



Speculative Fiction, Biocapitalism and Being Tentacular: Reading the *MaddAddam* Trilogy as Posthuman Saga

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Abstract

This paper focuses on the posthuman ideas that are ingrained within the narrative of Margaret Atwood's *MaddAddam* trilogy. The paper will identify various philosophical challenges posed by biocapitalism and a hyperhumanist ideology, while tracing the counter narrative through the critical framework of resistance provided by the critical humanist school of thought in particular. By reading into the writings of K Sundar Rajan and Nicholas Rose, the paper dwells on the issue of biocapital and its commodification of life, and also attempts to read an interventionist politics into the idea of bio-power which Mitchel Foucault posits. It also tries to provide an antithesis to the capitalocene and its subsidiary biocapitalism through an understanding of Donna Haraway's concepts of critter and chuthulucene.

Keywords: Biocapitalism, Chuthulucene, Posthuman, Speculative Fiction, Subjectivity, Transhumanism.

The concept of 'life' must constitute the subject of the coming philosophy.

-Agamben in *Potentialities: Collected Essays in Philosophy* (1999).

Margaret Atwood just a year after the publishing of the initial installment of the *MaddAddam* trilogy, *Oryx and Crake* (2003) wrote in "Context" the following lines about literature and Speculative fiction. According to Atwood, "literature" puts the dark forms of thinking and sensation- paradise, purgatory, monster, angel and everything into the light where one can measure them properly and arrive at a profound self and its boundaries. Engaging with imagination is no longer a hobby or even an obligation but a necessary operation, because progressively if one can employ imagination about a function or task, one will be able to do it (Atwood, 2004, p.517)

In her *MaddAddam* trilogy, Atwood uses the faculty of imagination to speculate on the socio-cultural, emotional- affective as well as eco-critical imperative of the coming together of capitalist thought and bio-technical enterprise. In these three novels she presents an utopic posthuman world where the utopia of human development through genetic engineering is woven into the bio-capitalistic dystopia where the unrestricted commodification of life results in its near extinction. Atwood employs her generic invention of "speculative" fiction to register the possibilities of annihilation which the genetic modification and the "bio-capitalist" turn carry within their folds. This chapter considers the post-human ethics of Atwood's speculative *MaddAddam* trilogy in tandem with the theoretical framework of "bio-capitalism".

Atwood distinguishes between science-fiction and her own invented nomenclature "speculative fiction" on the grounds of the possibilities which the scenarios presented in and

through speculative fiction holds to come true with our present stage of the technological and mechanical advances. Atwood goes on to build on this segregation between speculative fiction and sci-fi by positing that contrary to sci-fi which “denotes books with things in them we can’t yet do or begin to do, talking beings we can never meet, and places we can’t go” speculative fiction “employs the means already more or less to hand” (Atwood, 2004, p.513). Thus, speculative fiction employs the measure of extrapolation rather than indulging in pure imaginative invention as functional in sci-fi. Atwood in her earlier dystopic work *Handmaid’s Tale* had speculated on the possibilities which the fascist, misogynist and theocratic tendencies which the North American milieu had in itself to turn into a completely theocratic regimented autocratic state such as Gilead. In a similar manner the *MaddAddam* trilogy formulates a narrative framework which portrays the possibilities established on the present condition of bioscience and conservative and neo-liberal political agendas. The *MaddAddam* novels serve as tales of cautions against the dangers which the metastructure of bio-capitalism possess, as a system based on commodification, exchange and harnessing of matters and codes of life. The speculative trilogy of Atwood serves an ethical cautionary note against the danger of unchecked anthropocentric bio-scientific progress. As Amelia Defalco notes, “Atwood establishes fiction particularly speculative fiction, as a harbinger and an ethical imperative: a warning and urging” (Defalco, 2017, p. 433).

This warning which Atwood issues concerns itself with a completely different type of worlding. Her creative production of the utopic space is at complete polarity from “other world” which is conveniently spread through various narratives of science fiction. Atwood’s engagement with the “other world” is an exploration of a future. She carefully eschews the non-definite article “the” as “the future is an unknown: from the moment now, an infinite number of roads lead away to “the future,” each heading in a different direction (Atwood, 2011, p. 5). This reinstates the generic distinction which separates her novels from the sci-fi as speculative fiction. Atwood finds a mild support for this nomenclature from Ursula K. Le Guin who writes in Guardian article that her dear friend “Margaret” uses the term SF for her novels to escape rudimentary reduction by the critics.

However, the tone of criticism regarding the usage of ‘Speculative Fiction’ as literary term, is evident in Le Guine’s essay but she also notes that science fiction doesn’t receive the serious attention from the literary critics as a result Atwood is forced in a sense to develop the term to circumvent such relegation. Critic Bruce Sterling treats the category of SF as slipstream and suggests that genre is not “category” it is not even genre SF. Instead, it is a contemporary kind of writing which has set its face against consensus reality (Sterling, 1989, p. 77). However, Margaret Atwood maintains that the narrative genre of her trilogy is speculative fiction, as it draws upon the possible technocratic hegemonic tendencies prevalent in the contemporary society, and the novels conjure up the narrative of “what if”, dwelling into the possible ways in which the transhumanist expansion of the human category can lead to a near future which is dystopic. This possible dystopia of Atwood’s novels is post-anthropocentric not because of the philosophical de-centering of the human category but its ontological erasure as a species. Atwood writes in this context and comments on the gestation process of the first instalment of her dystopic world, which is *Oryx and Crake* “As with *The Handmaid’s Tale*, it invents nothing we haven’t already invented or started to invent. Every novel begins with a what if, and then sets forth its axioms. The what if of *Oryx and Crake* is simple, What if we continue down the road we’re already on? How slippery is the slope? What are our saving graces? Who’s got the will to stop us?” (Atwood, 2009, p. 323).

The premise on which Atwood speculates about the possible impending upheaval in the anthropocentric structure are ones which emerge from the very discourse of anthropocentrism, which in the current epoch has manifested through the techno-modernity of globalization. Market has come to dictate the configuration of human subjectivity in ever more intense and expansive manner giving rise to what in game theory comes to be termed Homo Economicus i.e. man as self-regarding, always engaged in maximizing his own payoff

Speculative Fiction, Biocapitalism and Being Tentacular: Reading the *MaddAddam* Trilogy as Posthuman Saga

without concern for others. The confluence of the relentless pursuit of mere economic considerations and hyper-rationalism with the development in genetic science gestates a completely new set of modality which has the potential of mercilessly marketing the human life itself for the sake of profit maximization. Rossi Braidotti writes in *The Posthuman*:

The most salient trait of the contemporary global economy is therefore its techno-scientific structure....The bio-genetic structure of contemporary capitalism is especially important and central to the discussion on the posthuman.... In substance, advanced capitalism both invests and profits from the scientific and economic control and the commodification of all that lives. This context produces a paradoxical and rather opportunistic form of post-anthropocentrism on the part of market forces which happily trade on Life itself (Braidotti, 2013, p. 59).

The neo-liberal forces of capitalist market readily surrender the ontological and philosophical site of the human subject for the monetary gain of the few presenting an ironic situation where the rampant commodification of human life is advertently lucrative for a section of human populations therefore biocapitalism, perpetuates a selective anthropocentric prioritization of human desire. In her book *Undoing Demos*, Wendy Brown marks the increasing foray of the neoliberal market ethics in the quotidian activities. The neoliberal logic of the market has come to replace that which was till date the autonomous, or at least mostly autonomous, realm of the political. This means that the neoliberal market economy has reformulated the very epistemology of life for the commoditization and exchange of life and in particular human life. This in turn requires a completely new formulation of the concept of life itself. The market economy, capitalism holds a power over life and as Mitchell Foucault writes that power cannot be wielded unless a particular economy of discourses of truth functions on that power, which power itself ordains. As pointed out by Foucault the sovereign holds the power over the life of the subject through various discursive practices and in the age of late capitalism it goes without arguing that the market has come to occupy the sovereign position over life.

It is this relentless stripping of life of its ontological aura which disturbs Atwood and leads her to speculate in her fiction about the possibility where economics and technology comes together to create hybrids, beings devoid of affective intelligence, which is similar to reducing the organism to the position of DNA robot. Atwood's speculation builds upon the views which have long been firmly entrenched in the genetic sciences. The view that human genetics as a form of information technology is not quite different from the human made computers and robotics. Biogenetics have long believed that the genetic programming of an organism, its biological information which is the catalyst of life, is actually the information encoded by a chemical structure, DNA. Gene the unit of life is conceived in the light of computer models of organism structure. Organism is a natural bio-computer or more precisely bio-robot. As Herman J. Muller the Nobel prize winning geneticist writes "Man is a giant robot created by DNA to make more DNA" (Holler, 2002, p. 88). It is exactly this view of life as mechanical and therefore technologically alterable which forms the premise of the trilogy by Atwood. In *Oryx and Crake*, where the chief antagonist of the novel, the scientist Crake, describes humans as faulty "hormone robots". This discourse at its essential core seeks to reduce human subjectivity, trivializes the human suffering and facilitates the philosophical groundwork to justify the species annihilation of human, genetic genocide of the faulty Homo sapiens, in order to replace them with the carefully bioengineered Crakers.

Many like Veronica Hollinger and J Brooks Bouson note a tone of complete mistrust of biotechnology in the *MaddAddam* trilogy of Atwood and dread of a posthuman future itself. For instance, Hollinger writes about *Oryx and Crake* that it is an "old fashioned dystopian warning about the potentially catastrophic effects of unbridled biogenetic engineering and unstoppable environment collapse". According to Hollinger, the novel is "anything but

celebratory in its construction of hybridity... [as a representation of] the unnatural, the transgressive, the grotesque and monstrous results of technoscientific stupidity and greed” (Hollinger, 2006, p. 453). In similar vein Bouson critically views the novel as an instance of Atwood’s technophobia “that in our new age of genetic manipulation and biological control, we may be blindly entering a catastrophic posthuman future as our scientific mavens sit in judgment on the world and play God with the building blocks of life” (Bouson, 2004, p. 149). The depiction of the engineered Crakers as failed copy of human beings has also led critics like Ralph Pordzik and Grayson to believe that Atwood rejects the dilution of the species boundary between the human and animal as well as the boundary between human and machine as species dilution dislodges “humanity from any particular privileged position in relation to matters of engineered evolution, perfectibility, and environmental change (or disaster) (Pordzik, 2012, p. 156). However, the critics in their attempts to read the novels as a cautionary tale about catastrophic posthuman future, which threatens to erase the precious ontologies and epistemologies of the “human” do tend to under read the fact that Atwood in her novels does not engage in a critical negation of the posthuman but rather she criticizes the ethics of transhumanism, which directly stem from the rampant commercialization of the genetic sciences.

It is essential here to categorically examine the differences between the philosophical positions held by Transhumanism and Posthumanism. According to Cary Wolfe, Transhumanism is merely an “an intensification of humanism” (Wolfe, 2010, p. xv). This strand of thought believes in the perfectibility of human condition, it visualizes the biology, the human body as something that can be transcended through technological derivations to make it less disease-prone, more intelligent in other terms to extend its possibilities. According to Nick Bostrom (2005) “It (Transhumanism) holds that current human nature is improvable through the use of applied science and other rational methods, which may make it possible to increase human health-span, extend our intellectual and physical capacities, and give us increased control over our own mental states and moods” (Bostrom, 2005, p.202). Transhumanism furthers the discourse of Enlightenment which believed in a linear plot of development of humans. Transhumanists view the existing stage of humanity as an intermediate phase before the emergence of a more developed form of the species augmented through biotechnology. Transhumanism invests in the Enlightenment binary division between mind and matter (body) and strives to enhance the latter to the point where the body can be an extension of the mind itself. Progressive transhumanism is replete with narratives of cyborgs, mutants and such ontologies which essentially valorize the prospect of corporal enhancement. Transhumanism also believes in the Enlightenment ideals of human/animal divide as it cognitively engages with the human as a species as separate and self-contained. It is this intensification of the “human” which Atwood criticizes in her speculative fiction. Instead of investing her faith in such “techno-utopian” society she reads in them a potential for ethnocentric discourse as science is typically typified as a “white mythology”. Instead for Atwood, Posthumanism is a means to critic the traditional discourse of humanism and view: “the human as co-evolving, sharing ecosystems, life processes, genetic material, with animals and other life forms; and technology not as a mere prosthesis to human identity but as integral to it.” (Nayar, 2013, p. 19)

The philosophical ideology of posthumanism is critical of anthropocentric values in the sense that it critically reformulates the very concept of subjectivity viewing the human subject as an assemblage, co-evolving with machines and animals. It questions hierarchical orderings and “adapting work from cognitive sciences, biology and philosophy, sees the complexity of the human system, with its ‘unique’ consciousness or cognitive/perceptual processes, as emerging from this embeddedness, where human complexity, with all its internal organization and operations, is a consequence of its openness to the environment” (Nayar, 2013, p. 20). This is exactly the ‘subjectless’ subjective position which Atwood seems to advocate through the voice of Crake who explains to Jimmy, his friend the Paradise project in the following manner:

What had been altered was nothing less than the ancient primate brain. Gone were its destructive features, the features responsible for the world's current illness. For instance, racism the Paradise people simply did not register skin colour. Since they were neither hunters nor agriculturalists hungry for land, there was no territory. Their sexuality was not a constant torment to them. They came into heat at regular intervals, as did most mammals other than man. They were perfectly adjusted to their habitat, so they would never have to create houses or tools or weapons, or, for that matter clothing. They would have no need to invent any harmful symbolisms, such as kingdoms, icons, gods, or money. (Atwood, 2004, pp. 358-359)

The possibilities of the posthuman Paradise people here are one of ultimate hospitality yet Atwood paints such a possibility with dim colours. This attempt of Crake to play God and create superior intelligent life-form from human genetic material completely fails and eventually leads to an ecocide. This apprehension in Atwood's narrative does not stem from the phobia of mutation or dilution of corporeal boundaries. Atwood seems to acknowledge that 'bodies are not objects with inherent boundaries and properties; they are material-discursive phenomena' (Braidotti, 2013, pp. 823-824). The problem with this possible future of producing genetic hybrids lies in the unethical nexus which emerges between technology and capitalism. It cannot be denied that homo sapiens is also homo faber (Man as inventor). But there are two possibilities which man as homo faber can initiate. The first instance is presented through the character of Snowman/Jimmy who exhibits Deleuzian biotechnogenesis where biology and technology symbiotically evolve as "Not all Life is confined to the organic strata: rather, the organism is that which life sets against itself in order to limit itself. ... There are also nonhuman Becomings of human beings of human beings that overspill the anthropocentric strata in all directions" (Deleuze, 2004, p. 554). Jimmy as homo faber in his attempts to invent, invents narratives for the technologically produced Crakers and is driven less by self-interest than by a sense of care. It is the nexus between the capitalist enterprise and biotechnology which governs the second instance, that of Crake, who seeks to control technology and biology and thus proposes the superiority of anthropos even though he is its greatest critique and seeks to dismantle it. This nexus facilitates what Vandana Shiva calls biopiracy as it inconspicuously places collective bio-intellectual property in the hands of capitalist firms. This is exactly what transpires in *Oryx and Crake* as all the enterprises are indulged in rampant biocapitalism for instance the OrganInc Farms where Jimmy's father worked researched ways to grow human organs cheaply and effectively and CorpSeCorps where Crake plied his trade as bioengineer develops under his supervision the BlyssPlus pill which were designed to genetically wipe out the human species and the farm also introduced the Paradise people/ Crakers as superior replacement to human beings leading to catastrophic results. It is this unethical biocapitalism which Margaret Atwood attacks in the trilogy.

Stefan Helmreich defines the term biocapitalism in the context of the rise of the biotechnology and its alignment with corporate entities and observes: "in the age of biotechnology, when the substances and promises of biotechnological materials, particularly stem cells and genomes, are increasingly inserted into projects of product making and profit seeking, we are witnessing the rise of a novel kind of capital: biocapital" (Helmreich, 2008, pp. 463-464). The alignment of the economic and financial sectors with the agencies of knowledge production is an integral aspect of the postmodern condition. Francois Lyotard in his seminal essay "The Postmodern Condition: A report on Knowledge" has propounded the establishment of the new dynamics between the process of knowledge production and the agents of capitalism, where knowledge production moves away from its traditional mode of acquirement through training or "Bildung" towards a more commodified entity. According to Lyotard,

The relationship of the suppliers and users of knowledge to the knowledge they supply and use is now tending, and will increasingly tend, to assume the form already taken by the relationship of commodity producers and consumers to the commodities they produce and

consume—that is, the form of value. Knowledge is and will be produced in order to be sold, it is and will be consumed in order to be valorized in a new production: in both cases, the goal is exchange. (Lyotard, 1984, p. 4)

Indeed, as Lyotard rightly observes knowledge has become the most essential commodity in the age of late capitalism. In the sphere of biotechnology and life/genetic sciences the collaborations with the market forces have produced a new mode of transaction and economy which Nikolas Rose terms as “economies of vitality”. According to Rose, “A new economic space has been delineated — the bioeconomy and a new form of capital—biocapital.” (Rose, 2001, p. 6). The old players and entities such as the pharmaceutical companies have transformed with their collaborations with science through “research and development” as well their increased involvement in free economy and share market. Michel Beaud who investigates into the history of capitalism notes that in present day late capitalism “The powerful capitalist corporations provide the major impetus which calls into play new scientific and technical knowledge in domains such as material handling, energy, life-forms, electromagnetic communication, and data storage and transmission” (Beaud, 303). At the core of this technoscientific capitalism of which Biocapitalism is an exponent, lies a new commodity which is not a material product nor a service but a complex composite product of services and materials augmented by knowledge systems which operate them. This complex amalgamation works only when subscribed to in its entirety. This is indeed possible because of the constantly variable form of capitalism to “capitalism” and its desire as a socio-economic machine to control the “excess” even in forms of codes, data and knowledge.

K Sundar Rajan, one of the key thinkers engaged in understanding of the potentials of biocapitalism notes that “Biocapitalism does not signify a distinct epochal phase of capitalism that leaves behind or radically ruptures capitalism as we have known it...the relationship between “capitalism” (itself not a unitary category) and what I call biocapital is one where the latter is, simultaneously, a continuation of, an evolution of, a subject of, and a form distinct from, the former. Further biocapital itself takes shape in incongruent fashion across multiple sites of its global emergence” (Rajan, 2006, p. 10). Rajan draws inference from Lyotard’s exposition of the relationship between modern and postmodern in his attempts to locate the “biocapital” turn within the scope of capitalism and suggests that just as “postmodernism is a symptom of modernity” (Rajan, 2007, p. 11) biocapitalism is a symptom of capitalism rather than a radically new phenomenon.

What this “biocapitalist” turn ensures and augments is the increased production of knowledge bases, info-technologies and even artificial “life forms” and their subsequently being aggressively protected as “private” intellectual property. This protectivism is a capitalist ethic that requires an epistemic reconfiguration of the life sciences. “Biocapitalism” can be understood as an epistemic engagement with the “systems of exchange and circulation” incorporated and indoctrinated in the contemporary life science as well as a marker to identify and engage with the epistemic reconfiguration through which the academe is being transformed into an industry. What emerges as a result of the co-relationship between biotechnology and capitalism is a situation where the life science is getting increasingly overdetermined by the capitalist socio-economic-political structure within which it originates. As Slavoj Žižek notes, “More than ever, capital is the concrete universal of our historical epoch. That is, while it remains a particular formation, it overdetermines all alternative formations, as well as all noneconomic strata of social life” (Žižek, 2004, p. 294).

In Louis Althusser’s use of the term, overdetermination describes the cumulative effects of the contradictions present in each constituent of social formulation, on the social formulation itself as a whole. This suggests that as a constituent of the constituent social condition of capitalism, biocapitalism with its own sets of practices and contradiction produces unique conditions of existence within the system. What this entails is an implosion of the established structures of ethics and conditions of transaction which lead to re-evaluation of the category of “life” itself. As biocapitalism deals with life as a unit of transaction it necessitates a reevaluation

Speculative Fiction, Biocapitalism and Being Tentacular: Reading the *MaddAddam* Trilogy as Posthuman Saga

of ideas of “justice”, “ethics” and “life” itself for development of an effective engagement with it. An exemplary case highlighting the problems of interpretation of “life” and developing its constituent “ethics” is the famous legal case of *Diamond vs Chakrabarty*.

As biocapitalism seeks to specifically point out the biocapital dimensions of contemporary capitalism it must also engage with the Foucauldian concept of “biopolitics”. Biopolitics has identified the possibilities which the enormous amount of medical data the massive computing power of the apparatus has brought at the disposal of capitalist medical enterprises. Atwood’s speculative novels *Oryx and Crake* followed by *The Year of the Flood* and *MaddAddam* grapple with troubled relationship between the existing biotechnology and the bioethics which occupy Manichean positions within the larger biocapitalist economy. Biotechnology tries to techno-critically reconfigure the biological as technological and understands bodies as “biomedia”. As Eugene Thacker writes in *What is Biomedia?* Biotechnology treats the bios as a technology far surpassing any human made technology. Atwood in *MaddAddam* trilogy expounds that if biology is conceptually reduced to bio machine, as data, life get reduced as informatics and consequently modifiable as data, as it is quantifiable and therefore it marketable and has fiscal value.

The trilogy portrays the dystopic vision which ensures due to the “instrumentalization” and “datafication” of life. If life continues to be reduced as information, as a combination of DNA sequence, any minuscule paradigm shift can render it as “exclusively informatic”. This has serious consequences as we find in the novel *Oryx and Crake* where in the pre-pandemic world the sinister corporation CorpSeCorp has gradually reduced life to codes and has made life devoid of affects situating it in a limbo in between subject- object position. In such a world it is a matter of time that a figure like Crake would emerge with the view that human life should be treated as computer codes which can be wiped out and recoded. Ironically, Crake seeks to exploit the sensual and the affective in the “human” and develops BlyssPluss pill, which promises extreme pleasure to the consumer but is actually a pharmakon to obliterate the bodies that consume it. The effort to transcend the affective body by transhumanism gets nullified as in the pandemic that results from Crake’s invention which God’s Gardener’s refer as the “Waterless Flood”, the disavowed materiality of the body and the attendant vulnerability returns with vengeance as Crake’s bioengineered splice turns human bodies into primordial waste/earth.

The dystopic world which Atwood presents in her novel has established an essential equivalence between genetic codes and computer codes. In the speculative fiction of Atwood, global industry based on human genome augmentation and post-human technology has made biotech the most profitable industry on the planet. There seem to be nothing existent outside the biotech corps such as Anoooyoo, HealthWyzer and obviously Crake’s CorpSeCorps. In this world where the multiplicity of life is reduced and then codified, abstractions are to be eschewed. In this worldview a strong distinction is made between the “word people” and the “number people”. The word people like Jimmy the snowman “fuzz up” the rationally critical, irrefutable reality of life through abstractions are essentially undesirable for the hyper-industrial society. There is a subtle but marked preference for the “numbers people” in this corporate community as they are the one on whose success lies the prosperity. The industry is dependent on people like Jimmy’s bioengineer father. Jimmy distinctly remembers his father returning home with a bottle of champagne in order to commemorate the accomplishment of his “neuro- regeneration project,” which has resulted “genuine human neo-cortex-tissue growing in the pigoon” (Atwood, 2003, p. 66). The pigeons are a prime example of the proliferation of bioengineering as they are created by collating primary pig species with human stem cells in order to grow human organs for xenotransplantation. Jimmy’s mother who is also a “word people” suggests that the pigoon operation is a “moral cesspool” and chides her husband for morally corrupt and profane intrusion on “the building blocks of life” (Atwood,

2003, p. 67). Jimmy's father is indifferent towards all the allegations levied upon him by his wife, and concedes his work as primarily a matter of manufacturing and trade: "it's just proteins," he shouts, "there's nothing sacred about cells and tissues" (Atwood, 2003, p. 67).

Through the course of the trilogy reader encounters fanatic biotech engineers such as Snowman's father, and later his friend Crake, who treat natural science as an applied field of research with which bio material can be modified, engineered, and manufactured at will, sans a moral compass and any ethical concern for the ontological integrity of life itself. This mechanical production of life form relegates emotive intelligence and affective capacities in its over attention to the mechanical assemblage of biogenetic codes for the purpose of economic exchange. Biotechnology is a union of bioscience and computer science, the desire to compute life, to rationally arrange for extensive molecular compartmentalization and codification of life, produces newly emerging market opportunities and corresponding ethics. The birth of the genetic body leads to "The calibration of living entities as code" according to Catherine Waldby, which procures them in the systemized bio-informatics economies which congregate with capitalist market; this in turn creates "biovalue". This value is produced wherever the fiscally viable gestating and transmutating efficiency of organic matter can be regimented and organized, which make them valuable for human activities and projects—like scientific research, commercial industry, pharmacological and nutraceutical enterprise, farming or other arenas of technical culture. This results in affective, cognitive and even ontological reduction of living organisms. For example, in *Oryx and Crake* Jimmy encounters lab grown chickens engineered at NeoAgricultures and the description of the animal is as follows: "What they were looking at was a large bulblike object that seemed to be covered with stippled whitish-yellow skin. Out it came twenty thick fleshy tubes, and at the end of each tube another bulb was growing." (Atwood, 2003, pp. 237-238)

When Jimmy exclaims "What the hell is it?" Crake tells him "Those are chickens....Chicken parts. Just the breasts, on this one. They've got ones that specialize in drumsticks too, twelve to a growth unit." Jimmy further "explained that they'd removed all the brain functions that had nothing to do with digestion, assimilation and growth" (Atwood, 2003, pp. 237-238). This reduction of the animal seems to disavow the very position of zoo cognition. It is as if biotechnology is bent upon making the question whether the animal thinks an irrelevant one.

Uniqueness of human subjectivity is established through qualities such as subjective autonomy, rationality and power of reason and communication. Humans have ascribed these qualities as essential markers or determinants for evolution and they categorically deny these qualities to the animal. Critics like Patrick Fuery and Nick Mansfield note that it is the human who has a discursive power to determine what qualities count as humane. Similarly, it is human prerogative to grant rights on the basis of distinction made between human life and animal life that is the human has appropriated the right to grant rights to itself. Jacques Derrida points out in his 'The Animal that therefore I am' that the term animal acts like a singularity "the animal"— "a name (men) have given themselves the right and authority to give to the living other" (Derrida, 2008, p. 23). The autobiography of human, Derrida points out is invariably tied with the act of distinguishing the category of human from this other—the animal. This category which humans have subjugated through nomenclature in order to claim the sole right over subjectivity itself. Derrida writes "no one today can deny this event-- that is the unprecedented proportions of this subjection of the animal.... neither can one seriously deny the disavowal that this involves (Derrida, 2008, p. 25). Rampant biocapitalism as portrayed in the passage above makes it clear that transhumanism and capitalism distinguish between zoe and bios. Though apparently it seems that it valorizes the bios or the meaning of life that humans give to themselves in comparison to zoe or animal life of suffering. But this distinction also entails a reduction for the human as the human needs to disavow the affective, the sensual and the bodily in order to place itself in a realm of rationality. Derrida interrogates the affective difference between thinking and sniffing or scenting and "why this zone of sensibility is so

Speculative Fiction, Biocapitalism and Being Tentacular: Reading the *MaddAddam* Trilogy as Posthuman Saga

neglected or reduced to a secondary position in philosophy and arts?” (Derrida, 2008, p. 55). The man animal divide becomes even more problematic with the emergence of “the genetic body”.

As depicted through the course of the trilogy the materialization of “the genetic body,” “biomedia,” as well as “biovalue” problematize the border dividing subject and object: “The classical distinction made in moral philosophy between that which is not human – ownable, tradeable, commodifiable – and that which is human – not legitimate material for such commodification – no longer seems so stable” (Rose, 2001, p. 15). In the speculative world of *MaddAddam*, “biovalue” is ominously dominant, it produces an extremely competitive biocapitalist economy in whose ambit the corporations dabbling in biotech for example - OrganInc Farms, NooSkins, and RejoovenEssence engage in R and D in genetic material and modifications, viruses, vaccines, tissues, and organs as well as market them.

The effect of trading through this biovalue is what Derrida has already pointed out— the domination of biocapitalism leads to utmost veneration of reason at the expense of affects and senses. In *Oryx and Crake*, the first few chapters depict the plight of Jimmy, one of the few human survivors of the apocalyptic extinction of humanity. Jimmy is confused and distorted. He is a nervous bundle of phobias and nightmarish memories. He is divorced from his personal affects, he experiences his tear drops as “salt water... running down his face again. He never knows when it will happen and he can never stop it” (Atwood, 2003, p.11). Throughout the novel “he feels like weeping. Then he hears a voice- his own!- saying boohoo; he sees it as if it’s a printed word in a comic strip balloon. Water leaks down his face” (Atwood, 2003, p. 161). This inability to feel one’s emotion and staying at a rational distance from it is the after effect of a cultural preconditioning towards unhinged rationality unaffected by irrational emotions. This perverse intensification of the rational faculty has an adverse effect on the effective apparatuses of a subject. Ben Anderson in his essay ‘Encountering Affect: Capacities, Apparatuses, Conditions’ invokes Baruch Spinoza to define the term affect, “affect is a body’s ‘capacity to affect and be affected’, where a body can in principle be anything” (Anderson, 2014, p. 9). According to Anderson “affect is two-sided. It consists of bodily capacities to affect and to be affected that emerge and develop in concert” and also affect relate to potentials instead of the existing corporeal characteristics. Affects concern the tentative capabilities of the body in any given circumstances, in addition to what it presently is engaged in and has done in the past. It must be noted that these capabilities are reliant on alterity which can never be comprehensively specified in advance. The affect studies therefore stress on the unknown and the unpredictable modalities of exchange and response which is just the opposite of the ethics of containment and manageability on which most of the creatures created in the *Maddaddam* trilogy are premised on.

It is intriguing to note that in a world where most of animal life has become extinct and one of the most popular games in this world is Extinctathon- a game which tests the player’s knowledge of extinct species, there is still a preoccupation with bio instrumentality and rampant visualization of the animal as biomedia and biovalue. This intensification of the biotech results in complete dismissal of indeterminacy of bodily identity which results in peculiar situations where the readers encounter Crakers acting with no capacity of reception of the sense and feelings of the other, as they are programmed with limited ability for affects. This paints a very bleak picture in the third novel *MaddAddam*, where Amanda, a woman who had been kidnapped and sexually assaulted by two Painballers, suffers further violation at the hands of the Crakers because of their lack of affective intelligence. These Painballers in Atwood’s dystopic world were hardened criminals would compete in gladiator-like arenas for the pleasure of the elite corporate class before the fall of humankind. Toby and Ren the protagonists of the novel find her alive and successfully retrieve her from the Painballers. Meanwhile, a group of Crakers, join the human encampment where Ren and Toby stay. When Toby and Ren return

with Amanda to the cobb-house, the Crakers begin their mating season and they force themselves on Amanda reading her pheromone secretion post her sexual violation as a biological sign of readiness for mating, despite her repeated protests.

Another bioengineered creature in the novels which deserve a closer critical inspections are the pigeons. They were created by means of genetic engineering in corporate labs. They were inflated like balloons to provide with more space to grow more organs and are completely defined in terms of being corporate properties. Pigeons are an aporiatic category as they straddle the boundary between the man and animal as they possess human organs and are also injected with human induced pluripotent stem cells (iPSCs) which lead to their mutation and forced evolution into human-pig hybrid with their own culture and language. Jimmy is traumatized by the memory of the gaze of the pigeons and do not know how to engage with them. In the course of the three novels, the pigeons manage to escape their prison like labs, and they cease to be fleshy bioengineered incubators for human organs. Outside the lab they further erase the man induced boundary between nature and culture/humanity. Gazing at pigeons instead of looking through them is an act of transgression, it completely over writes their condition as merchandise, as “deferred trash” as objects that are to be discarded after use. The pigeons running free and terrorizing the humans in the post-apocalyptic world, they no longer serve as incubator, as commodity of biovalue. They move beyond human economy and control and become their own thing, like Frankenstein’s monster they become their own “thing” going outside the human induced process of “thingification” in biocapitalism. It is fascinating to note that the pigeons begin as instance of instrumentalization of life where they are reduced to being commodity sans agency and through the course of the novel they grow in subjective dimensions to become first a formidable adversary to the human kind and their proto type the Crakers and finally they emerge as an able ally for the remaining humans against the dehumanized painballers as the reader finds that in *MaddAddam* that the MaddAddamites and the Pigeons form an alliance against the Painballers. The Pigeons even inform Toby that the Painballers are moving towards the ruins of the Paradise Dome to procure the weapons from the hold. The Pigeons further work with the humans, the MaddAddamites, to protect the Crakers before the battle with the Painballers. Eventually humans along with the Pigeons breach Paradise dome and are able to kill the Painballers, thereby fulfilling their pact with the Pigeons. Thus they become what Haraway terms as companion species, traversing a long distance from their beginning as bio-engineered organic commodities. This confirms that Atwood advocates the dilution of the species boundary as long it is an act of unconditional hospitality, and encourages affective vulnerabilities. The narrative of Atwood texts thus seem to time and again ramify the understanding that if biological entities are trans-mutated into marketable entities by biocapitalism, the aesthetic, artistic, pre-symbolic and the affective elements and scope of living “things” are greatly subdued and they consequently return as a repressed nightmare as capacity that returns as a trace of the apocalyptic erasure.

It is not merely that Atwood through her texts launches a scathing attack on the transhuman ethics which are at play in the biocapitalist economy. She also paves a constructive ethical chart for a hospitable and ethical posthuman condition. This affective and ethical pedagogy is initiated through the primary ecologist group of the trilogy, the God’s Gardeners. In contrast to the rich and influential biotechnological companies, the eco-theological sect, the God’s Gardeners, are tuned to function with susceptibility and affective openness, they are ready to acknowledge and are at ease with prospects of interdependency in subjective agency. In the second novel *The Year of the Flood*, the group’s founding father, “Adam One,” encapsulates his view about evolution from anthropocentric scientist, to a posthumanist sage “My dear Friends,” he says solemnly in a mimicry of Biblical narrative:

My name is Adam One. 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 studied epidemics, I counted diseased and dying animals, and people too, as if they were so many pebbles. I thought that only numbers could give a true description. But then – I saw a

Speculative Fiction, Biocapitalism and Being Tentacular: Reading the *MaddAddam* Trilogy as Posthuman Saga

great Light. I heard a great Voice. Spare your fellow Creatures! (Atwood, 2009, p. 40)

Giorgio Agamben notes in his book *The Open: Man and Animal* that “(a) posthistorical man no longer preserves his own animality as undisclosable, but rather seeks to take it on and govern it by means of technology; (b) man, the shepherd of being, appropriates his own concealedness, his own animality, which neither remains hidden nor is made an object of mastery, but is thought as such, as pure abandonment” (Agamben, 80). This desire to erase off the animal instincts in man is the reason Crake initiates his Paradise project. Pramod K. Nayar notes that Crake's modification of the humans in the novels and the consequent creation of the Crakers “plays out the ‘pastoral fantasy of humanism – he has employed the tools of genetic engineering in order to breed the wildness out of man, creating a species of human beings that will be congenitally unable to soil the planetary oikos’ (Nayar, 2013, p. 123). Crake’s project was to technologically, biogenetically and through socio-educational process write off the hormone driven instincts of man which are akin to animals and which according to him make man ecologically misfit and a threat to planetary balance. However, Atwood suggest that the species boundary must be reconsidered. The posthuman discourse in the novels is initiated through a palimpsestic reconsideration of anthropocentric text such as the Bible. For instance, in *The Year of the Flood*, Adam One's pedagogy focuses on a Deep Ecology ideal of transcending biological scribes and recognizing interconnectedness of all species and therefore the blurring of the animal–human border. Thus, when he offers a revisionary Biblical story of origins, he says that when ‘Jesus first called as his Apostles two fishermen’, he did so in order ‘to help conserve the Fish population’ (Atwood, 2009, p. 234).

This is exactly the reason why Atwood chooses the template of speculative fiction SF to counter the threats of biocapitalism and the broader spectrum of anthropocene. As Donna J. Haraway notes in her celebrated book *Staying with the Trouble*:

The tentacular ones tangle me in sf. Their many appendages make string figures; they entwine me in the poiesis— the making — of speculative fabulation, science fiction, science fact, speculative feminism, soin de ficelle, so far. The tentacular ones make attachments and detachments; they make cuts and knots; they make a difference; they weave paths and consequences but not determinisms; they are both open and knotted in some ways and not others. sf is storytelling and fact telling; it is the patterning of possible worlds and possible times, material-semiotic worlds, gone, here, and yet to come. I work with string figures as a theoretical trope, a way to think-with a host of companions in sympoietic threading, felting, tangling, tracking, and sorting. I work with and in sf as material-semiotic composting, as theory in the mud, as muddle. (Haraway, 2016, p. 31)

It is from this muddle the tentacular thinking as an approach emerges which can counter the anthropocentric drive of contemporary epoch. Haraway terms this as Chthulucene. “Unlike the dominant dramas of Anthropocene and Capitalocene discourse, human beings are not the only important actors in the Chthulucene, with all other beings able simply to react. The order is reknitted: human beings are with and of the Earth, and the biotic and abiotic powers of this Earth are the main story” (Haraway, 2016, p.55). This new proposed epoch as a possibility not only makes it an ethical impossibility for biocapitalism to function and trade through biovalue and biomedica as it dislodges the convenience of the singularity which is at the centre of the controlling power of the (bio) capitalist discourse as the tentacular chthulus is multiple and myriad, it also shatters the species exceptionalism of man which provides it with the right to trade in “life”.

Throughout the complete text of *The Year of the Flood*, the eco-theological sermons of Adam One counsels and warns the God’s Gardeners about the narrative of human

exceptionalism. Anthropocentric valorisation of self can only be countered by reiterating that the human animal is only one “critter” among many. According to Haraway, the “critters” are the interdependent beings sharing a network of affects, stimulus and the term is devoid of any possible hierarchy or categorization. “Critter,” is a hospitable concept for Haraway, as it makes reference to all bio forms universally in a conscious and comic attempt to oppose any expert, standardized, affectless uber-rational official pedantry and all taxonomies of singularity and exclusiveness. She visualises critters as “breathing, extant, evolving, changing, and dying in reciprocated interface with other, co-dependent living beings” (Haraway, 2016, p. 8). This informal, non-serious term is a suitable one to describe posthumanist perception of Margaret Atwood, reflecting her satirical derision for those engaged in biocapital sacrilege of the sacred “life” like Crake or even Jimmy’s father who in cahoots with the bio-capitalist policy makers, presuppose anthropomorphic nomenclature and homocentric structures, negating co-dependency and affective susceptibility of humans as a species. She is also critical of Crake who initiates the Paradise project in order to correct the exploitative excess of the anthropose but is caught in the discursive net of essentialism which leads him to programme the Crakers through genetic and socio-pedagogic patterns to be reduced. In order to rectify the human Crake chooses to eliminate what he deems to be “animal”, thus extending the species boundary which persists in the anthropocene and capitalocene. The posthuman critic is launched through the voice of the God’s gardeners who are at ease in dealing with vulnerability, affects and interdependence of species. They invert the very logic of the capital market by philosophising that “There [is] no such thing as garbage, trash, or dirt, only matter that hadn’t been put to a proper use” (Atwood, 2009, p. 69). Their doctrine is a straight critic of over consumption and upsets capitalism as the denial to consider things as waste is a snub to the very systemic proliferation of acts of commodification that calculates the worth of bio matter in terms of monetary gain. Hence it can be argued that they invest in a care economy which is based on ethics of cooperation rather than competition, which explains their caring attitude towards the Crakers who are a hybrid mutated caricature of humans and their eventual symbiotic alliance with the pigeons who were initially hostile towards the humans. One can explain Atwood’s posthuman position through Haraway who believes that:

Through their reaching into each other, through their ‘prehensions’ or graspings, beings constitute each other and themselves. Beings do not preexist their relatings. ‘Prehensions’ have consequences. The world is a knot in motion . . . There are no pre-constituted subjects and objects, and no single sources, unitary actors, or final ends. (Haraway, 2016, p.6)

This is exactly where Crake seems to fail in his project of creating the perfect life form as he presumes the subjective position for the Paradise people- the Crakers thus falling in capitalist entrapment of essential singularity and predetermination.

References

- Agamben, Giorgio. (2004). *The Open: Man and Animal*. Stanford University Press.
- Anderson, Ben. (2014). *Encountering affect: Capacities, Apparatuses, Conditions*. Ashgate Publishing.
- Atwood, Margaret. (2004). *Oryx and Crake*. Virago.
- Atwood, Margaret. (2009). *The Year of the Flood*. Virago.
- Atwood, Margaret. (2009). *Curious Pursuits: Occasional Writing*. Hachette UK.
- Atwood, Margaret. (2009). *In other worlds: SF and the Human Imagination*. London: Anchor.
- Atwood, Margaret. (2014). *MaddAddam*. Virago.
- Atwood, Margaret. (2004). The Handmaid’s Tale and Oryx and Crake in Context. *PmLa*, 119(3), 513-517.
- Barad, Karen. (2003). Posthumanist Performativity: Toward an understanding of how matter

Speculative Fiction, Biocapitalism and Being Tentacular: Reading the *MaddAddam* Trilogy as Posthuman Saga

- comes to matter. *Signs: Journal of women in culture and society*, 28(3), pp. 801-831.
- Barad, Karen. (2007). *Meeting the Universe halfway: Quantum Physics and the Entanglement of Matter and Meaning*. Duke University Press.
- Bostrom, N., and R. Roache. (2007). Ethical Issues in Human Enhancement. In J. Ryberg, T. S. Petersen and C. Wolf (eds.). *New Waves in Applied Ethics* (pp. 120-252). Palgrave-Macmillan.
- Bouson, J. Brooks. (2004). It's Game Over Forever": Atwood's satiric vision of a bioengineered posthuman future in *Oryx and Crake*. *The Journal of Commonwealth Literature*, 39(3), 139-156.
- Braidotti, Rosi. (2013). *The Posthuman*. Polity Press.
- Braidotti, Rosi. (2002). *Metamorphoses: Towards a Materialist theory of Becoming*. Polity Press.
- Brown, Wendy. (2015). *Undoing the Demos: Neoliberalism's Stealth Revolution*. MIT Press.
- Defalco, Amelia. (2017). MaddAddam, Biocapitalism, and Affective Things. *Contemporary Women's Writing*, 11(3), 432-451.
- Deleuze, Gilles and F. Guattari. (1988). *A Thousand Plateaus: Capitalism and Schizophrenia*. Athlone Press.
- Deleuze, Gilles and F. Guattari. (1994). *What is philosophy?* Columbia University Press.
- Derrida, Jacques. (2008). *The Animal that therefore I am*. Fordham Univ Press.
- Haraway, Donna Jeanne. (1989). *Primate visions: Gender, Race, and Nature in the world of Modern Science*. Psychology Press.
- Haraway, Donna Jeanne. (2003). *The Companion Species Manifesto: Dogs, people, and significant Otherness*. Prickly Paradigm Press.
- Haraway, Donna Jeanne. (2013). *Simians, cyborgs, and women: The reinvention of nature*. Routledge.
- Haraway, Donna Jeanne. (2016). *Staying with the trouble: Making kin in the Chthulucene*. Duke University Press.
- Helmreich, Stefan. (2008). Species of Biocapital. *Science as Culture*, 17(4), 463-478.
- Holler, Linda. (2002). *Erotic Morality: The Role of Touch in Moral Agency*. Oxford: Rutgers UP.
- Hollinger, Veronica. (2006). Stories about the future: from patterns of expectation to pattern recognition. *Science Fiction Studies*, 33(3). 452-472.
<https://www.jstor.org/stable/4241464>.
- Liotard, Jean-François. (1984). *The Postmodern condition: A report on knowledge*. U of Minnesota Press.
- Nayar, Pramod. (2013). *Posthumanism*. Polity.
- Pearce, David. (1995). *Hedonistic Imperative*. Electronic publication.
- Pordzik, Ralph. (2012). The Posthuman Future of Man: Anthropocentrism and the Other of Technology in Anglo-American Science Fiction. *Utopian Studies*, 23(1), 142-161.
- Rajan, Kaushik Sunder. (2006). *Biocapital: The Constitution of Postgenomic Life*. Duke UP.
- Rajan, Kaushik Sunder. (2017). *Pharmocracy: Value, politics, and knowledge in global Biomedicine*. Duke University Press.
- Rose, Nikolas. (2001). The Politics of Life Itself. *Theory, Culture & Society*, 18 (6), 1-30.
- Serres, Michel. (1995). *Genesis*. Bloomsbury.
- Serres, Michel. (2013). *The Parasite*. U of Minnesota Press.
- Serres, Michel. (2013). *Times of Crisis: What the financial crisis revealed and how to reinvent our lives and future*. Bloomsbury Publishing.
- Sterling, Bruce. (1989). "Slipstream." *Science Fiction Eye*, 1(5), 77-80.
- Wolfe, Cary. (2010). *What is Posthumanism?* U of Minnesota Press.
- Wolfe, Cary. (2003). *Animal Rites: American culture, the discourse of species, and*

Posthumanist theory. University of Chicago Press.
Žižek, Slavoj. (2004). The Ongoing “soft revolution. *Critical inquiry* 30(2), 292-323.

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