Manifesting *Extinctathon*: Virtual Reality and Terrorism in Margaret Atwood's *Oryx and Crake*

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Abstract:

Margaret Atwood's *Oryx and Crake*, the first novel in her dystopian *MaddAddam* trilogy, narrates the events that unfolded before humanity is purged off by a massive extinction on an apocalyptic scale. This paper acknowledges the issues of terrorism, media, technology and ecology when looking into the cause for the apocalypse. In the process, this paper also addresses Atwood's fears of the negative consequences of violent material on the internet, the ease of access to such inappropriate material and the threats posed by using the internet to instigate acts of violence. Attention will be focused on the modern fear of the evolution of terrorism with advancements in science and technology, the potential use of biological warfare, the perverse use of genetic engineering as well as the suppression of the green agenda by capitalist authoritarianism. It will also attempt to better understand Atwood's enigmatic Crake, who has been pigeon-holed into a one-dimensional 'evil-scientist' characterisation. Linking Crake's adolescent immersion into a simulacrum of violent virtual reality with the evolution of his dark utopianism allows for his act of genocide to be read as the real-life manifestation of the game-play of the virtual game-cum-chat-room that is *Extinctathon*. Within the speculative nature of the novel, Atwood accomplishes in exposing the truth of the historical repetition and future reproduction of atrocities, revealing glaring insights into the dystopian aspects present in the current state of society.

Keywords: internet, video games, violence, terrorism, *Extinctathon,* Crake

Introduction

In contemporary times, social media, as a result of its broad reach as well as convenience and affordability, has gained as much importance as mainstream media for its ability to communicate, educate and influence. Such platforms can escape the radar of extreme scrutiny from monitoring agencies due to their widespread nature and pre-existing privacy policies present on most websites. The free spread of propaganda is also aided by the anti-censorship culture of most western democratic societies. This has allowed social media platforms to become a hot-bed for illegal or anti-social activity, with law-breaking activities being planned through text, images, video and other digital means. Terrorist organisations have already been using the internet and social media platforms to recruit members and spread propaganda. In 20[1]4, ISIS's media department released the first propaganda video of the *Salil al-sawarim* series, demonstrating the use of social media to spread jihadi. The videos succeeded in becoming a popular meme online, allowing for the spread of the ISIS identity and the creation of online interactive environments for people to share their own SAS inspired videos and images. Such movements that have a propensity to be radically different in thought, beliefs and actions from those condoned by the agencies in power capitalise upon the frustrations of the young and impressionable and their youthful, sometimes wishful, desire to assist in change. Therefore, the engagement of such movements on social media is done with a target audience in mind in order to educate, radicalise, and in the most extreme cases, to groom and put into action.

The development in gaming technologies and online networking has led to the integration of gaming with social media. The popularity of gaming has also led to the development of gaming culture with its own social and behavioural rules. While gaming culture has now become extremely visible in the mainstream, it still constitutes a subculture within itself. The acceptable age of gamers has also increased; however, it is understood that the gaming world is often targeted towards the young, and therefore the most impressionable. Video games with a propensity for violence and aggression have been carefully designed and developed to be used as weapons to radicalise their target audience. In 2006, Al Quaeda altered the video game *Quest for Saddam*, a first-person shooter game that allowed the player to capture Saddam Hussein, into *Quest for Bush*, thereby completely reversing the player's aim. ISIS also released a jihad version of *Grand Theft Auto* and its android app called *The Dawn of Glad Tidings*. Video games with more advanced consoles could also allow for non-verbal and

non-peripheral modes of communication to share information, thus upgrading their capabilities from recruitment and spreading propaganda to networking, planning and action. In the aftermath of the Paris Attacks in 2015, there were suspicions that terrorists were possibly using the messaging feature on Sony's PlayStation 4 to communicate, network and facilitate the terrorist attack (Tassi, 2015). No evidence was found, but it led security analysts to contemplate if and how encrypted messaging technology could become a means to share sensitive information or create underground networks.

Olson (2008) notes that the terrorist radicalisation process utilises the desire in adolescent males to "experience fantasies of power and fame, to explore and master what they perceive as exciting and realistic environments (but distinct from real life), to work through angry feelings or relieve stress, and as social tools." (p. 55). There are also studies which show that that there is a preference for anti-social media content among the youth as a result of a positive correlation with their anger, frustration, and fears (Jansz, 2005; Jansz& Tanis, 2007). This aspect of the psychological appeal of violent material and game-play explains why the troubled Crake and Jimmy spend the majority of their adolescent years huddled in Crake's bedroom, scouring the internet for forbidden material, illegal websites and violent video games to play. The two young boys are unable to positively process their feelings of anger, loss, hopelessness, betrayal, sexual frustrations arising from the multiple crises of school, puberty, broken families, private angst and personal feelings of isolation from family and peer. Their unlikely friendship is forged through the online material they consume and the video games they play, mainly *Blood and Roses, Barbarian Stomp* and *Extinctathon*. The virtual game-play between the two evolves into the gamification of their physical reality, eventually leading into the epic final game-play where humanity becomes the object at stake.

 A common leitmotif in modern user interactive video games is that the anticipated violence is often targeted towards institutions like states and armies like in the *Call of Duty* series and law enforcement agencies and military personnel in the *Grand Theft Auto* series. This issue of such anti-establishment or anti-institution motifs further complicates the problematic relationship between gaming, violence and terrorism. Atwood takes this leitmotif further in her video games by making human culture and civilisations the objects of violence in the games in the novels, in particular *Blood and Roses* and *Barbarian Stomp*. This disrupts the meta-narratives of humanity by making the player complicit in the fragmentation or the destruction of his own identity, questioning if lived reality is real or a simulation or

representation of humankind's grand narratives. The narrative structures of the games they play take a bold stance in minimising human history, its genocides and achievements into a barter system, like a card-trading system or a question-answer gaming system. They also do not involve the emotional experience of the player. Due to their inherent structures as kill or be killed video games, they conceptually necessitate a level of basic violence. Another unifying quality of the games is the lack of conscience or moral presumption behind the actions as the killings are imbedded in the plots. All the games involve certain degrees of mass violence, either as genocide or extinction, as "individual rapes and murders didn't count" (Atwood, 2013a, pp. 89-90). *Barbarian Stomp* is the most graphically violent and relies on the knowledge of history, pitting 'civilised' societies against violent 'barbarians', with the game-play involving the destruction of entire civilisations. In *Blood and Roses*, players trade human atrocities for human achievements based on the outcome of a roll of dice. *Extinctathon* relies on the knowledge of extinct species and the causes of their extinction in its question-answer model. Death, destruction and extinction are conceptualised as logical, even necessary, for survival and self-preservation. Most ironically, the utter destruction of species, cultures and civilisations are required for the creation of the gamer's virtual reality.

Jimmy and Crake are in a literal sense safe from the events in the games but cannot escape from the imprinting of mental images and psychological obsessions. The virtual narratives of the online world imprint onto real-life when Crake cannot overcome his overbearing desire to create and destroy. The activities that they indulge in their youth on their worn down computers unknowingly lead to the gamification of their actual lives. Crake and Jimmy spend their entire lives engaged in real-life game play. In the real world, Jimmy, the man of 'words', is unable to succeed in the science dominated bio-political atmosphere while Crake, the man of 'numbers' who disdains art as a narcissistic endeavour, succeeds professionally and financially, despite his lack of social skills. They become living players in the war game of *Blood and Roses*, depicting the binary of culture and nature, except here, the normalised hierarchies are wilfully reversed when Crake acts upon his declaration that the human species is a failed experiment doomed to extinction. (2013a, p. 285, 347). Crake accomplishes what he tells Jimmy, "The Blood player usually won, but winning meant that you inherited a wasteland. This was the point of the game. . ." (2013a, p. 91). In all of his efforts to end the human species and establish utopia, *Extinctathon* constantly lingers in the background and

ultimately emerges into the foreground in order to make his radical beliefs a reality through a bio-terroristic act of human annihilation.

Oryx and Crake: Video Games and the Gamification of Reality

Social media operates without the selective filter of mainstream media and news outlets, allowing for unfettered communication through broad dissemination of messages or connectivity in real-time. The images and objects of the virtual world, when contextualised through hypertext and connectivity in the embedded systems of social-networking, are susceptible to 'readings' like literary-texts. This reading especially makes sense in the context of a modern mass culture where the consumer is bombarded with a multiplicity of material to consume or 'read'. This is why the objects of media contain multiple layers of embedded meaning, for example, in the multiple layers of communication in social media (Woods, 2006, p. 44). It is also important to note that social media platforms usually operate without the selective filter of mainstream media and news outlets, allowing for unfettered communication through broad dissemination of messages or even in real-time, allowing for 'readings' without intermediaries. Video games today have elements that are interactive and competitive, with visuals, rewards, rankings and communication within an exclusive like-minded group that appeal to the players psychologically. This existence of multiple different strands of interactivity is a trait that it shares with hypertext. Peter Bøgh Andersen (1992) defines an interactive work as one "where the interaction of the reader is an integrated part of the work's signification, meaning that the interaction functions as an object-sign that refers to the same subject as the other signs, not as a meta-sign referring to the signs of the discourse." (p.89). In the context of video games, the player's input, that is, the conscious decisions and actions a player makes, are processed as signifiers that determine the events in the game. In multi-player games, in particular, players can generate the same material in multiple manifestations because the same game-play cannot be replayed identically. In this sense, video games can slightly function like hypertext which de-centres the author by allowing the reader to assume the authorial voice, thus dismantling hierarchies and liberating the reader. Additionally, the interaction of the player is a necessary presupposition for the game to be played or be 'read'.

Following this interpretation, it is acceptable to understand how in the hyper-reality of *Oryx and Crake*, where representations and copies slowly replace the real, the virtual could morph into a replacement of the real. The online world, as well as the games that Jimmy and Crake

immerse themselves in, can be viewed as a simulacrum of the heavily commercialised entertainment industry that sustains itself on the commodification of bodies and simulation of the consumers' desired realities, which is in actuality determined by the media they consume. This also foreshadows the ultra-capitalist, biopolitical regime in the novel, as well as the decay of art and the normalisation of sexualised and violent spectacles of entertainment. This is exemplified in how the online videos and video games distance the viewer/player from the images and actions of the video/game, thus leaving the viewer/player devoid of any empathy due to the natural anticipated violence. The content that Jimmy and Crake view range from animal snuff sites, live executions, stoning, electrocutions and lethal injections, pornography, paedophilic content and assisted-suicide sites. The access to mass entertainment that fixates on violence enacted upon human bodies, simulated entertainment and interactive video games significantly shape Jimmy and Crake's perceptions of reality. The two create a simulacrum of reality derived from the warped entertainment and commodification of the objects and images on the internet. The vacuum in identity as a result of the deconstruction of labels and archetypes of stable and unchanging identity in meta-narratives in the post post-modern hyper-capitalist western world is, as Baudrillard anticipated, filled by consumerism. Jimmy and Crake become what they consume. The visuals they absorb become signs and symbols that are curated to establish the reality they withdraw into, which is a fragmented, disconnected reality which they assume to be the representation of truth. They are physically confined to the Compound, and their only interaction with the external world is through their computer screens, and even this reality is a curated combination of signs and symbols. Jimmy and Crake are immersed in a simulation of an unreal, narrow reality that becomes the foundation of their worldview. They consume violent material, satirical news and pornography with relative ease as and when they desire. The reality of human suffering is reduced to spectacles of vulgar entertainment and crude pleasure.

Atwood here conveys "her uneasiness as she describes the degradation of culture in a society where violence and pornography have become cheap, and readily available forms of entertainment" (Bouson, 2004, p. 143). These spectacles are further strengthened by video games that allow them to completely distance themselves from reality. This leads to the construction of a world where they are alienated from other forms of human experience. This availability of violence, vulgar entertainment and virtual-gaming reality on the same platform points to the interchangeable nature of the three, transforming Jimmy and Crake into the objects of reality, with everyone else around them becoming performers to keep alive the

simulacrum they have imbedded themselves in. Real-life is postulated as a copy of their curated reality, and the failure of life to imitate this, for example, in Jimmy's constant struggle to differentiate the two-dimensional image of Oryx from her real-life counterpart, becomes a crisis of identity for the both of them. The adolescent Jimmy can derive satisfaction from the game-play and walk away from the exertion of violence indulged in during his brief divorces from reality. The adult Jimmy, who appears on the surface to be the emotional foil to Crake's intellect, becomes obsessed with Oryx, whom he can never separate from her online persona. Jimmy's adult years are spent in failure as he cannot distance himself from the anguishes and obsessions of his adolescence and youth: a condition he cannot recover from even after his transformation into Snowman. The ultimate culmination of this corruption of reality occurs with Crake's final performance in front of Jimmy, as he slits Oryx's throat and Jimmy shoots him in revenge. They finally transgress the violent images in their computer screens as they immerse themselves into their simulacrum one last time before it disappears.

For Crake, virtual reality becomes the externalisation of his consciousness, creating a system where virtual gammification exerts itself into everyday living. In this system, *Extinctathon* exists both within and outside Crake's consciousness, exerting an influence over his understanding of and performance in the real world. Jimmy and Crake 'read' the games differently, with Jimmy entering the simulation and then withdrawing after his desires have been satisfied, while Crake immerses withdraws from the fragmented reality of the external world into the simulacrum of the internet created reality. Jimmy can never negotiate the fragmented nature of his identity, as he gives in to the pleasures of a materialistic, commercialised and hedonistic existence while racked with guilt at betraying his aesthetic beliefs and his mother's self-sacrificing activism. Crake, on the other hand, refuses to acknowledge the reality of the external world as the established truth. Inspired by the destruction of meta-narratives in the videos he watched and the games he played, he plans to enact such destruction upon humanity itself. He decides to manipulate reality completely by initiating his utopian simulacrum. He does so initially in the secretive Paradice project, which exists in a vacuum from external reality. It is only after the real world is destroyed that Crake allows Paradice to become universal.

In order to bring his plans to fruition, he must first wholly immerse himself in *Extinctathon*'s 'reality' and then manifest it into the real world. *Extinctathon* is an online networking system

run by the cryptic terrorist organisation called MaddAddam, which operates on the surface as an online "interactive biofreakmasterlore game" (p. 92). Players virtually wipe out species that had already gone extinct in the last fifty years and climb in ranks until they can finally access its inner workings. A similar game-play occurs in the real world as species are wiped out due to human intervention, while other questionable hybrid species are created through scientific experiments, highlighting the lack of concern for the ethical treatment of animals and the ecological question. This reality that *Extinctathon* inspires for Crake involves creating an ideology of anti-anthropomorphism that relies on factual knowledge of negative human interaction with themselves, the animal and plant world. This wishful identification with his player persona in the games: to be responsible for the re-organisation of worlds, to balance human exceptionalism with human tragedies, to have power over creation and destruction is greatly responsible for why the adult Crake feels that he possesses the sole right and responsibility to save the world. "Wishful identification provides a glimpse of "what if", and such a glimpse is a powerful predictor of future behaviour, especially in adolescents" (Konijin, 2007, p.1039). In the most obvious act of identification with his online persona, he discards the name given by his parents and becomes Crake, after the code-name he uses on *Extinctathon*: The Red-necked Crake.

Crake: Making *Extinctathon* a Reality

Research has shown that online recruitment of terrorist sympathisers is most successful when the anonymity of individuals is maintained in the initial contacts. Contact usually occurs from a safe physical and social distance; individuals are allowed to control the pace of early interactions, the initial identity of the group is revealed in a non-extreme, non-violent manner to the potential recruit and the actions requested by the recruits during the interactions are consistent with what has been established as norms for the group (Guadagno, 2010, pp. 43-44). In *MaddAddam*, Atwood provides glimpses into Crake's childhood, when he was known as Glenn, before and around the time of his father's death and before he learnt about *Extinctathon*. Zeb and Pilar build relationships with the lonely, ignored, invisible and brilliant Glenn, ultimately grooming him to become their spy within the compounds. Glenn and Zeb would play games every Thursday, particularly chess and *Blood and Roses*, with the two developing a kind of foster-brother relationship. Zeb would eventually teach him coding and hacking, talents that would become partly responsible for Glenn's transformation into Crake. After his father's death, Pilar grooms and recruits Glenn to perform duties for God's

Gardeners, which, if found out, could lead to his execution. Margaret Singer (1995) uses the term "in-betweener" to explain how vulnerable individuals, in emotionally and socially challenging transitional situations in life, such as between college and a job, arrival at a new location, or recent joblessness, and the like are vulnerable to persuasion by exploitative cults (p. 21). Glenn had already been scouted by Grandmaster Pilar at HelthWyzer, and through the calculated use of his misplaced anger and grief stemming from his mother's affair and later his father's death, was relatively easy to groom due to the lack of any parental guidance in his life. His tasks were also always consistent: reconnaissance of the Corporation's genetic engineering and bio-samples on Pilar's instruction. This double-role that Glenn/Crake regularly performs for a selective, unknowing homogeneous audience makes him both visible and invisible at the same time, like his online persona. His engagement with God's Gardeners introduces him to *Extinctathon*, the Gardener's online communication channel, which later evolves into MaddAddam's anti-establishment networking service. Crake discards his social identity as Glenn, the unpopular, awkward outcast, and becomes a member of a selective community where his contributions are recognised. This performance is psychologically rewarding, allowing him to climb in ranks in real life and the game. This small-scale performance of a player that began in the online world is the root of the large-scale voyeuristic destruction of the world where the members of humanity become unwitting performers in Crake's ultimate game of extinction.

His fascination with the dark web and forbidden material leads him to actively engage in the game, playing three thousand levels over years of committed gaming to become a Grandmaster. He shifts into the recruiter's role when he manages to draw the Grandmasters out into the physical world and employs them in the Paradice dome, where they continue to be referred to by their *Extinctathon* code-names. At Paradice, under the guidance and orders of Crake, they continue playing the extinction game in real life. It is here that Crake becomes the ultimate gamer, destroying worlds that do not subscribe to his vision of paradise and replacing them with his utopia. Crake also closely monitors Jimmy's failing professional and personal lives and then uses the same "in-betweener" recruitment tactic to get Jimmy to become professionally and personally dependent upon him. He baits Jimmy with the kind of consumerist lifestyle he desires then uses his intellectual and financial superiority to establish his dominance in their relationship. He leads Jimmy to believe that he valuable by introducing him to the other Grandmasters in Paradice Dome, revealing the top-secret Crakers to him and giving him creative control over the BlyssPluss's advertising.

Crake's manipulation of Jimmy is so meticulous that even after Jimmy discovers Crake's betrayal, he cannot shake off his loyalty to Crake. Jimmy appears to believe that since the orders were given by someone superior to him, he has no control over his own actions. It is, however, important to note that Jimmy was unaware of Crake's terrorist plan of global genocide. As the Rose player in the real-life *Blood and Roses*, Jimmy cannot fathom the destruction of the imperfect physical human form, humanity's cultural emblems, and humankind's inherent need for the emotional and the aesthetic. However, years of subversive gammification reduces Jimmy to an "agentic state", that is a condition in which the person sees himself as "an agent for carrying out another person's wishes" (Millgram, 1974, p. 133) and "feels responsible *to* the authority directing him but feels no responsibility for the content of the actions that the authority prescribes" (pp. 145-46). Millgram's experiments showed that in most cases of conflict, the agentic state overpowered individual autonomy despite tension and agitation. After Crake's death, he continues to watch over the Crakers, as it has been laid out by Crake that it is his responsibility to ensure their survival. Jimmy becomes Snowman, who has been specifically ordained by the creator Crake to care for his children, the Crakers.

Crake's limited capacity for empathy is what allows him to come to this terrifying conclusion of global genocide and what allows him to bring his plans to fruition. Divested of all emotional attachments or moral presumption, Crake operates as though he is playing a game. He functions on logic and conscious decision-making to attain the only possible outcome of the game that makes sense to him. His lack of empathy, which he often obscures as rationality, enables him to use the woman who worships him and the only friend he ever had as agents in his mission. Crake's gamification strategy is to use Oryx like a pawn by allowing Jimmy to form attachments with her while never relinquishing his possession of her. He rewards Jimmy with moments of pleasure by allowing him to create his brief simulated versions of reality where Oryx belongs to him. These brief escapes into this reality are intercepted by the actual reality of the fact that if Jimmy wishes to be allowed the psychological pleasure of 'owning' Oryx, he must perform his role well for Crake. He thus ensures that Jimmy is motivated to constantly participate in this living game-play. Crake knows that in his absence, Oryx would no longer be the reward that motivates Jimmy but instead become a distraction from the work Crake has left for him. At the end, when the game is won, Crake kills Oryx, establishing himself as the ultimate victor.

Crake's virtual game-play becomes a reality when he decides that the extinction of one last species is an absolute necessity in order to purge the earth of violence, subjugation, exploitation and all other evils. In fact, the entire plot of *Oryx and Crake* is moved forward through *Extinctathon,* as the trivia game of extinction becomes completely real in the hands of its players. However, Crake's dedication towards the realisation of the virtual does not come from a perspective that is environmentally motivated. Crake is obsessed with perfection, inventions, and advancements meant to better the condition of the human race. His desires for balance and perfection have led him to realise that man's scientific, technological and cultural accomplishments have amounted to the creation of ultimate chaos upon earth. In his cynical mind, correlation equals causation, and therefore the source of the chaos must be removed. Humans are removed from the picture and replaced by a species that possess not of the 'negative' traits of humanity. Crake tells Jimmy in one of their conversations that mirrors the civilisation versus wilderness/nature dichotomy of their games that the elimination of one generation of the human species is all that is needed to end civilisation. He tells Jimmy in game-play language, "Break the link in time between one generation and the next, and it's game over forever." Jimmy does not realise the foreshadowing when he nonchalantly replies, "Speaking of games," said Jimmy, "it's your move." (2013a, pp. 262).

Crake: A Terrorist?

Peter Olsson (2013) states four criteria as the key psychodynamic patterns in homegrown terrorists: "father longing" out of an ambivalence or disappointment in parental figures, ambivalence towards women, marriage and intimacy, prolonged identity search and crisis and an ambivalence towards authority." (p. 23). These criteria are Crake's defining personality traits and gradually develop into the saviour-complex and flawed idealism of his adulthood. When Jimmy visits Crake at Watsons-Crick, it is revealed that Crake falls in the autism spectrum, further highlighting the alienation he endured. "Watson-Crick was known to the students there as Asperger's U. . ." with students who were "Demi-autistic, genetically speaking, single-track tunnel-vision minds, (with) a marked degree of social ineptitude . . . a high tolerance for mildly deviant public behaviour" (2013a, p. 228). Crake is conceived in this chapter as automatic and emotionless, as purely the intellect with no moral development. The violent games and images from his childhood have effectively desensitised Crake to the violent control exerted by the CorpSeCorps that exists all around him. The narratives of kill

and destroy of the games mirror the narratives of the society he lives in: of historical genocides, invasions and normalised oppression. His knowledge of the extent of unethical medical research at HelthWyzer and his education and resources at Watson-Crick emboldens him to concoct his apocalyptic plan to end the human species. He plans to create utopian earth with a genetically perfect super-human species that possesses none of the physical, mental and emotional weaknesses of the human species. Crake becomes a terrorist, using scientific knowledge to engineer a bio-weapon to make *Extinctathon* a living, physical reality.

Van der Heide (2011) introduced the term "lone-operator terrorist" to include lone acting individuals, small networks that are undetectable by intelligence agencies, and individuals part of a larger network whose actions are inspired by but not instructed by the larger group. Such individuals "solely decide, plan and perform their act" (p. 7). All evidence points towards Crake being a lone operator of the last type, a type of terrorist that functions without the constraints of a hierarchal leadership of a formal terrorist organisation. As a lone operator, he is not required to wait for formal commands to plan or execute his attack. It cannot be denied that God's Gardeners anti-anthropocentric ideology and apocalyptic concept of "The Waterless Flood", along with MaddAddam's anti-capitalist violent agenda, played active roles in the development of his anti-thetical yet oxymoronic utopian and apocalyptic beliefs. He remains indirectly connected to the Gardeners and MaddAddam through the chat-ways embedded in *Extinctathon*. This lack of direct contact is also what enables him to act on his own while retaining access to the intelligentsia he needs. In a way, he maximises the operation of MaddAddam by emboldening their tactics and broadening the scope of reach. Crake operates alone like a traditional 'lone wolf' in terms of his ability to decide, plan and act, yet he is part of an organised terrorist network that inspires him without instruction. Crake as a lone operator emphasises the ambiguity in the categorisations and definitions of terrorism upon which counter-terrorist activities are based.

Crake does not reveal any particular ideology, whether political or religious or emotional connections that can completely explain his reasoning to commit genocide. This complicates our abilities to identify Crake as a terrorist because of the lack of the concept of nationalism as well as strict religious and political affiliations that oppose the security of the nation. It is, however, clear that Crake wishes to dismantle all bio-political power structures that dictate the control and subjugation of populations and species. Foucault (1990) defines a "biopolitics

of the population," through which the administration of life and populations is a political rationality (p. 28). This interpretation of power makes the human body the focus of subjectification, and in consequence, the species body and its biological processes are supervised through interventions and regulatory controls. The surveillance and control over human life by the Corporation is so severe that even vegetarianism is not a functionally viable option, with the only options being the processed vegetarian goods that are manufactured and sold by the Corporation's food and market chains. Science and technology are directed towards gene-modifications and genetic engineering to either achieve the perfection of the human body or the manipulation of other species to serve the human species. Crake tells Ren that the centre of power has evolved from kingship to "technological connections", which Ren takes to mean "coding and splicing", and Crake does not deny this. (2013b, p. 271). Crake attempts to circumvent this centre by not only destroying the human species but also by creating a new species without hierarchies and power-structures. He biologically manipulates the Crakers so that they do not possess "human" qualities like the ability to feel and act upon emotions, to comprehend manipulating their environment for their comfort, the ability to abstract complex thoughts into metaphors or images. In his own words, "That stuff's been edited out." (2013a, p. 66). The use of computer-related language highlights Crake's role as a programmer manipulating the brain to produce unalterable species traits in the Crakers. Crake essentially murders one species and then attempts to limit another species from ever culturally evolving from the fixed dogma that he has established as their truth.

Crake utilises the infrastructure his position entitles him to, the intellectual pool he collects in Paradice from MaddAddam, the personal and professional relationships he builds and the already existing networking capacities of *Extinctathon* to bring his plans to fruition. It is his personal desire to play God that causes him to choose such an apocalyptic means to re-configure the world. This massive destruction, akin to the Biblical flood, is targeted specifically towards the genetically same human race that must be punished for their exploitative greed. Crake combines the violent with the religious when he unleashes a bio-weapon on an apocalyptic, pandemic scale while escaping any moral culpability. The genetic sameness of the human race allows for Crake to plan the perfect act of global terrorism by selectively targeting the infrastructure of the human body. In doing so, Crake also overturns the global hierarchies of the dominance of the human being by effectively eliminating the need for the human in the spectrum of species interaction. He wishes to eliminate the human

over animal/nature hierarchy in his visualisation of eco-utopia. His environmental concerns do not take into consideration the sufferings of the weak and the vulnerable, such as the impoverished upon whom he conducts his clinical trials. Due to his inability to empathise, Crake views his human lab-subjects as collateral damage in his grand plan to re-configure the world. The genetic sameness of the human race around which he constructs his bio-weapon allows him to create the narrative of the singular, dominant, powerful human race, and due to this, he ignores injustices within the human species. Crake's dark idealism causes him to become a terrorist, bringing to extreme fruition the radical green agenda of MaddAddam by completely destroying the singular and same biological infrastructure responsible for the creation of dystopia.

It is apparent that Crake sees himself as the chosen one responsible to act for the greater good of humankind. In *The Year of the Flood*, Ren recalls of Glenn, "Once he asked me if I thought God was a cluster of neurons, and if so, whether people having that cluster had been passed down by natural selection because it conferred a competitive edge. . ." (2013b, p. 271). In the post-apocalyptic world after the genocide, Snowman recalls of Crake, "God is a cluster of neurons, he'd maintained." (2013a, p. 186). Dunlap (2013) comments that Crake's vision of utopia is ecotopian in that it "seeks to produce social happiness by restraining human desire" (p. 3). He accomplishes this through the creation of his peaceful Crakers, which ironically necessitates the death of the human race. Crake's genocide is his version of the greater good, mimicking through both genocide and his own martyrdom how the Corporation murdered his father for exposing HethWyzer's unethical practices. "Executed," said Crake, "That's what they'd have called it. They'd have said he was about to destroy an elegant concept. They'd have said they were acting for the general good." (2013a, p. 249). Here it is made apparent that Crake's political motivations are combined with a desire for revenge against the organisation that murdered his father, inadvertently killed his mother and left him an orphan. Disgusted with humanity and the crimes committed in the name of the greater good, he embodies the argument of the greater good to the extreme in order to completely destroy evil. His childhood video games had taught him that, when it comes to the human race, violence is the most powerful arbitrator of peace. In a premonitory conversation, he tells Jimmy, "So far they (MaddAddam) haven't done any people numbers, but it's obvious they could" (2013a, p. 254). Crake, of course, would not label himself a terrorist despite the nature of his actions due to his logic of 'the greater good' and 'the end justifies the

means'. His crooked idealisms of altruism and fatalism come together in the scene of his suicide, where he redeems himself of his violent deeds.

Extinctathon: An 'Eco-terrorist' Network'?

The term 'eco-terrorism' continues to remain undefined among scholars due to the problematic nature of the definitions of terrorism. The Federal Bureau of Investigation, however, defines eco-terrorism as "as the use or threatened use of violence of a criminal nature against innocent victims or property by an environmentally-oriented, sub-national group for environmental-political reasons, or aimed at an audience beyond the target, often of a symbolic nature" (Jarboe, 2002). The label "terrorism" immediately posits that such movements are definite threats to the health and safety of the nation and there have been criticisms of the usage of the terms "domestic/economic/eco terrorism" to stigmatise those who oppose or criticise the government and corporate interest. An example of this is what happened in 2017 when Elizabeth LaPensée released her video game called *Thunderbird*. LaPensée created the game which allows players to destroy pipelines and machinery or to bring animals and humans back to life as a protest against pipeline construction on indigenous land on Turtle Island. The game was greatly criticised by Energy Builders, a pipeline advocacy group and an investigation were called into its funding on the allegation that the game was designed to encourage eco-terrorism. The issue was dropped, and the game continues to be available on Microsoft Windows, Android and iOS, but the reaction towards it draws attention to the use of such labels, especially by those who have the power to make definitions.

Raphael da Silva (2019) uses Rapport's Wave Theory of modern terrorism[1] to examine the possible phenomena of an "Eco-terrorist Wave". He points to such a phenomenon existing through the 1970' s to the late 2010' s, characterised by tactics such as engaging in illegal acts of sabotage such as tree spiking and fence cutting and later guerrilla tactics "to advance animal rights and environmental protection" (p. 7). He notices that the most preferred eco-terrorist tactic was the "Facility/Infrastructure Attack", which meant the damage of non-human targets such as buildings and pipelines. MaddAddam's targets are always the facilities, infrastructure or inventions that the Corporation owns, such as Happicuppa bean crops, ChickieNob installations, interstate highways and the like. *Extinctathon* also satisfies a majority of the parameters identified by researchers on how terrorists use the internet: data-mining, recruitment and mobilisation, networking, sharing information, planning and

coordination (Weimann, 2004, pp. 6-10). What is important to note is that Silva concluded that while the eco-terrorist phase started losing momentum from 2016 onwards, it could return more strongly given the current climate change crisis (p. 10). This resurgence of the powerful "eco-terrorist wave" occurs in the *MaddAddam* trilogy as scientific, technological advancements integrate with the green zeal for environmental protection to overthrow a capitalistic, Orwellian regime.

Crake tells Jimmy about MaddAddam, "I thought at first they were just another crazy Animal Liberation org. But there's more to it than that. I think they're after the machinery. They're after the whole system. They want to shut it down." (2013a, p. 254). Crake could be referring to the Animal Liberation Front and the Earth Liberation Front, which the Federal Bureau of Investigation has labelled as "serious terrorist threat(s)" that have "committed more than 600 criminal acts in the United States since 1996, resulting in damages in excess of 43 million dollars" (Jarboe, 2002). Atwood here straddles the uncomfortable frontier between activism and terrorism. In the initial phase of environmental activism, the various green-groups in the series used demonstrations as the preferred way of protesting the corporate regime. Such demonstrations were met with suppressive measure, forcing groups to resort to underground methods such as infiltrating facilities, leaking or destroying sensitive information. The violent global resistance movement against Happicuppa that was putting small coffee growers out of business is met with stronger reactive measures. Peasants around the world are massacred by the armies of a number of countries. The capitalist repression of environmental activism through state-sponsored terror gradually led to members of such reactive movements to go into hiding to avoid criminal penalties, which usually meant execution, as was the case with Jimmy's mother. One thing that the multiple underground organisations in the *MaddAddam* universe could agree on was that the exploitative treatment of the natural world by the capitalistic regime was a major cause of the prevailing dystopia. As the regime's policies towards eco-groups became more aggressive, so did the reactive measures that these groups employed. *Extinctathon*, MaddAddam's underground networking application, is one such measure created to avoid state scrutiny and eventually evolving into a network to help coordinate and organise attacks. The covert mission of *Extinctathon* easily allows state investigative agencies to label it and an eco-terrorist weapon due to its affiliations with the radical MaddAddam and the eco-cult God's Gardeners.

In her essay "George Orwell: Some Personal Connections", Atwood writes that in the aftermath of the 9/11 World Trade Centre attack in the year 2001, "it appears we face the prospect of two contradictory dystopias at once — open markets, closed minds — because state surveillance is back again with a vengeance" (2004, p. 337). The Corporation's control of the population can also be contextualised through the use of media technology. In *Oryx and Crake*, Jimmy is shown video footage of his mother's execution to ensure that they had killed the right woman. The sheer volume of information the CorpSeCoprs have on his missing mother points to a centrally organised force for data collection and communication. The violent crackdown upon God's Gardeners, which causes the surviving members who are not killed or captured to go into hiding, is portrayed as a necessary counter-terrorism measure for the greater good. Mainstream media is also weaponised to create a narrative of the good versus evil, state versus terrorists, in an attempt to blind the population from the actual terrors against people and the planet perpetrated by the governing authority. Politics is transferred to the realm of the hyper-real as mainstream media broadcasts a state-approved virtual reality. Using Rapport's Wave theory, Jeffrey Simon argues for a fifth wave of terrorism when the defining characteristic will be "the influential role of technology" (p. 48). His "Technological Wave" posits the Internet as a necessary precondition. This brings into the fold of terrorism studies the use of technology by government and military to conduct surveillance and carry out covert operations in state-sanctioned counter-terrorism activities (p. 52).

By pointing to how the functioning of the Corporation mandated the use of state-sponsored terror by the CorpsSeCorps and the curtailing of individual freedom, Atwood leads readers to question which of the two kinds of organisations in the trilogy are truly terrorist in nature. In Atwood's series, the corporate regime and its government allies label eco-groups as cults and the more aggressive ones as eco-terrorists to legitimise the use of surveillance and excessive force to protect their own capitalist concerns. In the trilogy, MaddAddam is immediately labelled an eco-terrorist organisation for its use of gene manipulation technology to destroy Corporation infrastructure; HelthWyzer makes its profits by embedding disease-causing bio-forms in its supplements, ensuring a never-ending supply of the ill to sell its medicines to. Both utilise bio-forms as weapons, yet the organisation that actively infects the human population is not held legally responsible or punished. This recalls Simon's wave theory of technology which differs from the ideology specific nature of Rapport's theory, and because there can be no monopoly over technology, his theory can be expanded to include both terrorist and counter-terrorist activities.

Conclusion: Acknowledging Global Fears and Questioning Global Solutions

Atwood investigates the enormous working capacity of social media as networking tools for covert communication and infiltration while looking into the psychology of recruiters and potential targets for indoctrination, focusing on the aspects of loneliness and social ostracism that could lead to one being easily seduced by anti-social elements. However, a surface perusal may not lead readers to categorise *Oryx and Crake* as a terrorism novel as the futuristic and dystopian elements tend to overshadow the realism of the trilogy. Once attention is paid towards the engagement with hyper-capitalism, underground resistance, political and environmental activism, genetic engineering, pharmaceutical corruption, anti-green government agenda and bio-weaponry, it becomes very clear that Atwood's futuristic vision is actually uncomfortably close to the present. P.J Smith predicts the development of the internet as a resource for information as well as technical instruction on the use and development of weapons, and as a pool of knowledge on how to successfully carry out chemical, biological, radiological or nuclear attacks (p. 51). Such experiments by terrorist organisations have already begun. On March 18, 1995, the AumShinrikyo launched a terrorist attack in the Tokyo subway system with sarin gas, causing a large number of deaths. The death count would have been higher had it not been for the ineffective delivery system of the gas. The group had allegedly attempted three unsuccessful biological attacks in Japan using anthrax and botulinum toxins. Members had also attempted to acquire the Ebola virus in Zaire during 1992 to use as a bio-weapon. (Riedel, 2004). The advancements in science and technology have allowed for the creation of various vectors and strains possessing terrible potentials that could leave nations unprepared and vulnerable to such diseases. Atwood's *Oryx and Crake* brings to life the human fears in the outbreak of the COVID-19 pandemic that bio-terrorism could become a reality, potentially threatening international peace and security.

Along with the acknowledgement of global fears, Atwood, in the nature of the critical dystopia, asserts the historical repetition of human atrocities as revealed in the game-play of *Blood and Roses, Barbarian Stomp* and *Extinctathon* and in the real-life enactment of human oppression, extreme surveillance, mass murders, dictatorship, executions etc., species extinction, and genocide. This knowledge of the repetition of atrocities also provides a contemporary context to how and why the utopianism of capitalism and human culture can be linked to social and environmental dystopia. This critical lens invites the reader to recognise

the dissolution of humanity's meta-narratives and the normalisation of systemic evils of the present. By disrupting the historicity of man's atrocities and acknowledging instead the repetitive enactment of violence upon man and animal in a multiplicity of modified and evolved forms as well as the failures of the utopian capitalist, consumerist present, Atwood questions utopia's ability to actively engage in the reconstruction of the future through the remediation of the present. Crake's fatalistic idealism is revelatory of Atwood's fears of the potentials for destruction in unrestrained utopianism in the same way capitalism has created a contemporary world order of excessive materialism, human and environmental exploitation, multiple wars, unequal distribution of wealth and resources, global poverty, etc. that resembles dystopia instead.

This blurring of the boundaries of the binaries of dystopia and utopia, with each present in the other, is reflective of the actual ambiguity of human reality that creates dichotomies of nature/culture, man/environment, the physical/virtual etc. in the efforts to preserve meta-narratives which have been dismantled in a post-modern, post-structural hyper-capitalist setting. The efforts to ignore this dismantling are also reflective of the desire to maintain the anthropocentric notion of man as the centre of all things. What gets lost in the process is humanity's responsibility and action in its dystopic destruction. To reflect this and question the human conceptions of good and evil, Atwood chooses the themes of terrorism and the apocalypse to critique and brings to action this metaphor of destruction. Atwood thus questions everything contemporary reality takes for granted or accept as the norm. She achieves this, first of all, by reversing the conventional tale of the hero stopping the destructive force of evil and instead portraying humanity and its achievements as the ultimate evil. In the process, she questions our forms of entertainment, our inventions, our achievements, our perceptions of nature and culture, our commercial and medical practices, the obsession with consumerism, the concept of the anti-social, the biological and emotional factors that make up the human condition, etc. She brings these pertinent questions to the surface, all while stressing on the victimhood of the planet as it struggles to preserve itself in the growth of human civilisation. She questions the use of violence as the preferred means of resolving grievances, registering protests and disrupting the status quo on how to initiate change, as well as investigating how idealism and personal interests, altruism and ambition can coincide in the problem of the strange case of terrorism that aims to bring peace. She portrays the apocalyptic end of the world as a realistic culmination of the unlimited power of human potential and exceptionalism and correlates this with the unrestricted exploitation of

the weak and the earth, thus making man the creator of his own doom. Atwood thus warns readers to approach the concept of utopianism with caution as its ethical, political and environmental parameters are much too fragile to be handled as callously as Crake did.

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1. Rapport's Wave Theory, as expounded by David Rapport in "The Four Waves of Modern Terrorism" is a theoretical framework in the field of terrorist studies that organises global terrorism into historical 'waves' based upon political concerns, ideology and technological development.