhuman collectives in a symbolic deconstruction of the notion of an atomistic self as well as a representation of the political ecology we are already a part of, have the potential to create, and must perpetually revise. Overall, the God’s Gardener’s vital materialist and botanically enhanced meditative techniques allow them to discern the underlying thing-power of the animate and inanimate world as well as enter into new ethical becomings in direct opposition to state conceptualizations of the privileged subject and his instrument-objects.

Part II: The Enchanted Materialisms and Recalcitrant Natures of the Post-Apocalyptic World

As Ronald B. Hatch recognizes, “Atwood has something in common with recent ecocentrist writers in her rejection of the anthropomorphic viewpoint and their struggles to reposition humanity as one species among many in a web of natural connections” (qtd. in Rozelle 2). Indeed, the basis for hope in the novels is in the transformation of human subjects from isolated egos to relational beings with an awareness of their multiplicity stimulated by the emergence of the recalcitrant natures, rogue genomes, and the thing-power of the more-than-

human world that defies control and conformity to modernist divisions. This comprehension of an enchanted materialism and the cultivation of a “sense of life’s inevitable expression of itself through resistance” (Wolfe 37) is made possible by the doors opened by the perceptive practices discussed above and the new intimacy and direct proximity of humans with the natural world in the post-apocalyptic landscape, which unexpectedly lays the “groundwork for a new convergence of humans and ecosystems” (Rozelle 1).

Interestingly, the “apocalypse” thrusts humans back into the natural world and the reader glimpses the way that “the more one lives out of doors the more personality there seems to be in what we call inanimate things. The strength of the hills and the voice of the waves are no longer grand poetical sentences, but an expression of something real” (Sarah Jewett qtd. in Donovan 81). Ren, a child Gardener turned exotic dancer, affirms the impossibility of experiencing wonder or comprehending a vital nature inside the confines of the noisy hyper-separated capitalist landscape for “[w]e are a culture generally deaf to both our bodies and the rest of material life, deaf at an increasing cost” (Slicer 61). She tries to do a meditation but reports: “I could hear the thump, thump of the bass line coming from the Snakepit and the humming of the mini-fridge, I could see the lights of the street making blurry patterns through the glass bricks of the window” (*The Year* 279). The city environment proves not to be spiritually enlightening and so she ceases her efforts to turn on the news. In contrast, after the collapse of this noisy capitalistic world, Jimmy (Crake’s best friend left in charge of the humanoid Crakers after the pandemic) unexpectedly becomes more perceptive to the vitality of things by unconsciously exercising a version of the aesthetic and receptive attentiveness advocated by the God’s Gardeners. Jimmy lovingly ponders in slow, focused detail on an insect descending from a tree branch:

A caterpillar is letting itself down on a thread, twirling slowly like a rope artist, spiraling towards his chest. It's a luscious, unreal green, like a gumdrop, and covered with tiny bright hairs. Watching it, he feels a sudden inexplicable surge of tenderness and joy. Unique, he thinks. There will never be another caterpillar just like this one. There will never be another such moment of time, another such conjunction.

These things sneak up on him for no reason, these flashes of irrational happiness. It's probably a vitamin deficiency. (*Oryx and Crake* 41)

Bennett describes feelings of openness to nonhuman ontologies, the bridging of the gap that separates humans and nonhumans as an experience of joy: "To the thing-power materialist, one powerful source of the energy required to jump the gap is joy—joy as one expression of the thing-power of the human body, joy as a animating energy generated in part by affection for a material world experienced as vital and alive" ("Steps Toward" 363). Furthermore, Josephine Donovan argues that this "attention to the particulars of one's environment is morally progressive because it breaks down egotism and fosters compassion" (91). Unfortunately, as Toby initially is wont to do, Jimmy brushes off this experience of joy in the enchanted nature of things because of his socialization in a society saturated with reductionist beliefs in the predictability and mechanistic character of nature's objects. Jimmy's fallback response to seeing a moment of spiritual enlightenment is to brush it off as a meaningless chemical or physiological malfunction. The "Western discourses of domination cannot hear" the language he has the potential to "share[] with the tree, [the caterpillar], and other creatures of the wood" (Donovan 81). Nonetheless, the new landscape has the potential to foreground the vitality of things and transform the hyper-estranged human subject into a more ecological sensitive multiplicity as the reader later sees when Jimmy begrudgingly apologizes to a banana slug: "*I'm sorry I stepped on you, Child of Oryx, please forgive my clumsiness*" (*Oryx and Crake* 334).

Hunkered down in the AnooYoo Spa after the pandemic, Toby has an experience similar to Jimmy's as she surveys the tree line from the rooftop for threatening forms. She thinks that the

“trees look innocent as ever; yet she has the feeling that someone’s watching her – as if the most inert stone or stump can sense her” and justifies these feelings as the effects of isolation which may induce “talking crickets . . . writhing columns of vegetation . . . eyes in the leaves. Still, how to distinguish between such illusions and the real thing?” (*The Year* 15). Later when Toby goes to harvest maggots from the carcass of the dead boar she shot, she becomes overwhelmed with the swarming activity and vitality of nature, the contagion of the pack’s intensities:

All around her is sweet scent – the tall clover’s in bloom, the Queen Anne’s lace, the lavender and marjoram and lemon balm, self-seeded. The field hums with pollinators: bumblebees, shining wasps, iridescent beetles. The sound is lulling. Stay here. Sink down. Go to sleep.

Nature full strength is more than we can take, Adam One used to say. It’s a potent hallucinogen, a soporific, for the untrained Soul. (*The Year* 327)

This experience with the alien vitality of things resembles what Timothy Morton calls the “object-oriented sublime” as that which “unnervingly reveals the ‘subject’ to be an (assemblage of) object(s) that can be acted on physically” and where one becomes intimate with an alien presence (“Here Comes Everything” 171). Indeed, according to Toby, the new proximity to nature in “full strength” tempts the former Gardeners and MaddAddamites to “[b]lend with the universe”, to stray “away during the night, into the labyrinth of leaves and branches, of birdsong and windsong and silence” (*MaddAddam* 192). These atomistic egos feel a lonely isolation from what is “profoundly apart. Loneliness [that] turns to yearning, a kind of love, an overpowering attraction to something beautiful and mysterious and other, the desire to hold forever the object of our wonder, to be a part of it, united with it” (Dean Moore 268). The contagious affect and thing-power of alien others appeals to and infects something deep within these individuals that seems to want to be swept up in the pack or multiplicity similar to the way “the depths of the ocean and the mountain heights are said to lure people, higher and higher or deeper and deeper, until they vanish into a state of rapture that is not human” (*The Year* 327).

Toby senses a similarly overwhelming feeling of thing-power that verges on sublimity, in its “inhuman, radically different, irreducibly strange” qualities, as she traipses off with Ren to rescue Amanda from the Painballers (Morton, “Elegy” 265). She imagines the crows’ desire for her edible body while also perceiving that “each flower, each twig, each pebble, shines as though illuminated from within, as once before, on her first day in the Garden. It’s the stress, it’s the adrenalin, it’s a chemical effect: she knows this well enough” (*The Year* 415). Once more, she slips into scientific justifications as Atwood perpetually reminds us of the essentialist and reductionist views that limit our experiences of the world. However, Toby also seems to be “struck by the profound otherness and indifference, or maybe the mystery, of what [is] beyond [her], and by [her] own terrifying insignificance” (Dean Moore 268). This sense of physical vulnerability, or interior thing-hood, her edibility, induces a “glimpse ‘from the outside’ of the alien, incomprehensible world in which the narrative of the self has ended” (Plumwood, “Being Prey” 3). What prevails is an impression of the way in which “humans are always in composition with nonhumanity, never outside the sticky web of connections or an *ecology*” (Bennett, “Steps Toward” 365).

As the thing-power of the world becomes increasingly conspicuous within these novels so does the irreducibly unpredictable nature of the bioengineered creatures, some of which function as “contagions” that propel new combinations of bodies and things into alliance. As Lee Rozelle argues that in the post-apocalyptic world the “[t]ransgenic animals now represent emergence and flux in the relationship between humans and other species; humanity’s situation in this brave new biosphere, one that contains ferocious pigeons...requires an extra level of respect and heedfulness, to say the least” (5). Jimmy reflects on how the “whole world is now one vast uncontrolled experiment...and the doctrine of unintended consequences is in full spate”

(*Oryx and Crake* 228). In particular, he ruminates over the fact that despite the genetic engineers' belief that they could sculpt tusk-free transgenic pigs with human brain tissue, "they were reverting to type now [that] they'd gone feral, a fast-forward process considering their rapid-maturity genes" (38). While there is already ample evidence that other species (from elephants, sun bears, Yellowstone bison, to whales, among countless others) actively mourn the death of their loved ones (B. King 2), further evidence of the always already rogue and recalcitrant natures of the bioengineered animals is evidenced when Toby notices the pigoons have scattered funeral fern fronds and rose petals over a dead boar's carcass. She recalls this as normal behavior for elephants but "usually [the pigoons] just eat a dead pig, the same way they'd eat anything else. But they haven't been eating this one" (*The Year* 328). Moreover, in stark contrast to mechanistic descriptions of organisms as inert and wholly controllable, the pigoons have the capacity for pleasure and enjoyment as when Blackbeard, a Craker child, tells the reader they playfully and leisurely swim in the pool as well as feel "delight" in the prospects of a recently planted oak tree producing acorns (*MaddAddam* 539). Additionally, the pigoons are understood as being able to kill out of spite and revenge (219). These animals seem to have unexpectedly evolved complex cultural, phenomenological, and communicative systems that agitate human/animal boundaries in that characteristics that were once considered unique to humans are in fact exhibited by more species. They unsettle notions of what has been hitherto securely established as inert, controllable objects as well as who is endowed with subjectivity and "personhood". While these examples challenge one to acknowledge that the expansion of subjecthood "might well extend in the future into forms of life that we as yet scarcely understand—or, to put an even finer point on it vis-à-vis the question of synthetic biology, that have yet to be invented" they also stir one to consider extending subjectivity to already existing

natures like elephants and therefore present an opportunity for a more widely inclusive community (Wolfe 85). Finally, the genetically engineered Children of Crake defy their “maker’s” wishes in overriding their genetic predetermination in being able to sing and in their ability to practice religion, artistic skill, literacy, and leadership. The MaddAddamites, who bioengineered the Crakers, confirm that “[t]heir brains are more malleable than Crake intended. They’ve been doing several things we didn’t anticipate during the construction phase” (*MaddAddam* 391). A further surprising advantage to this genetic rebellion by the Crakers is that the particular ability to sing seems to allow them to communicate with a wide swath of species, which adds another rogue ingredient to the volatile co-species emancipatory potential in this post-apocalyptic world. Above all, the combination of contagious thing-power, pack affect, and recalcitrant natures work to deconstruct notions of singularity and fixed identities.

Part III: Emergent Publics/Packs

In *MaddAddam*, the combination of a newfound consciousness of recalcitrant natures, rogue genomes, and thing-power, made possible by perceptive practices and intimate proximity to nature, culminates into the “unintended consequence” of an emancipatory formation of cross-species alliance. Indeed, in this new post-apocalyptic “cyborg world...people are not afraid of their joint kinship with animals and machines, not afraid of permanently partial identities and contradictory standpoints” (*Simians* 154). Later, after the collapse of “civilization,” when confronted with the dark and unknown consequences of Amanda’s possible pregnancy by a Painballer or a Craker, Toby imbibes an Enhanced Meditation formula again, this time in order to glean advice from the dead Pilar buried under an Elderberry bush. Perhaps due to the “doors” and “thresholds” she unearthed on the Edencliff Rooftop garden, Toby seems to have more faith in the ability to stimulate “a crinkling of the window glass that separates the visible world from

whatever lies behind it,” to apprehend the “imperceptible,” the vitality of the more-than-human world (*MaddAddam* 318).

Deleuze and Guattari assert that multiplicities are becomings that braid together “animals, plants, microorganisms, mad particles, a whole galaxy” (250). Furthermore, each becoming is molecular because “becoming is not to imitate or identify with something or someone” but instead to “belong to the same molecule” (273). In other words, one emits particles and imbibes particles as one flits in and out of different becomings in accordance to whatever assemblage one encounters and adapts to, whatever “zone of proximity” one enters into (272-273). They claim that all of the molecular-becomings are “rushing toward” becoming-imperceptible as “the immanent end of becoming, its cosmic formula” where one “passes through the kingdoms of nature, slips between molecules to become an unfindable particle in infinite meditation on the infinite” (279). Deleuze and Guattari’s notion of becoming-imperceptible might be understood through Keats’s notion of himself as a “camelion” poet who engages continually with “filling” or “becoming” some other “Body—The Sun, the Moon, the Sea and Men and Women” (“To Richard Woodhouse” 973). To become-imperceptible is to “[e]liminate all...that roots each of us (everybody) in ourselves, in our molarity” (279) just as Keats “has no Identity” (973). In his letter “To Benjamin Bailey,” Keats tells his friend that the “setting sun will always set me to rights—or if a Sparrow come before my Window I take part in its existence and pick about the Gravel” (967). Deleuze and Guattari’s becoming-imperceptible resembles Keats’s filling of himself with the affect of his surrounding environment, the way he is “embalmed” by the “murmurous haunt of flies” (“Nightingale” 50) while his “heart aches, and a drowsy numbness pains” his “sense” as he feels “too happy” in a nightingale’s “happiness” (1-6). To move toward becoming-imperceptible one must escape self-enclosure and become-everybody/everything to

“make a world” (280). Deleuze and Guattari assert that drugs are an agent of becoming-animal, becoming-molecular, and becoming-imperceptible simultaneously and that they make the imperceptible perceivable (282). Indeed, at “zero hour,” with the expectation that Enhanced Meditation formulas “can mobilize gradients and thresholds of perception toward becomings-animal, becomings-molecular” (284), Toby enters into the becoming-molecular of Pilar and, unexpectedly, becoming-Pigoon (a Drug-Pigoon-Pilar-Toby-Craker-semblage) and in effect deterritorializes the “Old World” of instinctive and mute object-animals controlled by soulful human subjects endowed with free will. A new world of alternative modes of being opens up along this line of flight that simultaneously suggest the possibility that departed spirits can communicate with and through bioengineered creatures who can communicate with the Crakers.

Toby enters the “zone of proximity” of Pilar’s grave where Pilar is present in her “new body,” the Elderberry bush assemblage that is a molecular cascade of white flowers, sweet air, and a multitude of vibrating honeybees, bumblebees, and butterflies (*MaddAddam* 317). After self-consciously realizing she is asking an “inert” bush for a sign of what to do about Amanda’s pregnancy, Toby is confronted by a mother pigoon and her five farrow. As she is sensually ruminating on the “qualitative singularities,” the aesthetic beauty of the giant pig, her “elements” are suddenly saturated with “the relations of movement and rest, the affects” that would make her become-pigoon (Deleuze and Guattari 258). As the pigoon mother and Toby stare at one another the “imperceptible itself becomes necessarily perceived at the same time as perception becomes necessarily molecular...colors and sounds engulfing lines of flight, world lines” (282): “All around there are sounds, noises, almost-voices: hums and clicks, tappings, whispered syllables” (*MaddAddam* 319). Toby is “emitting particles that enter the relation of movement and rest, or the zone of proximity, of a [microanimality],...that produce[s] in [her] a molecular

animal, [that] create[s] the molecular animal” (Deleuze and Guattari 275). Toby disintegrates into “life, life, life, life. Full to bursting, this minute. Second. Millisecond. Millennium. Eon” while barely perceiving molecular-sound moving through her “like wind in the branches, like the sound hawks make when flying, no, like a songbird made of ice” (*MaddAddam* 321). Toby seems to become aware of the “conversation that [one] carr[ies] on with things, a continuous dialogue that unfolds far below [one’s] verbal awareness” (Abram 52).

Later she recounts the experience to a fellow Gardener, fairly certain that the pigeon mother was communicating with her, and to Blackbeard, a Craker child who has taken a liking to her. Toby seems to want to believe that “Pilar appeared in the skin of a pig,” which allowed Toby to discern that all entities take pleasure in life. Toby’s vision and what is communicated in the encounter with the sow seems also to consist of a hopeful message that this new world of chimeras (Craker/human and pigeon/human) is fertile and full of productive, communal potential. Moreover, the drug helps Toby to perceive the musical language through which the Crakers and animals communicate with one another, further adding to the possibility of the cultivation of fuller life for all species as an enlightening aperture opens in the communicatory world. Communication seems to be for her “no longer restricted to a verbal exchange between humans” but is rather “redefined as a greater range of nonverbal, embodied expressiveness” (Warkentin 115). Toby says that she was moved by the affect of and connected to the interspecies and particulate assemblage, “to the wavelengths of the Universe” with the “help of a brain chemistry facilitator” (*MaddAddam* 326). She defends against the classification of her experience as meaningless coincidence: “And just because a sensory impression may be said to be ‘caused’ by an ingested mix of psychoactive substances does not mean it is an illusion. Doors are opened with keys, but does that mean that the things revealed when the doors are opened

aren't there?" (326). Because of her vital materialist "willingness to suspend the negatives," Toby is able to experience this "mystical quasi-religious experience" (326) of "multiplicity" or "becoming-animal" that confuses "rigidly anthropocentric subjectivity and represent[s] a 'line of flight' from modernity's...dualisms" (Economides 5). This deconstruction of the human as the sole "speaking" subject and the animal as eternally mute and dumb in the text provides a glimpse into the liberating potential of including animal perspectives in the struggle for life. Arguably, the bioengineered creature houses the very possibility for this encounter that leads to the transformation of egos as isolated subjects into entities aware of their part in an assemblage and vital things once categorized as objects into subjects: "The Pigeons were not objects. She had to get that right. It was only respectful" (*MaddAddam* 500).

The reader is "present at the dawn of the world" in that Toby "has made the world, everybody, everything, into a becoming, because [she] has made a necessarily communicating world, because [she] has suppressed in [herself] everything that prevents [her] from slipping between things and growing in the midst of things" (Deleuze and Guattari 280). Furthermore, Toby's meditative experience has "sufficiently changed the general conditions of space and time perception so that nonusers can succeed in passing through the holes in the world and following the lines of flight" (286). In other words, Toby has transformed the unfamiliar imperceptible, all that was repressed by state-sanctioned metanarratives, into something that might slowly approach an ethical quotidian:

The bees fly in and out of the hole in the Styrofoam cooler. They seem to like it here in the garden. Several of them come over to investigate her. [...] Yes, they know her. They touch her lips, gather her words, fly away with the message, disappear into the dark. Pass through the membrane that separates this world from the unseen world that lies just underneath it. There is Pilar, with her calm smile, walking forward along a corridor that glows with hidden light.

Now, Toby, She tells herself. Talking pigs, communicative dead people, and the Underworld in a Styrofoam beer cooler. You're not on drugs, you're not even sick. You really have no excuse. (397)

The interaction with the sow seems to ask if humanity might “regain the dramas of interaction with nature which reductive science has stolen from [them], and [become] receptive to the stories of other beings” (Plumwood 138). Such an animation of entities primarily thought of as inanimate in addition to the practice of a kind of attentive “becoming” might work to propel readers into exercising such an ecological relation of moral responsibility with the more-than-human world in that becomings are intended to “strip away (or de-code)” instrumental, state sanctioned modes of being or “the actual determinations of the past, and restore to the present its virtual potential to become-otherwise in the future” (Holland 137). Toby’s “sober” acknowledgment of the vital materiality and interconnectivity of things demarcates the revolutionary transformation of human and nonhuman subjectivity in the text as well as whose voices and interests that might count in a public or political ecology, the pack.

Toby’s communicative experience, the recalcitrant natures of transgenic and native things, in synergistic combination with the Gardeners’ perceptive practices, leaves this post-waterless flood MaddAddamite community deterritorialized. Not only are they more agreeable to the potential of thing-power and becoming-animal, but they are open to the politics of the pack in which one sees the “world as a swarm of vibrant materials entering and leaving agentic assemblages” (Bennett, *Vibrant Matter* 107), where diverse bodies “enter into composition with...the affects of [other bodies]...to exchange actions and passions with [them] or to join with [them] in composing a more powerful body” (Deleuze and Guattari 257). Evolutionary scholarship has, until recently, privileged competitive models of natural selection and largely underestimated the importance of cooperation to the longevity of natural systems, a description

of reality that closely resembles Bennett's notion of political ecologies and Deleuze and Guattari's formulation of mechanistic assemblages and packs above (Sachs et al. 136). In a scene that could be easily read as a satire of "talking animals," the pigoons (or Pig Ones) confront the Gardeners and MaddAddamites in order to cooperatively request their aid in eliminating the piglet-murdering Painballers (criminalized rapist-cannibalistic-gladiator figures who survive from the pre-apocalyptic world). This newly formed collective symbolically represents "nonhuman animals as coconstitutive with human beings in resisting the articulations of a biopolitical *dispositif* in and through the body" (Wolfe 35). In other words, this group signifies the revolutionary resistance against the capitalist hyper-consumptive, cannibalizing, inhumane, and female and animal objectifying regime signified by the Painballers. Furthermore, the communicative gesture by the Pig Ones resembles Bennett's description of the political act as consisting of "the exclamatory interjection of affective bodies as they enter a preexisting public, or, rather, as they reveal that they have been there all along as an unaccounted-for part" (*Vibrant Matter* 105).

The interspecies group combines as a powerful assemblage that defeats the Painballers and succeeds in "the work of clearing away the chaos" leftover from the pandemic (*MaddAddam* 415). The group also conjointly participates in a trial to decide the fate of the inhumane Painballers upon which they reach a bleak verdict, namely, these men's execution. Afterwards the group performs a funeral for their various fallen comrades-in-arms whereupon the Pig Ones gather flowers and ferns to decorate the bodies and "carry Adam and Jimmy to the site... as a sign of friendship and interspecies co-operation" while the Crakers contribute by singing in their eerie "digital-keyboard theremin" tonality (538). Perhaps most significant to the future of fictional and real interspecies relations is the pact made between the Pig Ones and the humans, a

political act in its effect of provoking a “gestalt shift in perception: what was . . . an instrument becomes a participant, what was foodstuff becomes agent, what was adamantine becomes intensity” (Bennett, *Vibrant Matter* 107). The Pig Ones agree that they will “not hunt and eat any of the [humans], and they [will] also not dig up their garden anymore. Or eat the honey of the bees” (534). Meanwhile, the humans agree also to keep the pact communicated to the Pig Ones by Blackbeard’s translation of Toby: “None of you, or your children, or your children’s children, will ever be a smelly bone in a soup. Or a ham, she added. Or a bacon” (534). With the aid of various perceptive practices, and a new proximity to the contagious affect and vitality of things, the former Gardeners and MaddAddamites undergo a radical transformation in their understanding of their own subjectivity and nonhuman subjectivity. Their “prejudice against a (nonhuman) multitude misrecognized as context, constraint, or tool” is substituted for “a vital materialist theory of democracy that . . . transform[s] the divide between speaking subjects and mute objects into a set of differential tendencies and variable capacities” that allows for and represents a more egalitarian and achievable utopian consideration of nonhuman perspectives, needs, and ecological interests (Bennett, *Vibrant Matter* 108).

Part IV: Ethology (or Degrees of Affect) Versus Biocentrism as a Foundation for a Cross-Ontological Ethics

One might be tempted to mistake the above interspecies collective or representations of enchanted materialisms as a kind of advocacy for biocentrism or a “flat ontology,” worldviews that conceive of all things as the same with regard to value. As briefly mentioned, various scholars view the disintegrating boundaries and differences between humans and animals or objects as highly unsettling in its potential fostering of instrumentalist and objectifying attitudes toward humans (Glover 53). Correspondingly, in a critique of biocentric deep ecological theory, humanist thinker Luc Ferry views the crumbling categories as a blasphemous denigration of

human uniqueness and worries that “the entire *Cosmos* may well be assigned a positive coefficient higher than that of humankind” (73). On the other hand, Cary Wolfe points out in his book *Before the Law: Humans and Other Animals in a Biopolitical Frame* that “as long as the automatic exclusion of animals from standing remains intact *simply* because of their species, such dehumanization by means of the discursive mechanism of ‘animalization’ will be readily available for deployment against *whatever* body happens to fall outside the ethnocentric ‘we’” (21). In other words, as long as the category of the animal, as a domain of non-subjects denied ethical status, exists the potential for human animalization exists. Wolfe explains the ideological links between this animalization or “speciesism” and the “othering” of human groups (women, non-whites, etc.) He describes the “institution of speciesism” as the “ethical acceptability of the systematic ‘noncriminal putting to death’ of animals based solely on their species” (*Animal Rites* 7). This “discourse of speciesism” can be applied to any human group that has not purchased its membership into the great family of Man. Therefore, despite Ferry’s fears, a posthuman de-centering of the human (privileged simply because of its specific species status) is necessary both for the sake of other life forms and human society.

Furthermore, in a mildly surprising critique of certain strains of neovitalism and deep ecological thinking, Wolfe argues that by “radically de-differentiating the field of ‘the living’ into a molecular wash of singularities that all equally manifest ‘life,’” or declaring all forms of life as equal in value, one enters into a kind of political paralysis due to this position’s implausibility to translate into serious ecological praxis (59). Despite the intention of these philosophies, they also have the potential to produce a highly anthropocentric human relationship to nature as humans still act as the conferrer of “value” in accordance to their interests and benefits, but in a steward-like kind of benevolent shepherd-of-the-world figuration. Said in

another way, deep ecologists ignore that the only “to whom” any thing matters is still the exceptional Man even in their theory that purports to be a “flat ontology.” This is precisely Ferry’s critique captured in his sentiment that such deep ecologists act ““anthropocentrically” themselves when they claim to know what is best for the natural environment” and that all protection, “all valorization...of nature, is the deed of man and...consequently, all normative ethics is in some sense humanist and anthropocentrist” (131).

Wolfe acknowledges the impossibility of escaping anthropocentric human interventions into nature. However, at the same time, he suggests one must pursue a “pragmatic” approach to ethics in which one neither commits to a Kantian social contract theory of rights (a subject-centered ethics that depends upon the possession of such-and-such attributes) or a Utilitarian calculation of “interests” in the name of the greatest good, which is still based on the nonhuman entity of concern containing some essential attribute (that humans also have) that purchases their ethical consideration into the privileged “empire of the same” without challenging the prejudiced structures that permitted the exclusion in the first place. He suggests that ““when the question of what justice consists in is raised, the answer is: “It remains to be seen in each case”” (Lyotard qtd. in Wolfe, *Animal Rites* 71). We must reach “a decision that...go[es] through the ordeal of the undecidable,” otherwise “it would only be the programmable application of unfolding of a calculable process. It might be legal; it would not be just” (Derrida qtd. in Wolfe, *Animal Rites* 68). Wolfe suggests we must carefully consider ethological distinctions and the symbiotic relations between living things and thereby acknowledge “questions of value indeed necessarily depend on” *other* “to whoms” or to a multitude of other nonhuman subjects with intentionality, interests, and pleasures that look nothing like human forms of experience (83-84): “If the capacity...to be a ‘to whom,’ is not given but rather emerges, is brought forth, out of a complex

and enfolded relation...to its outside (whether in the form of the environment, the other,...or the ‘instinctive’ program of behavior), then the addressee of value...is permanently open to the possibility of ‘whoever it might be’” (84). This ethics can never congeal into reified law⁹. There is no permanent point of reference for determining whose community flourishing will take precedence from moment to moment. This perspective seems to be more accommodating to a wider array of vital needs, interests, and trajectories appropriate to whatever ecological issue is at hand. However, in Wolfe’s conceptualization, even if humanity humbles itself into acknowledging a more diverse multitude of beings as “whos” with idiosyncratic needs and values of their own (as we saw with the Gardeners’ acceptance of the Pig Ones’ desires), one must still select according to one’s conditional perspective and situation and therefore exclude (as with the Painballers¹⁰). We must exclude more ethically and carefully perhaps rather than in sweeping motions based on essentialist and prejudiced principles that revolve around kind, species, or inherent cores.

In any case, as Bennett discusses, the goal of a vital materialism is not to eliminate all differences between humans, animals, and materials as well as non-physical entities but to focus on the underlying non-filial affinities (vitality, energy, affect, etc.) that both constitute and formulate ecosystems, assemblages, and packs. The reasoning is that by (re-)cultivating an awareness of the vitality and agential capacity of all things as well as one’s interrelationships with and among them, one might be more hesitant to harm or dispose of any element carelessly. Furthermore, she is fully aware of the necessity of considering that “[p]ersons, worms, leaves, bacteria, metals, and hurricanes have different types and degrees of power...depending on the

⁹ Perhaps the legal system under this fluid ethical framework would transform into a much more open-ended process not dictated by uncompromising, solidified laws but more-or-less guided by laws permanently and fluidly open to contestation and revision. This model would entail a much more lengthy legal process to be sure, but perhaps less violently dismissing and condemning.

¹⁰ It seems the Painballers are excluded on pragmatic ethical grounds based not on reified notions of privileged species membership but on the threat that they would continue to devastate multiple species’s communities, that they are forces of death counter to the productive flourishing of the overall ecosystem.

time, place, composition, and density of the formation” (*Vibrant Matter* 109). Similar to both Bennett and Wolfe, Deleuze and Guattari assert that “in defining animal worlds, look[-] for the active and passive affects of which the animal is capable in the individual assemblage of which it is a part” when formulating one’s platform for the ethical treatment of nonhuman natures (257). These “posthumanist” perspectives imply a kind of situational or conditional ethics in which the consideration of nonhumans and humans depends upon their mutable degrees of affect in concordance with changing circumstances. The challenge that these thinkers struggle with is how to transform the ethical thinking that focuses on the human/animal distinction informed by biology and kind to an ethical perspective that sees all forms of life as ontologically and phenomenologically diverse, which then requires a very nuanced, and inherently imperfect, reassessment of the ethical implementation of the politics of life and death.

A parodic (and arguably problematic on many levels) example of a pliable, situational, non-anthropocentric application of the above ethics occurs in the *MaddAddam* text when the Gardeners/MaddAddamites notice and decide that the “[d]eer are proliferating: they are an acceptable source of animal protein. They are much leaner than pork, though not as tasty” (543). Additionally, they almost unanimously decide that the Painballer execution is necessary to the survival of their group thereby refusing to privilege human life based on an essentialist notion of human value, a highly controversial verdict. Their ethical decision is informed by a sort of affect calculus¹¹ in which they conclude the Painballers’ affects would destroy other bodily affects in

¹¹ A distinction that could be made between this kind of “affect calculating” ethical decision-making and utilitarianism is that pragmatic affect considerations do not necessarily always meet the essentialized condition that one avoid instances of *suffering* for all living beings. As Wolfe points out while quoting from Deborah Slicer’s work, the attempt of pragmatic ethics seems to be to avoid the “problem...endemic to the liberal justice tradition in moral philosophy,” which is that it “holds ‘an “essentialist” view of the moral worth of both human beings and animals’ because it proposes ‘a single capacity—the possession of interests’ (or Singer’s [utilitarian] ‘suffering’) ‘for being owed moral consideration’” (*Animal Rites* 35). In this way, utilitarian or essentialist moral philosophies “exclude[-] from ethical relevance anything *other* than the specific criterion for the interest in question, whether it is the subject’s specific ontogeny, its location or ecological role, its gender, and so on.” Pragmatic ethical considerations seem to be based on large-scale ecological context and ethological characteristics versus the reified, universalized gauge for ethical judgments that marks utilitarian moral philosophy.

all around diabolical and grisly ways. This suggests the Gardeners are more inclusive in their definition of subjects according to the respective entity's degree of affect (in the case of the Pig Ones) and yet there are also “an endless number of others to consider, and one cannot take responsibility without excluding some others in favor of certain others’,” as in the case of the Painballers who murder indiscriminately and the deer that might multiply to the point of destroying the surrounding vegetation and the other life forms dependent on that vegetation (Martin Hägglund qtd. in Wolfe 86). Wolfe addresses this paradoxical problem in his assertion that it is “not that we shouldn't strive for unconditional hospitality and endeavor to be fully responsible; it's simply that to do so, it is necessary to do so selectively and partially, thus conditionally, which in turn calls forth the need to be more fully responsible than we have already been” (86). Thus, as a member of a vegetarian countercultural group, Adam One's situational ethics on consuming animals (“When in extreme need...begin at the bottom of the food chain. Those without central nervous systems must surely suffer less”) seems much less hypocritical (*The Year* 325). Above all, *The Year of the Flood* and *MaddAddam* grapple with the political and ethical goals of creating a more inclusive community via a careful and discriminatory broadening of the scope of who or what is recognized as having, what Wolfe calls, “immunity protection,” and voice within the expanded community; It “is not the perfect equality of actants, but a polity with more channels of communication between members” (Bennett, *Vibrant Matter* 104).

Overall, Margaret Atwood's *The Year of the Flood* and *MaddAddam* show the dualisms “in which we are ourselves imprisoned, the opposition beyond which we cannot think . . . [That] it is only by shattering their...dominion that we might conceivably be able again to think politically and productively, to envisage a condition of genuine revolutionary difference, to begin

once again to think Utopia” (Jameson 308-309). These novels emphasize how repressive and blind to potential it is to assume the fixity or predictability of nature, for life will always exceed one’s knowledge or control in the most unexpected ways. The books reveal the “element of chanciness [that] resides at the heart of things” and that animals, tempests, molecules, and “so-called inanimate things have a life...and that deep within is an inexplicable vitality or energy, a moment of independence from and resistance” (Bennett, *Vibrant Matter* 18). Furthermore, these novels show that entities have the ability to form congregations with powerful impacts on both human and nonhuman worlds. The novels suggest that acknowledging these things may lead humanity to a more ethical and sustainable relationship with the world of enchanted things. Atwood shows the enchanted materialism of the world and the recalcitrance and unpredictable potential for unforeseen pack formulations inherent to all things: natural, bioengineered, human, animal, or plant. The eco-countercultural God’s Gardeners group both practice the appropriate techniques in order to sensually apprehend the thing-power underlying the material world and remain open to joining in becomings-animal, ontologically diverse eco-public packs. These novels work to show how humanity is constantly adapting and mutating through its conversations with the natural world and that in its “passage among multiple states of becoming, humanity has the capacity over time to shed” the notion of human exceptionalism and corresponding irresponsible and indiscriminate ecocidal impulses (Rozelle 5). Perhaps if we can perceive of a “darkness with voices in it” rather than a “silent void” (*MaddAddam* 217) we will be more inclined to expand our definition of community and less inclined to idly “watch the lights blink out” (*The Year* 252).

CONCLUSION:

In the now-leveled epistemic playing field,
we are compelled to find other models
of living among animal kin that will not
perpetuate the social and ecological
holocausts destroying the planet today.

G.A. Bradshaw, "An Ape Among Many" (2010)

As my investigation of Mary Shelley's *Frankenstein* and Margaret Atwood's *Oryx and Crake* has shown, socialization under a patriarchal capitalist culture, which has historically valued the categorical hyperseparation and emotional detachment of the self from the other, leads to the formation of a particularly destructive kind of masculinist/scientific personality and culture. As my previous documentation of theories by feminist critics of the reproduction of patriarchy and scientific culture attests, early psychosocial development that emphasizes an absolute split between self/other and a relationship toward "woman/nature in terms of superior/inferior and subject/object" breeds the notion of androcentric human supremacy (Plumwood, *Environmental* 54). This widely adopted assumption of human (masculine) superiority by Western culture has justified and continues to justify the instrumental use and exploitation of feminized-others (i.e. disenfranchised groups of human and nonhuman others) within both the private realm of the patriarchal family unit and the public sphere that houses various scientific institutions. The particular types of childhood trauma Western masculine-subjects are made to suffer that result in the anxious desire to dominate object-others to secure ego boundaries and a sense of omnipotence directly correlate to certain biotechnological scientists' conceptualizations of feminized nature as disenchanting, determined, mechanistic, and fully predictable, controllable, and profitable.

The neo-Cartesian masculine-subject/scientist's particular "sado-dispassionate" stance, as Plumwood labels it, "his" "denial of embodiment and illusion of autonomy" (15), has led to the formation of a "technoscience and economic rationality that treat[s] nature as a nullity," and "the outcome of their enormous growth and progress as a force for remaking the earth is a progressive nullification and decline of nature" (61). This eradication of nature is clearly indicated by the fisheries collapses, massive deforestation globally to feed the West's equally massive lust for palm oil, California's climate-change-driven drought, the British Petroleum (BP) oil spill in the Gulf of Mexico, etc. These ecological disasters "shadow" the blind optimism of technocratic scientists such as the geneticist Craig Venter who created a synthetic life form he sees as "herald[ing] the dawn of a new era in which new life is made to benefit humanity" (qtd. in Feder 2), that can "churn out biofuels, soak up carbon dioxide from the atmosphere and even manufacture vaccines" (Feder 2).

However, many thinkers, who carefully qualify their celebration of Enlightenment agendas and scientific progress in consideration of the various "civilizing" atrocities committed in the name of the Father, reason, and light (i.e. sugar and spice), appropriately point out the vast accomplishments that have flourished under the dominating, colonial system of a patriarchal Enlightenment culture. Citing truly miraculous feats such as the Haber-Bosch process, anesthesia, more nuanced and sophisticated understandings of ecological systems, space travel, the bioengineering of more nutritious, efficient-growing plants, cosmetic and reconstructive surgery that allows for unprecedented creative bodily autonomy, in vitro fertilization, the internal combustion engine, among almost an infinite many other things that have contributed to the overall accumulation of life joy for a substantial *proportion* of humanity, these thinkers suggest that without such strict self-interested patriarchal (patriotic) individualism propelled forth by a

sturdy and steady domestic environment, we would not be where we are today. Plumwood cautiously acknowledges this argument in her book *Environmental Culture: The Ecological Crisis of Reason*. She conscientiously yields to the idea that perhaps androcentric politics may have “aided our expansion in a different era,” that the anthropocentric framework “may once have been functional for the dominance and expansion of Western civilization, removing constraints of respect for nature that might otherwise have held back its triumphs and conquests” (121). This may very well be the case, but these historical values and aspirations have also led us into the “age of ecological limits”; this “highly dysfunctional” old paradigm with its “insensitivity to the other... promotes a grave threat to our own as well as to other species’ survival” (121-122).

A wide swath of concerned cultural critics, environmentalists, social justice defendants, etc. have long made the call for the necessity of a more reciprocal and interspecies-friendly system of values, ethics, and epistemologies. However, perhaps because of the postmodern “ennui,” a helpless sense of boredom and passivity at discovering the world “barren” and dead (Bennett, *The Enchantment of Modern Life* 187), on top of the “antihumanist” sociobiological narratives of inevitable selfish genes that seem to be fatefully driving the nonhuman and human species to extinction (Bookchin, *Re-enchanting* 36) is what leads to a kind of normalization of the destructive impulse as a part of human nature, a helplessly bitter and hedonistic pursuit of a short yet saturated life. A smirk and a shoulder shrug accompany the chant, “Woe to the conquered!” Indeed, many have tried to defend and justify such imperial and patriarchal models as delineated in this thesis project as “universal” and “timeless,” essential to the human condition, in their effort to silence various queer, feminist, animal rights, and postcolonial social movements: “The old anthropocentric model that binds our relationships with nature within the

logic of the One and the Other” has made it quite difficult for us to move toward the adoption of “the new mutualistic and communicative models we now so urgently need to develop for both our own and nature’s survival” (Plumwood, *Environmental* 121).

Other thinkers, such as Max Horkheimer and Theodor Adorno in their celebrated *Dialectic of the Enlightenment*, provide us with a demystifying, critical account or description of the primitive origin of Western culture’s dominating behavior without, unfortunately, providing a reconstructive or productively idealistic picture of alternative modes of being, a critical style which Jane Bennett suggests has a potentially “enervating” impact on political wills in that it might leave one with a sense of the inevitability or invincibility of whatever hegemonic structure in which he or she is embedded (*Enchantment* 161). They sketch in painstaking detail the origins of Enlightenment humanity’s continued impulse to dominate or “mathematize” nature both within the self and outside the self as grounded in the fearful primitive effort to control unpredictable and chaotic natural forces. In fact, they claim that despite the Enlightenment’s promise of freedom from political domination it remains obsessed with the mythological domination of outer nature as well as the control of humans hierarchically and internally through the mechanism of repression. They claim that the Enlightenment subject refuses to acknowledge or critically reflect upon “his” agendas as driven by the primitive need to escape and control inner and outer nature. As a result, when the unaware subject’s repressed nature returns, “the volatile inward” is projected onto “the outer world, branding the intimate friend as foe. Impulses which are not acknowledged by the subject and yet are his [or hers], are attributed to the object: the prospective victim” (Horkheimer and Adorno 154). Thus the surrounding world and its feminized-others become a “diabolic system” that provokes the destructive and defensive response of self-enclosure in the subject. There is a danger to proposing such a universalizing

and timeless picture of human domination over nature without pointing toward a more viable human ontology and ethics. Such a historical anthropology could be coopted by the disillusioned and misanthropic far-left or right-wing groups in order to naturalize such behavior for their own agendas.

Fortunately, we are not inevitably bound to the patriarchal model of subject formation and its particular breed of sadomasochistic interpersonal and interspecies relations. Nor are we doomed to the self-interested depredations of neo-colonial technoscientific, corporate agendas despite their seemingly “universal” and “timeless” nature. As examined, thinkers such as Jane Bennett have attempted to sketch viable posthumanist ethics of attentive openness to the other as an intentional and communicative being that one can adopt and perform in a mode of “becoming” under current capitalist conditions, but which also work to actively dismantle and reassemble the system from within, an ethics of slow reconstruction and reformation for the “cultural narratives that we use help to shape the world in which we will have to live” (*Enchantment* 9). As discussed in roughly the second half of my thesis, the virtues and ethical techniques of Margaret Atwood’s God’s Gardeners group in *The Year of the Flood* and MaddAddam (though they seem to only flourish under the conditions of large scale social collapse) provide an excellent model for the kinds of interspecies interactions that hint at the new kinds of scientific epistemologies of care many are actively pursuing presently and should be more widely adopted and which might have the social and economic structural-reformation effects Bennett suggests.

Bennett explains that the individual’s movement toward cultivating an ability to experience a state of wondrous suspension of bodily movement through an immobilizing or spellbound encounter with a radical other can be read as an instance in which the

“world...sometimes bestows a gift of joy to humans, a gift that can be translated into ethical generosity” (175). In a sense, this experience of the other that draws one into the end of the narrative of the singular self works as a “catalyst” to “draw sensuous performances toward avowed purposes” or ethical actions (29). For instance, a feeling of enchantment might fuel the motivation of the self to take the time to carefully study the bodily etiquette, intentional agency, and communicative potentiality of the other in order to form a careful and accommodating response. Once one develops this mutualistic sensibility s/he is able to discern the fragile interdependence, vitality, and uniqueness of all things, which might propel individuals and collectives to carefully consider the future consequences of their choices. In particular, this enchanted stance toward the natural world might aid the masculine-subject/scientist to see the world as vitally alive rather than inert, manipulatable, and controllable disenchanting matter. Such an ethical posture by individuals might motivate technoscientific institutions to pursue a more intensified project of self-regulation, to reorient themselves “with the modesty that comes from acknowledging the independent vitality of nonhuman forms and from admitting corollary limits in the capacities of human agents to know exactly what they are doing when they manipulate the world in which they participate” (157).

While Atwood’s *MaddAddam* gives us an allegorical image of human-animal relations of care only under conditions of social collapse, in reality we are seeing contemporaneously positive movement in the direction of a more broad interspecies etiquette and the ethical treatment of the objects of scientific study in a fully functioning capitalist society. There are indeed, some scientists who “already operate wholly or partially within dialogical and care models rather than in the theoretically dominant frameworks demanding ethical and emotional disengagement and objectification,” who “find[-] in the nature they study the basis for awe and

environmental commitment rather than instrumentalism and an inflated sense of self’ (Plumwood, *Environmental* 55). For example, Atwood’s interspecies body politic resonates deeply with Dr. Sue Savage-Rumbaugh’s truly “trans-species community” of humans and bonobos (*Pan paniscus*) at the Iowa Primate Learning Sanctuary in Des Moines, Iowa. As documented in G.A. Bradshaw’s essay “An Ape Among Many: Animal Co-Authorship and Trans-species Epistemic Authority,” in Savage-Rumbaugh’s effort to study the origins of human language, she has pioneered a science that highlights “animal agency and new modes of communication and models of knowledge” (18), a science that treats “nature [as a] participative subject in an organic community” rather than as a “pure object” (Simon Estock qtd. in Bradshaw 17).¹² Savage-Rumbaugh co-authors a study with the bonobos Kanzi Wamba, Nyota Wamba, and Panbanisha Wamba that describes what captive apes consider as important to their emotional and physical flourishing. The “animals” are capable of “comprehend[ing] and respond[ing] to complex linguistic narration and questioning in a free-flowing manner on essentially any topic connected meaningfully to their lives” (24). The methodology employed for these interspecies scientists’ study is called Participatory Action Research (PAR), where “[i]nstead of the conventional animals-as-object framing, the *Pan-Homo* community participate[s] simultaneously as objects *and* subjects” (26). Each party’s biases and motivations are brought to the fore and “all participants” are guaranteed the intended outcome of the study will be beneficial to them specifically. Savage-Rumbaugh composed a list of activities, interests, and desirable objects that she saw as significant to the bonobos “self-actualization” and then she

¹² One might understandably interject here that taking bonobos from the wilderness of the Democratic Republic of the Congo is hardly treating them as participatory subjects. On the contrary, kidnapping bonobos forcefully from their home ranges is in fact deliberately treating them as objects devoid of self-directed intentions or emotional ties to loved ones and the landscape. Like the unexpected, illegitimate birth of the cyborg from objectifying science and technology, I see the birth of this new trans-species society in the Savage-Rumbaugh lab as accidently and productively springing from her original objectifying agenda to use the animals to make discoveries about human-oriented research questions. My hope is that the scientific culture of her lab, and others touched by the important work being done there, will be unable to go back to their highly anthropocentric science motives and objectifying conduct toward earth others.

says, she “solicit[ed] their views regarding my thoughts” (26). The results suggest “considerable agreement” but also vast differences in opinion on what is essential to the bonobos well being. Bonobos believe they have a right to maintain “lifelong contact with individuals whom they love,” to be “able to leave and rejoin the group, to explore, and to share information regarding distant locations,” and to “receive recognition from the humans who keep them in captivity of their level of linguistic competency and ability to self-determine and self-express through language,” among other freedoms (29-30).

Such a study should deliver a final staggering blow to human-animal boundaries as Bradshaw points out. Neither definitions of personhood, for rights purposes, or “ethical arguments...logically fall along species lines” any longer (27). Wary of liberalism’s “moral extensionist” rights framework that suffers from an “absolutist,” ecologically “uncontextualized” form of “closure” in addition to its failure to question the overall system of animalization and commodification (Plumwood, *Environmental* 153), I find Bradshaw’s idea that “Nature stares back” with “agentic” and “epistemic authority” more compelling in that it absolutely requires humans to revise their interactions with nonhuman others into a mode of “social justice and self-determination, where epistemic authority and decision-making may not only be shared with other species, but *dictated* by nonhuman species” (28; my emphasis), which is exactly what Atwood prophesizes we might be *forced* to do in the speedily approaching future.

I’d also like to point out how this human-bonobo study demonstrates the concrete reality, and therefore applicability to social praxis, of Deleuze and Guattari’s notion of becoming that Atwood aesthetically represents in her Toby-Pigoon-Craker encounter, which “can be seen as a letting go of the illusory fixity of the conventionally human standpoint and a becoming open to otherwise imagined modes of perception and sense” (Clark 198). Lynda Birke and Luciana Parisi

interpret “becoming” as a move beyond simple dualisms” in Deleuze and Guattari’s insistence on “connections and flows rather than on individual entities” and “transformation and change rather than essence” (67). Bradshaw points out that “[a]s several lines of neuropsychological research document, different developmental contexts correlate with different social psychologies and underlying neural substrates” (21). In other words, in consonance with Deleuze and Guattari’s concept of becoming, there is no static, essential identity for any living form; one is molded from the ground up according to his or her cultural and environmental context and on a more immediate, micro-level the “usual structure of a thing [perpetually] dissolves and the newly released bits reconfigure with each other and with other bits of matter in the vicinity” (Bennett, *Enchantment* 51). We are constantly being (re)-made and quickly evolve over generations. As I have suggested, just as Atwood’s post-apocalyptic interspecies wondrous encounter opens up a “line of flight” from the hierarchical dualistic outlook left over from the patriarchal, homocentric ideological framework, so too does Savage-Rumbaugh, Kanzi, Nyota, and Panbanisha’s study. Bradshaw discusses how the “bicultural rearing” of humans and bonobos who intimately interact on a daily basis is

producing cross-generational epigenetic effects upon the bonobos and the humans at a very rapid rate. Both species are co-evolving toward a new kind of understanding of each other with the experience of small biological changes. There are arising enlightened insights and a greatly increased ability to communicate across the species boundary in each succeeding generation. Both species are benefiting, with each beginning to draw upon the best traits of the other in succeeding generations. These changes are not occurring through sexual transmission, but rather through cultural transmission. (21)

The human-bonobo cultural transmission is an example of Deleuze and Guattari’s becoming-animal of the human and the becoming-human of the bonobo within a multiplicitous pack “without filiation or hereditary production” for they are “[l]ike hybrids, which are in themselves sterile, born of a . . . union that will not reproduce itself, but which begins over again every time,

gaining that much more ground” (241). Atwood leaves her readers with this very picture at the end of *MaddAddam*. Readers are left wondering whether the co-species cooperation born of a kind of “contagious” transmission “spanning the kingdoms of nature” will become the norm in the post-apocalyptic world of the interconnected cultures of the Pigoon, Humanoid Craker, and Human species. As Deleuze and Guattari argue, beneath the actual world lies a virtual realm of potential, there is “room in the [human] for other becomings, ‘other contemporaneous possibilities’ that are not regressions but creative involutions bearing witness to ‘*an inhumanity immediately experienced in the body as such*,’ unnatural nuptials ‘outside the programmed body’” (273). The genetically distinct yet culturally fluent humans’ and bonobos’ “nuanced social psychological” structures that originate from their uniquely intertwined “developmental experiences” at the Iowa Primate Learning Sanctuary demonstrate the exciting mutations possible in the zones of indeterminacy in one’s enclosed subjectivity. These cross-species interactions point toward the possibility for a transformation in one’s accustomed, state-sanctioned atomistic being into something more inhuman. Atwood’s visionary (cautionary) tale about the strange compromises we might have to make with cyborgs can and should be a celebratory intercommunicative and interrelational choice we make with a wider array of nature-made and “artificial” nonhumans now, and one that we can work toward actively constructing by encouraging a more intimate proximity between our cultures.

Finally, it is important to note that despite the fact that Atwood chooses to craft the God’s Gardeners as an unsuccessful coalitional alliance, as a countercultural movement unable to reform the seemingly “invincible” Corporatocracy before the tragic pandemic is unleashed, their many valuable qualities do provide us with some of the parts for forming a viable model for political resistance. Like the Savage-Rumbaugh laboratory, this group’s strange amalgamation of

geneticists, engineers, fast food workers, the sons of a Baptist preacher, deserters of elite privilege and wealth, etc. demonstrate Haraway's hope for a "cyborg society, dedicated to realistically converting the laboratories that most fiercely embody and spew out the tools for technological apocalypse" and "committed to building a political form that actually manages to hold together witches, engineers, elders, perverts, Christians, mothers, and Leninists long enough to disarm the state" (154-155). Haraway's cyborg society contains the "dream not of a common language, but of a powerful infidel heteroglossia," and "means both building and destroying machines, identities, categories, relationships, space stories," which human-bonobo society certainly does as well as Atwood's interspecies, interhuman cultures (*Simians* 181). There is no essential unity that holds these subjects together apart from contempt for the objectifying values of the "new technologies," the shared interests in survival, and a respect and joy for all forms and expressions of life. The area of "broad agreement" I think that we are all slowly coming to and which will have a "world-shaking" (not world-shattering) effect is the notion that we should take "responsibility for the social relations of science and technology, and so...embrace[-] the skillful task of restructuring the boundaries of daily life, in partial connection with others, in communication with all of our parts" (181). The God's Gardeners' human-diverse, interspecies dialogic ethic of care and accountability, which rejects Cartesian duality and encourages the attentive practice of an active effort to discern earth others as intentional, agential subjects who can exert as many changes upon humans as humans can upon them, provides a picture of one half of Haraway's cyborgian call for responsibility. The Savage-Rumbaugh group provides the other half to Haraway's political sketch in their modeling of an interspecies, feminist science based on the "new-found ideals of respect, solidarity with and advocacy for an actively disclosing other to whom the [scientist] attends" (Plumwood, *Environmental* 54). This new

science is intended to substitute the dominating “hard-science” framework that “models...disengagement, disrespect, over-manipulation and reductionism” and which has caused an unprecedented amount of suffering (54). The combination of Atwood’s vision of interspecies alliances, Deleuze and Guattari’s politics of becoming, Bennett’s enchanted stance toward nature, and the new techniques for scientific investigation provide us with a viable model of resistance to the continued destruction of the planet. While in this thesis I have approached large issues without definitive solutions, I hope to have successfully highlighted the importance of resurfacing debates about individual socialization within patriarchal societies, the gendered politics and economic foundations of scientific methodology and knowledge, and the rich political potential of opening individuals and collectives up to the lively world of things.

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