THE POLITICS OF NOSTALGIA IN ATWOOD'S *ORYX AND CRAKE* AND BACIGALUPI'S *THE WINDUP GIRL*

MURAT KABAK

BOĞAZİÇİ UNIVERSITY

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Murat Kabak

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DECLARATION OF ORIGINALITY

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ABSTRACT

The Politics of Nostalgia in Atwood's *Oryx and Crake*

and Bacigalupi's *The Windup Girl*

This study explores the representation of nostalgia in two dystopian novels, the Canadian writer Margaret Atwood's *Oryx and Crake* (2003) and the American writer Paolo Bacigalupi's *The Windup Girl* (2009). While there are major works tracing the themes of longing for home and belonging in contemporary fiction, there is no current study adequately addressing the connection between dystopian novel and nostalgia. Therefore, this study fills a gap in the existing scholarship by virtue of its focus on the dystopian novel. Building on the contemporary interdisciplinary approaches on nostalgia and dystopian tradition, this M.A. thesis investigates the political implications of yearning for the past. Through examining our ways of relating to the past, *Oryx and Crake* and *The Windup Girl* question two arguments that are central to utopian fiction: a return to nature argument and scientific and technological utopianism. Both novels not only problematize these contradictory possibilities, but they also propose and contest a third alternative: the possibility of a future that brings together human and non-human. I argue that Atwood and Bacigalupi's novels are a meditation on utopian thought and a nuanced exploration of the experience of nostalgia.

ÖZET

Atwood'un *Antilop ve Flurya* ve Bacigalupi'nin *Kurma Kız* Romanlarında Nostaljinin Siyaseti

Bu çalışma, Kanadalı yazar Margaret Atwood'un *Antilop ve Flurya* (2003) ve Amerikalı yazar Paolo Bacigalupi'nin *Kurma Kız* (2009) romanlarında nostaljinin temsilini keşfetmeyi amaçlar. Edebiyat çalışmalarında, çağdaş romanda yuva hasreti ve aidiyet temalarının keşfine sıkça yer verilirken, distopya romanı ve nostalji arasındaki bağlantıyı yeterli düzeyde irdeleyen çalışma bulunmamaktadır. Bu nedenle, bu çalışma distopya romanına odaklanarak mevcut alandaki boşluğu doldurmayı amaçlamaktadır. Nostalji ve distopyacı gelenekteki disiplinlerarası çağdaş yaklaşımları temel alan bu yüksek lisans tezi, geçmişe duyulan özlemin siyasi imalarını araştırır. *Antilop ve Flurya* ve *Kurma Kız*, geçmişle kurduğumuz ilişkiyi inceleyerek, ütopya kurgusunun merkezindeki iki karşıt görüşü sorgular: doğaya dönüş argümanı ve bilimsel ve teknolojik ütopyacılık. İki roman da, yalnızca bu karşıt görüşleri sorunsallaştırmakla kalmayıp, üçüncü bir seçenek olarak insan ve insan dışını bir araya getiren bir gelecek olasılığını tartışırlar. Atwood ve Bacigalupi'nin romanlarının, ütopyacı düşünce üzerine bir tefekkür ve nostalji deneyiminin incelikli bir keşfi olduğunu ileri sürmekteyim.

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To my dear sister Şeyma,

La fille qui a attendu (pour moi de finir ma thèse)

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CHAPTER 1

INTRODUCTION

In the present study, I examine the representation of nostalgia in two contemporary dystopian novels, the Canadian writer Margaret Atwood's *Oryx and Crake* (2003) and the American writer Paolo Bacigalupi's *The Windup Girl* (2009). As a result of global-scale social and ecological collapse in both post-apocalyptic novels, there is nostalgia for a time before the catastrophe and the desire to reconstruct the world in its untainted state to achieve a utopia. These novels have two main questions at their core. First, does nostalgia have an emancipatory or transformative potential to help us actualizing a utopia? Second, can we imagine an ideal state beyond our human-centered understanding? I am interested in exploring the implications of these questions by looking at three types of connections in Atwood's *Oryx and Crake* and Bacigalupi's *The Windup Girl*: nostalgia as a means to analyze the connection between past, present, and future; the connection between utopian thought and nostalgia; and intertextuality as a tool to explore the connection between different texts. Through exploring these connections, I will discuss these two post-apocalyptic texts to understand what likely future scenarios these novels offer in the face of our contemporary political and ecological crises.

The main inspiration behind this thesis is a question raised from a lifelong dedication of reading science-fiction and speculative fiction from the early twentieth century to present, in both utopian and dystopian forms: how a genre that is associated with overtly future-oriented settings, themes, and motifs can also carry nostalgic overtones at the same time? Underneath the futuristic, technology-oriented façade of science-fiction, for instance, yearning for a lost time and space appears as a

recurring motif from the fantasies of altering the course of history by changing the past to revisiting some golden age through time machines, wormholes or dream vision. The allure of the past, as well as the present, seems to provide more comfort and safety than the uncertainty of the future. This is precisely why Judith Berman argues that most science fiction stories are "full of nostalgia, regret, fear of aging and death, fear of future in general" (as cited in Hollinger, 2006, p. 466). Nostalgia, in that sense, is a reaction against our fear of mortality because it provides us with a sense of historical continuity. As opposed to the uncertainty of the future, the past provides us a sense of comfort, safety, and belonging.

I aim to address the crossroads where utopian writing and nostalgia meet to put the subject's present into question. I argue that a certain branch of utopian fiction is nostalgic for a romanticized past because the works that imagine an ideal state and the wistful yearning for the past share the same spatial and temporal aspects. Utopian thought expresses the possibility of a state that is superior to the utopian projector's existing reality. This possibility relies on a reconfiguration of both temporal and spatial dimensions since a utopia is built upon the fantasies of a better future (the temporal dimension) and the restoration of lost home (the spatial dimension). Thus, through a comprehensive reworking of social, cultural, political, and economic aspects of life, in the narratives of utopias, there is an attempt to recreate life in simple and mundane terms. In other words, literary or philosophical utopias aim to transform the present to achieve a better future. The study of nostalgia coincides with the temporal and spatial aspects of utopian fiction. "Nostalgia itself has a utopian dimension," Svetlana Boym (2001) writes in *The Future of Nostalgia*, "only it is no longer directed toward the future" (p. xiv) and later adds that "[a]t first glance, nostalgia is a longing for a place, but actually it is a yearning for a different *time* –

the time of our childhood, the slower rhythm of our dreams" (p. xv). Nostalgia is projected towards a past that is known to be irretrievable, yet it is sought anyway. Acknowledging that not all works in utopian tradition fit into this description, the structuring logic connecting utopian fiction and nostalgia is their spatial and temporal aspects. In both utopian writing and nostalgia, there is a discontent with the present time and space and the will to transform it. Concerning this discontent with time and space, in the following sections, I will first discuss Atwood and Bacigalupi's nostalgia critique in relation to the concept of home. Second, I will discuss how these novels engage in a critique of utopian thought by making references to their literary antecedents in utopian tradition.

1.1 A critique of nostalgia

In *Oryx and Crake* and *The Windup Girl*, there is nostalgia for home which is often associated with a sense of belonging, and security. However, the novels problematize what home is by showing that this sense of belonging is accomplished by the exclusion of all differences. Within the boundaries of home, there is no distinction: there is only the promise of a uniform, homogeneous identity. In the same vein, nostalgia assumes a linear, progressive understanding of time. However, the novels challenge this modern view and propose a circular vision of history. This challenge also suggests that these novels also contest the Western concepts of progress and development, which are rooted in the Enlightenment thought.

In his doctoral dissertation, Johannes Hofer coined the term nostalgia from the combination of the Greek words *nostos*, homecoming, and *algos*, signifying pain or sorrow, the term nostalgia was originally used to designate "the sad mood originating from the desire for the return to one's native land" (1934, p. 381). From

its inception in the seventeenth century to present, nostalgia moved from a mood disorder to a sentimental reaction. Svetlana Boym (2001) suggests that with the advancements in understanding human physiology, "the impossible task of exploring nostalgia passed from doctors to poets and philosophers … Nostalgia is treated in a new genre, not as a tale of putative convalescence but as a romance with the past" (p. 11). In other words, nostalgia moved from the domain of pathology to a wistful longing for the past. In "Imperial Nostalgia", Renato Rosaldo (1989) points out this changing definition of nostalgia and this yearning for a different time is neither natural and pan-human nor is innocent and pure (p. 109). Instead, it is always ideological. My aim is to discuss the political implications of nostalgia in *Oryx and Crake* and *The Windup Girl*.

Even though distanced from its original meaning in the seventeenth century, nostalgia still has an etymological connection to home. In *Oryx and Crake* and *The Windup Girl*, home represents a memory or a fantasy, an imagined space signifying belonging, security, and wholeness. In other words, home is not "merely a physical structure or a geographical location but … an emotional space" (Rubenstein, 2001, p. 1). However, both novels expose that home is "an illusion of coherence and safety based on the exclusion of specific histories of oppression and resistance" (Martin & Mohanty, 1986, p. 196). In *Oryx and Crake*, the interrogation of the meaning of home exposes the incongruities and paradoxes of the seemingly perfect society in the novel, under its peaceful façade of corporate suburbs, there lie unethical bioengineering practices and a society under surveillance and coercion. *The Windup Girl* does not only expose the instability of home but also illustrates how the longing for a homogenous homeland perpetuates ethnic cleansing and racially motivated

violence in the name of achieving a home that is believed to be free from external influence.

Nostalgia for a distant past assumes a linear, progressive understanding of history. As Keith Jenkins (2004) succinctly puts, history is "an inter-textual, linguistic creation" (p. 9) brought back by the efforts of the historians from the main object of their inquiry, past. History, as a discourse about past, is "epistemologically, methodologically, ideologically and practically positioned" (Jenkins, 2004, p. 31), and there is no objective way of reaching to the past. However, this contemporary view contrasts especially the nineteenth-century romantic historicist framework. The nineteenth-century historiography presents an interesting case for our ways of relating to the past. The most profound change in the history of Western thought occurred, according to Franklin Rudolf Ankersmit (2001), after the dual revolutions of the late eighteenth- and early nineteenth-century (p. 301). Due to the French Revolution and the British Industrial Revolution, this period was marked by "feelings of a profound and irreparable loss, of cultural despair and of hopeless disorientation" (Ankersmit, 2001, p. 302). Romanticizing this irrevocably lost way of life created its by-product, nostalgia. In that sense, nostalgia is distinctly European and believes in a linear, progressive understanding of time.

As opposed to this linear view on history, the novels advocate for a non-linear view which is best exemplified in the criticism of modernity. Timothy Mitchell (2000) criticizes "the narrative of modernization" which perceives history as a linear process which is "singular [and] moving from one stage of development to another" (p. 8). In such an account, there is not a possibility of multiple or non-linear histories: it renders the West as the center of modernity and progress at which the non-West aspires to reach. However, even modernity is not the product of the West "but of its

interaction with the non-West" (Mitchell, 2000, p. 3). Hence, we cannot talk about a linear and singular vision of Eurocentric history. James Ferguson (2005) also advocates for "plurality, fragmentation, and contingency" of history as opposed to an understanding of history as "a teleological unfolding or a gradual rise through a hierarchical progression" (p. 176), because such a view assumes a finality of historical progression or a goal to achieve, which establishes Europe as the norm. As opposed to the modernist view which assumes the West as its center, this non-linear view has competing centers, and there is no causal or linear but complex and multidirectional relationship. Walter Benjamin also rejects the idea of history moving progressively forward. In "Theses on the Philosophy of History", Benjamin perceives history not as "a chain of events" which assumes a cause and effect relationship but as "one single catastrophe which keeps piling wreckage upon wreckage" (1955/1969, p. 257). At the center of Benjamin's criticism was the German socialist party who failed to recognize the rise of Nazism in Germany, as they perceived the historical condition as a process of constant progress, moving forward despite the regressive reactions. Benjamin does not only repudiate the notion of linear time but also formulates a non-developmental history due to these catastrophes.

Although Atwood and Bacigalupi refer back to the eighteenth- and nineteenth-century texts to draw attention to the recurring problems in history, *Oryx and Crake* subscribes to a linear vision of history and the belief in the stability of identity, whereas *The Windup Girl* advocates the co-existence of human and non-human identities. Despite its non-linear narrative technique, Atwood's text follows the traditional *Bildungsroman* structure which is embedded in the belief in development and progress. The formation novel, a popular genre in the eighteenth

and nineteenth centuries, advocates for a linear understanding of personal history where the protagonist's integration into society's norms and belief system is mediated through individual progress. The classical *Bildungsroman* ends with a sense of enclosure where the protagonist's education leads to maturity and acceptance of their place in the larger community of belonging. The belief in development and progress is ingrained in a unified, stable, homogeneous identity, because in the *Bildungsroman*, the protagonist's radical difference is rendered into acceptance. Only when "the youth is subordinated to the idea of 'maturity'" (Moretti, 1987, p. 8) and they yield to society's demands they become a part of the community. In *Oryx and Crake*, this search for belonging in a community is satirized in Snowman's search for a unified identity through representing the character's inability to integrate into society. However, in Atwood's narrative, a homogeneously masculine, Eurocentric worldview is still at the center through references to William Shakespeare, Daniel Defoe, and Jonathan Swift. There is no room for a multiplicity of competing voices or histories in the novel. It is caught up in the same distinctly European understanding of linear, progressive understanding of history which it seeks to criticize. *The Windup Girl*, on the other hand, contests this linear, homogeneous, Eurocentric model. Bacigalupi's text does not only rely on the canonical Western texts but also employs allusions and cultural references to Eastern religions and myths in support of its heterogeneous and non-linear vision. The references to one of the foundational tenets of Buddhism, the Circle of Life, or the cyclic existence, inform Bacigalupi's environmental vision. Because in the Buddhist tradition, the human ascendancy over non-human beings does not exist. Rather, the cycle is understood as a peaceful and equal co-existence. Here lies the main difference between the Western and the Eastern understandings of history which

influence these novels: in Western concepts, as being criticized in Mitchell and Ferguson, historical change depends on a linear progression, whereas as illustrated in the Buddhist circle of life, it depends on the balance between human and nature.

In both novels, nostalgia is the search for a center. This ideological center is the belief in a homogeneous identity and a model of linear progression. This center promises to mend the loss of sense of belonging, security, and wholeness. Born out of a sense of profound loss, nostalgia is the sentiment that dictates a linear model of time that promises progress, reconciliation, and enclosure. This model does not allow the presence of competing and clashing voices and centers, as it is distinctly Eurocentric. Through problematizing the meaning of home as a fantasy that provides the subject with the loss of sense of belonging, Atwood and Bacigalupi's novels questions nostalgia. In *Oryx and Crake*, the linear form and the Western-oriented textual references are in a clash, and the novel yearns for a homogeneous, unified identity. Whereas in *The Windup Girl*, the dialogue of the Western and Eastern texts is in support of the novel's environmentalist and multicultural agenda. This agenda that promotes diversity and multiplicity is, in fact, proposed to question two ideas that are central to utopian thought.

1.2 A critique of utopian thought

Atwood's *Oryx and Crake* and Bacigalupi's *The Windup Girl* deconstruct two contradictory strains in utopian thought: return to nature argument against scientific and technological utopianism. Utopian fiction consists of a body of works that propose elaborate solutions to social, economic, political, educational, religious, and environmental problems. While not all utopian and dystopian works can be identified within this framework, I am interested in exploring the relationship between two

opposing poles in utopian tradition: the ideal state as the recreation of the idyllic, pastoral simplicity with an emphasis on abundance and plenitude, against the idea that the ideal state can be achieved through attaining an urban, mechanized, technological perfection. These contradictory strains in utopian thought are best exemplified in Edward Bellamy's *Looking Backward, 2000 - 1887* (1888), and William Morris' *News from Nowhere* (1890) that was written as a response to Bellamy's utopia. While Bellamy advocates for an "industrial evolution" (1888/2007, p. 29) that would transform the society, Morris' socialist utopia is nostalgic for a pre-industrial age. Return to nature argument expresses resentment towards the complexities of civilization and calls for an attempt at going back to a simpler and idyllic "natural" order to achieve utopia. In this view, an escape from the refinements of society to a primitive simplicity and pre-industrial existence is advocated. Whereas technological utopianism offers a reconfiguration of our contemporary society through advanced technology. By deconstructing these two contradictory strains in utopian thought, *Oryx and Crake* and *The Windup Girl* offer a third solution and test the limits of this possibility: the posthuman or human-non-human hybrid future. The human-animal or human-machine hybrid future does not only reject the ontological difference between human and non-human but also negates the basic assumptions of the two utopian arguments. In their visit to these arguments, both novels employ intertextual references to the eighteenth- and nineteenth-century texts.

Oryx and Crake and *The Windup Girl*'s intertextual references can be read in two contrasting ways. Fredric Jameson (1991) argues that parody has been replaced by pastiche in postmodern texts. Although pastiche resembles parody's "idiosyncratic style … it is a neutral practice of such mimicry, without any of

parody's ulterior motives, amputated of the satiric impulse, devoid of laughter" (p. 17). For Jameson, as "a neutral practice", pastiche imitates without any political purpose. It lacks "parody's ulterior motives", in other words, its pedagogical function of transforming societies, institutions, or individuals by exposing their follies and hypocrisies. Where Jameson perceives a critique that is devoid of politics, Linda Hutcheon (2002) sees a political potential in postmodern parody whose "initial concern is to de-naturalize some of the dominant features of our way of life; to point out that those entities that we unthinkingly experience as 'natural' … are in fact 'cultural'; made by us, not given to us" (p. 2). As opposed to Jameson's derogatory use of pastiche, Hutcheon maintains that postmodern parody can deconstruct what we perceive as natural or given. Therefore, throughout this study, these novels are not treated as "the random cannibalization of all the styles of the past [and] the play of random stylistic allusions" (Jameson, 1991, p. 18) but as texts that invite their readers to consider different nostalgic recollections and utopian possibilities, from the return to nature to ultimate belief in science, in the context of their present reality. Borrowing from these concerns to achieve the ideal state, Atwood and Bacigalupi's texts problematize our human-centered understanding through intertextual references and reflect on the twenty-first-century scientific developments through ironic revisits to the ambivalent views on technology in the nineteenth century. The intertextual references in the novels enable "a critical revisiting [and] an ironic dialogue with the past" (Hutcheon, 1988, p. 4). Atwood and Bacigalupi's novels have echoes of two contradictory impulses which appear as a leitmotiv in literary and philosophical schemes of perfect societies. The first one is the return to nature argument in the form of a romanticization of a pre-historic and pre-civilization existence to re-establish human's peace with nature to achieve utopia. The second one is the sense of

absolute confidence in science and technology in solving all our problems, and its ideological opposite as a form of technophobia.

Although the idea that a state of natural simplicity is superior to civilization originated in Hesiod's *Works and Days*, the return to nature argument keeps resurfacing over millennia in the history of Western thought. The early utopias have an emphasis on "simplicity, security, immortality or an easy death, unity among the people; unity between the people and God or the gods, abundance without labor, and no enmity between human beings and the other animals" (Claeys & Sargent, 1999, p. 2). Dwelling the earth long before Hesiod's contemporary "Iron Age", the members of the golden age co-existed with their nature. The promise of not only the improvement of the human condition but a perfection of it is also present in the Romantic idea of escaping from civilization. In 1794, Samuel Taylor Coleridge and Robert Southey devised a utopian scheme called "pantisocracy" as a solution to their disillusionment with the revolution turning into the Reign of Terror in France, and their resentment towards the rapid industrialization in Britain. Although their plan to establish an agrarian community in North America with an emphasis on a simple lifestyle failed due to the conflict between the two young poets, the idea of pantisocracy survived in the poems of Southey and many succeeding Romantic figures. In the first *Botany Bay Eclogue* (1837) Southey's speaker, Elinor, finds peace in nature:

> Welcome, wilderness,
> Nature's domain! for here, as yet unknown
> The comforts and the crimes of polish'd life,
> Nature benignly gives to all enough (p. 73)

She has been deported to the Botany Bay penal colony; ironically, however, Elinor finds her freedom and a chance to begin anew in the wilderness. Nature serves as a remedy to the ills of civilized society. In its adoration of nature, this romantic escape

from the Industrial Revolution, as well as the failures of the French Revolution, however, assumes a fundamental difference between nature and culture. From this perspective, "polish'd life" is responsible for human suffering but going back to a pastoral, natural state of existence is possible, and it can mend human's fall from the golden age. This assumption is revisited in Atwood and Bacigalupi's novels.

The Windup Girl exposes that yearning for a golden age is far from being innocent but is always ideological. Confronted by environmental disaster and economic crisis in Thailand, one of the characters in *The Windup Girl* blames the refugees, and the Western imperialist states: "She wonders if it was really better in the past, if there really was a golden age fueled by petroleum and technology. A time when every solution to a problem didn't engender another" (Bacigalupi, 2009/2012, p. 211). In Bacigalupi's text, however, this golden era is not romanticized. Rather, it shows that the past as a golden age is an ideological construction because there is a veiled assumption that Thailand was originally a homogeneous nation in this type of nostalgia for a time before the interference of what is perceived as an external threat. However, this belief does not only dismiss the cultural complexity of present Thailand and constructs a nostalgic fantasy of a homogeneous past. It also disregards the effects of the perceived golden age of "petroleum and technology" in the current predicament of environmental destruction.

The yearning for a return to a state of natural purity also resurfaces with the discovery of the New World. In the colonial discourse of the sixteenth century, where we observe the rise of literary utopias with the publication of Thomas More's *Utopia* (1516), there appears an interesting superimposition of the images of "cannibal" or "savage" with the idealized existence which was drawn from Greco-Roman mythology. In his essay, "On Cannibals", describing the Brazilian natives in

both condescending and admiring tone, Michel de Montaigne talks about how close he thinks those nations are to "original simplicity": "[T]hey have received very little moulding from the human intelligence, and are still very close to their original simplicity. They are still governed by natural laws and very little corrupted by our own" (1958/1993, p. 108). Montaigne is left in awe before the peaceful existence of these 'noble savages' who have "little artificiality and human organization" (1958/1993, p. 109), because the organization of life from the most minute detail is a characteristic of Plato's *Republic*, More's *Utopia* and many of the subsequent literary utopias. However, this fascination with the natives of the new world is more than "the discontent of the civilized with civilization" (Lovejoy & Boas, 1973, p. 7), and has ideological implications. The European colonial perspective situates the natives as Europe's pre-historic past and ignores the cultural complexity of their civilization. The cultural primitivism of Montaigne assumes a linear history progressing from the golden age to Plato and to the rebirth of antiquity in his age. Hence, while seemingly presenting a simpler, less complex, and happier existence in Europe's other, underneath, it reasserts Europe's cultural dominance over the cannibals whose very little decorated minds, for Montaigne, are yet to catch up the civilized West. Playing on the figure of the noble savage, *Oryx and Crake* problematizes the colonial discourse through a parody of the European mission to civilize in Snowman's education of the hybrid beings in the novel.

Another shared thematic concern to Atwood and Bacigalupi's novels is the ambivalence of scientific and technological advancement which was central to nineteenth-century utopianism. The belief in science and technology's potential to solve all social, political, and economic problems carries the basic assumptions of Enlightenment thought: the perfectibility of humans, the conquest of nature, ultimate

belief in science and reason. The German-born American utopianist, John Adolphus Etzler promises "creating a paradise" where everything "desirable for human life may be had for every man in superabundance, without labour; without pay; where the whole face of nature is changed into the most beautiful form" (1836, p. 1). While Etzler was a proponent of technology's ability to bring plenitude and equality to humankind maybe more than any of the utopian socialists, ironically, half a century later, his utopian project was put into practice by Henry Ford and Frederick W. Taylor, not to actualize a perfect state by setting the human free from labor but to promote the efficiency of mass production. As opposed to Etzler, Karl Marx and Friedrich Engels realized that technological developments that transform the means of production would not inevitably produce social change. The novels problematize technological utopianism because it relies on human ascendancy.

While *techne*, or craft, as the human's ability to act on the external world and to transform it for human purposes (Marx, 1971, p. 143), is at the center of the Marxist understanding of production, what Marx deems problematic in technological utopianism is based on "the application of machinery under capitalism" (Marx, 1982, p. 492). Describing the state of the factories with fully automated, or "self-acting" machines, Marx writes the following lines in the first volume of *Capital* (1982):

> Here have we, in place of the isolated machine, a mechanical monster whose body fills whole factories, and whose demonic power, at first hidden by the slow and measured motions of its gigantic members, finally bursts forth in the fast and feverish whirl of its countless working organs. (p. 503)

The use of corporeal imagery in the passage paints a grotesque image of a human-machine hybrid. Described as a mechanical beast with its excessive qualities ("gigantic members" and "countless organs") the machine replacing the human workers have a "demonic power". The proletarians do only become "an appendage of the machine" (Marx & Engels, 1888/2015, p. 12), but their absence is filled by

these grotesque figures. Marx's critique of the use of industrial machines as a substitute for the workers appears as early as *The Communist Manifesto*. Marx and Engels lament that with machines replacing humans, "the work of the proletarians has lost all individual character … and all charm for the workman" (1888/2015, p. 12). Marx's view on technology in both passages reflect a Romantic rejection of automation and the romanticization of manual labor, instead of Enlightenment praise of science and technology. While Marx and Engels accuse "the petty-bourgeois socialists" for being "reactionary and Utopian" (1888/2015, p. 39), as they aim to restore the feudal means of production as a solution to capitalism, the nostalgia for human labor over automated manufacture in aforementioned passages reveal Marx's technophobia. While the critique of the ultimate belief in science and technology is present in Atwood's novel, the technophobia, and the fear of losing one's body over machinery are central to Bacigalupi's text.

Through references to technological utopianism's potential to actualize an ideal society, *Oryx and Crake* and *The Windup Girl* test the viability of the hybrid future after the apocalypse. While *The Windup Girl* is jubilant, celebratory of the posthuman, *Oryx and Crake* adopts a more conservative stance toward hybridity. While Atwood's text is critical of the human-centered utopias, it also denies the viability of hybridity as another unfeasible solution. In *Oryx and Crake*, hybridity is the product of unchecked scientific experiments, and this type of hybridity is always artificial and depends on the fusion or grafting of different animal species and humans. In *The Windup Girl*, however, there is no distinction between what Atwood perceives as artificial and authentic. The novel offers a more diverse, pluralistic future in the form of unification of human and non-human.

In conclusion, as opposed to artfully balanced social structures and planned communities of Plato, More, and the succeeding utopian projectors, the yearning for a state of natural purity appears as a leitmotiv in the previously cited works in utopian imagination. Although this primitivism is substituted by the scientific method of transforming societies after the Industrial Revolution, both the return to nature and technophilic arguments are based on the recreation of an innocent existence akin to paradise. Nostalgia, in this respect, is the search for authenticity, security, and belonging in the mythical past. *Oryx and Crake* and *The Windup Girl*, however, seek to expose the dangers and pitfalls of yearning for authenticity and belonging in some romanticized past through intertextuality. Considering the filial bond between nostalgic yearning and utopian thought, the primary question these texts pose is: Can nostalgia have a redemptive or emancipatory potential? In other words, can the past provide answers to our present problems? Nostalgia, however, is not the stick to beat the characters who are unable to adapt in these novels. The wistful yearning for some lost object or time is not a problem but a major symptom of a larger cultural and social problem. Atwood and Bacigalupi's novels point out the problems with human-centered ideology concerning the modernist understanding of linear history. Once the sense of historical continuity is severed in these dystopias, yearning for a bygone time or place is but a morbid engagement with an idealized past. This type of attitude is neither able to reflect on the consequences of human's past actions nor able to build a better future. I argue that nostalgic yearning is at the core of both postmodern dystopias because even though it has ideological implications, nostalgia has a critical and transformative potential. When used as a tool to reflect on our actions in the past, and their implications in the present, it has a critical and transformative potential to change the future. Both novels question the

uses and abuses of nostalgia and its potential of actualizing an ideal state. I aim to analyze how these novels imagine humanity's future by looking at the recurring themes and techniques.

In critical literature, other than a book chapter by Lars Schmeink, there is no published work that discusses the two novels comparatively. In "The Anthropocene, the Posthuman, and the Animal", Schmeink (2016) discusses how human is transformed into inhuman in both novels due to the hypercapitalist consumer culture. In both fictional worlds, Schmeink maintains that Atwood and Bacigalupi move beyond the dichotomies of nature-culture, human-non-human, and propose a posthuman possibility (2016, p. 75). Although my conclusion is in line with that of Schmeink, the approach of the present study differs from other works in the scholarship in its consideration of the political and social implications of nostalgia and the extensive intertextual references in the novels in support of their argument.

The second chapter of this thesis focuses on Margaret Atwood's critique of human-centered thought in *Oryx and Crake*. Set in the near future North America, the chapters in the novel alternate between the corporate dystopia and the post-apocalyptic world where humanity has been annihilated except for the protagonist, Snowman. In the pre-pandemic setting of the novel, due to global climate change, large parts of the planet have become uninhabitable. The elite group of scientists and pharmaceutical workers live inside the class-segregated compounds while the rest of the population is under constant threat of crime, manufactured diseases, and environmental degeneration. The novel focuses on the catastrophic outcomes of climate change and out of control bioengineering. Atwood problematizes alternative solutions to these problems by focusing on the tension between two utopian projects: the elimination of all suffering and the perfection of human beings by discarding

their weaknesses through bioengineering, and the re-creation of the human through rewriting history. The intertextual references to Jonathan Swift's *Gulliver's Travels* (1729) draw attention to the human-centered vision in the processes of creation and the capitalization of non-human animals in modern scientific practices. Daniel Defoe's *Robinson Crusoe* (1719), on the other hand, is parodied in Snowman's recreation of the hybrid beings in the image of humans. By grounding her environmentalist argument in these texts, Atwood draws attention to the incongruities of the idea of human ascendancy which created these recurring problems from the eighteenth century to the novel's publication in 2003. Crake's yearning for a paradisiacal existence and Snowman's yearning for the lost humanity are used to criticize the search for a center that would govern the entire structure of human-centrism. However, I aim to illustrate that the novel shares Snowman's nostalgia for humanity.

The third chapter investigates the politics of imagining home as an emotional space representing different forms of stable identities in Paolo Bacigalupi's novel *The Windup Girl*. The novel is centered around the issues of environmental disaster and the blurring line between humans and machines. The agricultural corporations dominate the food market through genetically modified organisms while the rest of the world suffers from various manufactured plagues. The depletion of fossil fuel, global climate change, and rising sea levels devastate the earth, and the novel is set in one of the few cities left unharmed in the twenty-third century, Bangkok. The antagonism between the Trade Ministry and the Environment Ministry serves as a narrative frame that converges the fates of a diverse cast of characters from an American industrial agent to a Japanese android. The novel does not only problematize the conservative and nationalist views on home, nation, and belonging

through references to the myth of golden age but also deconstructs the stability of human identity through questioning of human-non-human hybridity with allusions to Mary Shelley's *Frankenstein* (1818) and Karel Čapek's. *R.U.R. (Rossum's Universal Robots)* (1921). Through the references to two texts that are concerned with the human's encounter with the non-human other, *The Windup Girl* exposes that human is an ontological category invented to legitimize its supremacy over all non-human beings. After discussing home as a fantasy corresponding to an authentic origin to which the characters yearn to go back, I aim to analyze how the novel advocates a future society with the co-existence of human and human-machine hybrid identities.

CHAPTER 2

NOSTALGIA FOR THE CENTER: REWINDING AND REWRITING HISTORY IN MARGARET ATWOOD'S *ORYX AND CRAKE*

This chapter analyzes the Canadian writer Margaret Atwood's novel *Oryx and Crake* (2003) as a critique of human-centered ideology as the main cause of environmental problems. Set in the near future in an unidentified part of the east coast of North America, the novel problematizes two projects that aim to perfect the human condition by juxtaposing utopian-dystopian elements with linear-non-linear narrative techniques, and by making references to the eighteenth-century texts. At its core, *Oryx and Crake* poses the questions: "*What if we continue down the road we're already on?* How slippery is the slope?" (Atwood, 2003, p. 383). This dangerous path, for Atwood, is the excessive human interference to ecology and its devastating effects. On the other hand, in the context of the novel's juxtaposition of various forms, the slippery slope points out the precarious and unstable nature of such categories as utopia and dystopia. In the novel, the dystopian scenario of wiping out the human race with a virus and replacing them with a genetically modified race, referred to as the Children or the Crakers, are embedded in the utopian plan of a scientist named Crake. In other words, the elaborated solutions to the social, economic, and environmental problems can easily evolve into nightmarish possibilities in Atwood's text. In the same vein, the non-linear narration dissolves into the linear form of traditional *Bildungsroman* in the novel to question how the selfhood is constructed. The narrator, Jimmy, who later assumes the name Snowman recounts his life from his earliest memory to the annihilation of humanity. The novel's narrative is composed of a series of time jumps between Jimmy's formative

experience before the pandemic and Snowman's present condition as the protector of the hybrid beings, the Children. Even his narrative is fragmented due to the inability to cope with the death of humanity, the linear form of recounting his life is an attempt at re-establishing and re-ordering his personal history, hence his identity. However, the dialogue, which has been established through references to Jonathan Swift's *Gulliver's Travels* (1729) and Daniel Defoe's *Robinson Crusoe* (1719), between the novel's publication date and the eighteenth century suggests a cyclical vision of history since the problems of both ages are the same, and they are the products of human-centered thought.

In *Oryx and Crake,* Atwood attacks the basic tenets of progressive and human-centered Western worldview in support of an environmentalist vision. Sociologists William Catton and Riley Dunlap (1980) point out that among the basic assumptions of the worldview dominated Europe and North America are the beliefs that humans "are fundamentally different from all other creatures on earth, over which they have dominion … [and] the history of humanity is one of progress; for every problem there is a solution, and thus progress never cease" (pp. 17-18). The idea that humans are the measure of all things has been deeply ingrained in our culture and consciousness from its roots in the Abrahamic religions to Enlightenment thought. The belief in progress, understood as the cultural and intellectual development of humans from their primitive, childish state to a collective of rational beings, originates in Enlightenment. Nature is at the disposal of the enlightened man to be transformed and dominated in the name of progress. This dominant human-centered vision which shaped our interaction with our environment, however, has been and continues to be harmful to the land and marine biodiversity, water sources,

and climate. Informed by this environmentalist vision, Atwood contests the viability of different projects which imagine a better future for humanity.

Oryx and Crake questions human-centered thought by focusing on the tension between two utopian plans. Crake, observing the problems of overpopulation and environmental degeneration, yearns for the simplicity of an idyllic existence. His utopian plan is based on the elimination of all suffering and the perfection of humans by discarding its weaknesses. Hence, a new life form which transcends the limits of the human will be suspended in time and will enjoy this Edenic existence. Snowman, on the other hand, yearns for the lost humanity. His utopian plan, then, is based on the re-creation of the human through rewriting the Children's history and assimilating them into the human-centered world. The problem with both their utopianism is their fixation with changing the past: rewinding the history of human civilization so that a form of human-animal hybrid beings, removed from human imperfections, can enjoy a pre-historic, pre-civilization existence or rewriting history so that the lost humankind can be revived in the form of these hybrid beings. Even though Atwood problematizes both utopian projects and their shortcomings by exposing their latent human-centered vision, as well as their complicity in the environmental disasters, the third utopian alternative, the human-non-human hybrid future, is not welcomed in *Oryx and Crake*.

The novel's critique of the nostalgia for a fixed origin is ambiguous because the novel is nostalgic for a homogeneous identity. In his seminal lecture, "Structure, Sign, and Play in the Discourse of the Human Sciences", Jacques Derrida argues that an "event" has enabled us to think about "the structurality of structure", meaning that each philosophical system in the Western philosophy has a fixed point which governs the entire structure: a center (1967/2001, p. 352). This event corresponds to

the influence of the linguistic theory of Ferdinand de Saussure, which shows that the idea of a center is itself a construction (Derrida, 1967/2001, p. 354). Thus, the center is bound to change constantly, as God, human, and reason acted as the philosophical and intellectual centers of Medieval, Renaissance, and Enlightenment thinking, respectively. On the other hand, when confronted with this impossibility of a center which holds a universal truth, there are two approaches according to Derrida, "the saddened, *negative*, nostalgic" attitude towards the lack of a center or "the joyous affirmation of the play" celebrating the de-centeredness (1967/2001, p. 369). While levelling a critique against science and technology's potential to achieve a perfect state and deconstructing the subjecthood, Atwood's critique falls into the former, nostalgic camp in her treatment of the alternative to both utopias. Instead of celebrating the centerlessness and hybridity, the novel is nostalgic for a unified, structured, and homogeneous identity.

The novel's adherence to the traditional *Bildungsroman* form reflects this paradoxical critique of a unified identity. The *Bildungsroman* believes that there is a linear progression in the protagonist's development leading into the protagonist's emotional and psychological maturity, and his/her conformity into society's norms and expectations. Franco Moretti (1987) defines the *Bildungsroman* as "the 'symbolic form' of modernity" (p. 5). "Youth", who is at the center of the formation or initiation process represents "modernity's essence, [who is] the sign of a world that seeks its meaning in the *future* rather than in the past" (Moretti, 1987, p. 5). In *Oryx and Crake*, however, the future cannot promise a better world, as the pharmaceutical compounds are under corporate and totalitarian control. Hence, the protagonists seek refuge in the romanticized visions of the past. However, as I have noted, this is not a commentary on the modern belief in the individual subject.

Rather, the individual is still at the center of Atwood's novel. While *Oryx and Crake* engages in a critique of nostalgia, it has a conservative view in the protagonists' failed initiation into the social norms. To Atwood, there is nothing pleasant in the novel's present. Without any parental guidance, the education, or the *Bildung*, of the children of the pre-plague world, Glenn and Jimmy, is in the supervision of violent video games on the Internet, and child pornography. The collapse of the family structure, the invasion of the entertainment industry, and cultural degeneration disrupt the protagonist's initiation process, as much as the environmental catastrophe (Barzilai, 2008, p. 88). In *Home-Countries*, Rosemary Marangoly George (1999) emphasizes the importance of identity formation in relation to one's experience of home (p. 26). Due to this imagined future's inability to provide the individual with a sense of belonging, a healthy identity formation is rendered impossible. In other words, in Atwood's dystopia, as the nucleus of the social fabric, the family, is disintegrating, the youth cannot seek meaning in the future, and thus their direction lies in the past. In the following three sections, first, I will be discussing the relationship between nostalgia for the center and the search for a perfect society. Second, Atwood's critique of technological utopianism will be analyzed with references to the Biblical flood and Jonathan Swift's *Gulliver's Travels* (1726). Third, the intertextual references to Daniel Defoe's *Robinson Crusoe* (1719) and the European colonial project will be discussed in the context of Snowman's search for the self.

2.1 Utopia, longing, and belonging

In *Oryx and Crake*, the individual's sense of belonging is at stake due to the dissolution of the social fabric and the environmental disaster that is happening so

rapidly and so thoroughly that no palpable relation can be found between the individual's past and present. Longing for a simpler and more stable time is the characters' reaction to mend this loss of sense of belonging. Set in the future, the novel's flashback scenes describe the life inside the enclaves owned by the pharmaceutical companies that dominate the world through bioengineered products. The novel's interrogation of the meaning of the home exposes the incongruities and paradoxes of this seemingly perfect society because, under its peaceful façade of corporate suburbs, there lies unethical bioengineering practices and a society under surveillance and coercion. The home in this gated utopia is but a compromised site that can only create an illusory sense of safety and belonging. Moreover, the connection between human beings and nature has been severed due to the environmental collapse, and nature cannot provide a safe refuge. Due to this loss of sense of belonging, both Glenn/Crake and Jimmy/Snowman long for a center, an origin to mend their loss. This nostalgia for the center dictates that with the recovery of what has been lost, the effects of the loss would be canceled out.

Oryx and Crake questions home as a physical space that creates an illusory sense of freedom and security via extreme surveillance. One of the corporations which creates genetically modified beings, the OrganInc Farms is where Jimmy's father works as a high profile "genographer" (Atwood, 2003, p. 22). The OrganInc also houses such talented scientists within its gated suburbs, called "Compounds", supposedly protecting them from the chaotic "pleeblands" (Atwood, 2003, p. 27) outside its walls. When Jimmy enquires why the compounds are so heavily protected, his father tries to communicate the situation first by describing the world outside the walls and then referring what remains inside:

> There was too much hardware around, said Jimmy's father. Too much hardware, too much software, too many hostile bioforms, too many weapons of every kind. And too much envy and fanaticism and bad faith.
>
> Long ago, in the days of knights and dragons, the kings and dukes had lived in castles, with high walls and drawbridges and slots on the ramparts so you could pour hot pitch on your enemies, said Jimmy's father, and the Compounds were the same idea. Castles were for keeping you and your buddies nice and safe inside, and for keeping everybody else outside. (Atwood, 2003, p. 28)

The too-muchness of technology, manufactured diseases, and extremism are kept away from threatening the secluded world inside the walls. Jimmy's father's emphasis on the intensification of everything, noting the repetition of "too much", shifts from external threats to medieval imagery. Such strong demarcations, "high walls … drawbridges and slots on the ramparts"; however, only justify extreme policing in the name of protecting the scientists inside the walls against the perceived siege. From its examples in the early modernity to the twentieth century, the utopian genre's fixation on protecting its boundaries by walls (Dusenbury, 2018, November 20) is satirized by Atwood in this passage. As Bülent Somay (2010) also observes in *The View from the Masthead*: "a utopia, when walled in, generates an excess … What remains inside is a series of rules, regulations, and arrangements" (p. 196). This excess, created to protect the scientist elite, ironically limits their movement inside the compounds.

Atwood further complicates what home is through looking at its inability to provide the individual with safety and unity. Snowman recalls when he was a child, the adults were yearning things about their lives before the ecological and cultural collapse: "*Remember when you could drive anywhere? Remember when everyone lived in the pleeblands? Remember when you could fly anywhere in the world, without fear? Remember hamburger chains, always real beef, remember hot-dog stands? … Remember when voting mattered?*" (Atwood, 2003, p. 63). The source of

their yearning in the first three questions are about mobility. The next two questions are about what Jovian Parry (2009) calls “nostalgia for meat”, or the romanticization of traditionally produced meat over the genetically modified organisms (p. 250), and the last question is about the lack of centralized government. The repetition of “remember” in the passage reveals the insistence of keeping the memory of the sense of control over one’s life and actions alive because these are questions that are posed rhetorically. It is not only Jimmy who does not feel at home in this enclosed utopia but also the scientists. The interlocutors who exchange these questions do not expect an answer to the inquiry of whether they remember a time when voting mattered. Rather, they express their discontent with the current authoritarian and oppressive pharma enclaves because what is being limited is the individual’s ability to perform certain actions. As an enclosed space limiting the freedom of its inhabitants, Crake and Snowman’s childhood home, as Eleonora Rao (2006) states, “is [already] a ‘compromised site’” (p. 108), unable to provide the sense of comfort and belonging.

The individual’s sense of self is disintegrating due to cultural and environmental collapse, and this loss is emphasized through flashback scenes in the novel. The first flashback opens with Snowman’s narration on his first intact memory:

> Once upon a time, Snowman wasn’t Snowman. Instead he was Jimmy. He’d been a good boy then.
> Jimmy’s earliest memory was of a huge bonfire. He must have been five, maybe six … [L]et’s say five and a half, thinks Snowman. That’s about right. (Atwood, 2003, p. 15)

While using the first-person point of view for the rest of the novel, the narrator Snowman recalls his earliest memory in the past tense, and in the third person point of view, which emphasizes the fragmentation of his sense of self. It is, as if, Snowman and Jimmy are completely different individuals, and the former is

observing scenes from the latter's remote memories. Snowman's disassociation of himself from the person he used to be is reflected not only through linguistic means ("Snowman wasn't Snowman. Instead he was Jimmy") but also stylistically. He interrupts his own recollections by commenting on them ("let's say five and a half"). The effort to revise his thoughts can also be read as an attempt at forming a consistent narrative of his identity. The use of the stock fairy tale opening phrase in his narration, "once upon a time", signals that this childhood is either vanished a long time ago or existed on an imaginary plane. The very first word of the chapter, "once" separates the narrative time from Snowman's existing reality after the plague. As his sense of self has been severed, Snowman is trying to re-establish a sense of normality through narrativizing his life and goes back to his childhood.

Despite its fairy tale-like associations, Snowman's memory of the bonfire contradicts a romanticized vision of childhood as an innocent, pre-historic existence. In the first flashback chapter, "Bonfire", the diseased animals are exterminated to prevent the spread of an infectious disease:

> The bonfire was an enormous pile of cows and sheep and pigs. Their legs stuck out stiff and straight; gasoline had been poured onto them … and a smell of charred flesh filled the air. It was like the barbecue in the backyard when his father cooked things but a stronger, and mixed with gas-station smell. (Atwood, 2003, pp. 15-16)

The sight of exterminated animals accompanied by the smell of their charred flesh is too gruesome a description for a child's earliest memory. In *Home Matters*, Roberta Rubenstein (2001) points out that memory is "an elusive, fluid, and often unreliable component of consciousness" (p. 14). This ambiguous and elusive aspect of memory is present in the following lines. Snowman's comparison of the bonfire to barbecue is suspicious, as the bonfire is presented as the earliest intact memory. For Jimmy to make this comparison ("a stronger … gas-station smell"), the happier, more

wholesome memory of a pastime activity on their backyard should happen before the extermination scene. This temporal shift in Snowman's narration implies that these two memories are combined retrospectively. Hence, the ecological collapse, shown in the contagious animals, distorts Snowman's memory. Jimmy's witnessing of the destruction of livestock at an early age shows the extent of ecological challenges, which invalidates an obsession with childhood as a harmonious coexistence with nature. The connection between human beings and nature is severed, as Snowman's earliest memory is stained by the horrifying images of the burning of the livestock. Typically associated with the times of merriment and celebration, the use of bonfire as the agent which cleanses the manufactured contagion also subverts the bonfire symbolism.

Due to the loss of sense of connection with nature, and the non-existence of home as a site providing safety and belonging, a romanticized past act as a refuge. While there is the acknowledgment of the non-existence of home, the pain of being separated from an origin, of the fall, is present. Hence, their nostalgia, or homesickness, provides the illusion that fixing the past would cancel out the fall. Fixing the past, in this context, is used in two complementary figurative senses: "To 'fix' something is to *secure* it more firmly in the imagination and also to *correct* – as in *revise* or *repair*- it (Rubenstein, 2001, p. 6). Perceiving history as their playground, as the title of one of their childhood video games suggests, "Barbarian Stomp (See If You Can Change History!)" (Atwood, 2003, p. 77), confronted with the cultural and environmental collapse, Crake and Snowman seek the solution in fixing the history of humankind and their personal narratives.

2.2 Rewinding history through science and technology

The themes of rewinding, resetting, and reversing the history of civilization to achieve a state that is analogous to the Edenic existence are central to the novel's critique of the scientific utopian ideal of Glenn/Crake. Crake denies the validity of the claims of progress for the sake of overzealous environmentalism. From his perspective, humanity's so-called progress has caused the destruction of nature. For Crake, due to "the ancient primate brain", the course of civilization runs through a thread of "idols and funerals, and grave goods, and the afterlife … [to] slavery and war" (Atwood, 2003, p. 361). Without positive or negative valence, the things Crake lists are all human activities which distinguish human from non-human animals: religious practice, war, slavery. However, Crake confuses human culture with what he perceives as human nature. Due to his insistence on understanding humans as a mechanical being, Crake's basic premise is that human beings cannot be rehabilitated. Hence, the only way to achieve an environmentalist utopia, for Crake, is to destroy humans, and create a genetically modified version of them by eliminating these destructive features so that these hybrid beings can replace humans. As Crake believes that these new hybrid beings will enjoy a paradise-like existence, he names this utopian plan "Paradice Project" (Atwood, 2003, p. 302). Yet, as the extermination of all human beings is required in the realization of this utopia, the alternative spelling of paradise, as "Paradice" in the novel, suggests that the name can also be read as a "pair of dice" thrown against humanity. The irony in Crake's environmentalist project is that it relies on scientific knowledge in rewinding history to go back to an idyllic state without science and progress. *Oryx and Crake* problematizes the use of scientific knowledge without any ethical or moral oversight

in attaining an ideal society by showing that it is not only totalitarian but also inherently human-centered.

Despite the claims of scientific objectivity and environmentalism, the novel exposes the human-centered origins of Crake's utopian project. As Crake is convinced that what he perceives as human nature is responsible for the environmental catastrophe, and it is the only obstacle in the path of his perfect society, he develops a method of genetic editing of human embryos to create an enhanced race based on specific pre-selected characteristics to repopulate the earth after he eradicates humanity:

> 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 illnesses. For instance, racism … had been eliminated … the Paradice people simply did not register skin colour. … [T]here was no territoriality: the king-of-the-castle hard-wiring that had plagued humanity had, in them, been unwired. (Atwood, 2003, p. 305)

This method of gene editing is inspired by the real-life technique used in biogenetic research called "gene splicing" which allows the researchers to edit certain parts of the genetic material of an organism so that certain characteristics or traits can be combined with other organisms. To understand Crake's concealed human-centric understanding, it is important to note his word choice describing human: destructive features, register, hardwiring, and unwiring. It is as if there is a mechanical aspect to human nature to process the external stimuli, and these mechanical parts are composed of permanently connected circuits. Hardwiring, a term from computer science, describes that a particular function of a device is physically built into the device, as opposed to programming. In other words, what Crake deems as the destructive parts belong to human's hardware, as opposed to software, that is cultural, social, and political elements that are outside. Crake aims to cure "the world's current illnesses" by undoing these features.

Crake's method of genetic elimination of certain human features is problematic for two reasons. First, this method presumes a core that defines human. By reversing Sartre's central claim in his existentialism, Crake goes back to the thesis that essence precedes existence, i.e., the human is inherently destructive, or in his terms, hardwired to be evil. The paradox of this thesis is that even though it wants to get rid of what is evil in human, Crake's project posits human in a special place among beings. The salvation of non-human nature depends on one human's *techne,* in other words, the devastating effects of human can only be reversed through ultimate belief in science and technology to isolate the evil. In this way, to rewind history to a pre-historic state is possible. Second, this method reveals the totalitarian aspect of Crake's nostalgia for a paradisiacal existence. As the hybrid beings are unable to tell the difference between good or bad, they are renditions of Adam and Eve's state before the Fall. Even though the attempt to redress all existing conflicts is well-intentioned, sacrificing the individual's right to choose between right and wrong for the greater good is imperative to the realization of Crake's utopia. The promise of a peaceful existence through genetic alteration can only be achieved by removing all differences. Hence, Crake's yearning for a paradisiacal existence where Adam and Eve had no choice between good and evil reflects the totalitarian side of his nostalgia: not only does he get to play god but he will enforce a homogeneous, unified vision of (post)human by removing the hybrid beings' ability to tell the difference between right and wrong.

Despite its scientific claims, this assumption of an evil human essence not only assumes a mechanistic understanding of human, but it is also rooted in the Judeo-Christian belief system. Nostalgic for human's pre-historic unity with nature, Crake can only actualize his utopia by exterminating the entire human race. Under

the guise of his scientism, he assumes the role of the Hebrew God who, after seeing the evil in human beings, is displeased with his creation: “the wickedness of man was great … so the LORD said, ‘I will destroy man whom I created from the face of the earth’” (Gen 6:5-7, The New King James Version). The Biblical flood is later quoted in the novel where Snowman depicts the time before the creation of the Children: “[S]o Crake took the chaos, and he poured it away … this is how Crake … cleared away the dirt, he cleared room…” (Atwood, 2003, p. 103). Snowman’s allegory is simple: Crake cleared human beings, who were the source of the chaos, and made space for the Children. Yet, the implications of this allegory’s connection to the Biblical flood are significant because this passage reveals Crake’s latent human-centered thought. Crake acts as the judge who condemns human beings to death but at the same time, not unlike the Hebrew God, who appoints Noah as the protector of all non-human animals, appoints a human protector for the Children, Snowman. The same religious story of human ascendancy is given a technological/scientific disguise in Crake’s utopian vision of the Children, who still need human protection, despite their genetic superiority over human beings.

Moreover, the novel problematizes Crake’s Paradice Project by revealing that the scientific methods without any philosophical or moral supervision are unable to provide a sustainable or a viable solution to environmental problems. During a key scene in the novel, Crake expresses that “as a species we’re in deep trouble” (Atwood, 2003, p. 295) because the problem of overpopulation leads to habitat loss, pollution, and famines. Crake’s solution is to develop a drug that would both enhance one’s sexual performance and prevent any sexually transmitted disease. In fact, what the drug actually performs is to sterilize the users without their knowledge. During

the clinical trial stage of the drug's development, Crake reports his observations to Jimmy:

> It was an elegant concept … though it still needed some tweaking … several [test subjects] had assaulted old ladies and household pets … Also, at first, the sexually transmitted disease protection mechanism had failed in a spectacular manner. One subject had grown a big genital wart over her epidermis … but they'd taken care of that … at least temporarily. In short, there had been errors, false directions taken, but they were getting very close to a solution. (Atwood, 2003, p. 295)

The solution that Crake believes that they are 'getting very close' is the prevention of human reproduction so that he can solve the problems of overpopulation and environmental degradation. However, Crake's mocking tone in this passage reveals a complete disregard for human life under the guise of his environmentalist, humane, or altruist scientific program. While describing the "errors" and "false directions" in the trials, he says that the drug needs some "tweaking," as if the test subjects who suffer from the side effects are mechanical objects. In the experiment, sexual intercourse is also reduced to a mechanical act without emotion or passion. It only seeks an object to satisfy its carnal desire, whether it is "old ladies" or "household pets". Moreover, Crake mentions that they have taken the epidermal eruptions of a test subject under control, only to add "at least temporarily" later in a nonchalant manner. Presuming that the end will justify the means, Crake thinks that to achieve the desirable outcome, the wrongdoings can be disregarded as false directions.

This detached scientific approach, however, is not the solution but a part of the problem. When Jimmy visits the Watson-Crick Institute where Crake receives his education, he is horrified by the unchecked scientific experiments. One of the scientists who is working on the production of ChickieNobs, a genetically modified strain of fast-growing and headless chickens, explains these chickens do not need any growth hormone as "the high growth rate's built in. You get chicken breasts in two

weeks … And the animal-welfare freaks won't be able to say a word, because this thing feels no pain" (Atwood, 2003, p. 203). The future corporate scientists believe that by removing their heads or their ability to feel pain, they can override ethical boundaries concerning animal cruelty. Reflecting on the implications of producing artificial life for the purposes of human needs, Jimmy feels that "some line has been crossed, some boundary transgressed" (Atwood, 2003, p. 206). What Jimmy describes as transgression has ethical implications in science and technology. In "The Animal That Therefore I am (More to Follow)", Derrida points out that scientific knowledge is used in the name of the well-being of humans. The non-human animals are transformed into commodities:

> by means of farming and regimentalization at a demographic level unknown in the past, by means of genetic experimentation … the production for consumption of animal meat, artificial insemination on a massive scale, more and more audacious manipulation (hormones, genetic crossbreeding, cloning, etc.) … in the service of a certain being and the putative human well-being of man. (2006/2008, p. 25)

This passage emphasizes the abuse of scientific knowledge in controlling and manipulating the bodies of non-human animals. The various methods of genetic experiments are conducted for the presumed welfare of human beings. In this short passage describing the production of the ChickieNobs, however, Atwood shows that such problematic inventions are not the consequence of overpopulation. The main issue, as Derrida also points out, is the intellectual hubris and the predatory mode of production that would allow the scientists and the pharmaceutical corporations capitalizing on the non-human life forms. Crake, on the other hand, is caught up in his tunnel vision and is unable to reflect on his complicity in the destruction of the environment. The same detached objectivity and indifference toward life can also be seen in the novel's intertextual references.

The intertextual references to the Part III of *Gulliver's Travels* (1726) draw parallels between the eighteenth-century scientific utopian thought and the detached scientific attitude in the novel. The ultimate reliance on scientific knowledge and technology only creates tunnel vision, which does not allow the utopian projectors, such as Crake in the novel, to see the social, environmental, ecological problems with their complex dimensions. In her book on science fiction, *In Other Worlds: SF and the Human Imagination* (2011), Atwood cites the influence of the Laputans in Jonathan Swift's *Gulliver's Travels* as a model to the scientific clique in the novel (p. 195). The Laputan scientists are so immersed in their research that they need servants who tap their eyes and ears "with a blown Bladder fastned like a Flail to the End of a short Stick" (Swift, 1726/2005, p. 146) so that they remember to see or hear. Crake's indifference to human life and the unnamed scientist's explanation of the ChickieNob production are, both in tone and content, are reminiscent of the experimental projects that Gulliver sees in his visit to "the grand Academy of Lagado" in Chapter 5 of Part III. From "extracting sun-beams out of cucumbers" (Swift, 1726/2005, p. 167) to turning ice into gunpowder (Swift, 1726/2005, p. 168), these experiments are meant to be satirical representations of not only the Royal Society but also of all sorts of planners of political, scientific, or social schemes, as the name of the researchers, "the projectors", suggests. Nonetheless, the most striking similarity that Crake's disinterested, scientific look shares with the projectors is where a doctor tries to solve stomach and bowel disorders with a pair of bellows. The physician's experiment with a dog consists of pumping and withdrawing air from the dog's anus with a bellow. As this experiment explodes the dog, Gulliver reports that "the Dog died on the Spot, and we left the Doctor endeavouring to recover him by the same Operation" (Swift, 1726/2005, p. 169). Crake's indifference

despite the failures “in a spectacular manner” is closely connected to the Enlightenment thought, which would put the ultimate faith in science and reason; and it also reflects Atwood’s skepticism towards scientific exploration without oversight. While Swift satirizes the scientific utopianism of his contemporary Britain, Atwood’s satirical tone and her depiction of Crake as a scientist without any moral codes show that Atwood warns her reader against the worst results of these unchecked researches. Even though they are presented as utopian solutions to the environmental problems, with complete irreverence for human and non-human life alike, these methods are the main cause of environmental degradation. Whether the test subjects are human or animal, the desired products in both *Gulliver’s Travels* and *Oryx and Crake* serve a human end.

Despite his tunnel vision, Crake is not represented as a mad scientist in the novel. While most critics praise Atwood’s detailed characterization of Jimmy/Snowman and the depiction of his anguish in an apocalyptic world, the same critics perceive Crake as a caricature of a one-dimensional scientist whose only function is to give Jimmy/Snowman character motivation. Oliver Morton argues that Crake is a mere a plot device to set the events in motion (2003, May 9), and Michiko Kakutani maintains that he is “a cardboardy creation” (2003, May 3). However, as I tried to illustrate, as Crake reflects the idiosyncrasies and paradoxes of Atwood’s dystopian society, he is the most complex character in the novel. While he argues that god is but a creation of human mind, or “*a cluster of neurons*” (Atwood, 2003, p. 157), he plays the role of god for the Children. He yearns for an idyllic existence but aims to achieve it with technology. He does not believe in progress but aims to perfect the human condition. As the product of the corporate dystopia, he represents everything that is paradoxical in the novel. Atwood imagines the logical conclusion

of our prevailing human-centered worldview and its devastating effects on the environment. Yet, the novel also warns against the dangers of relying upon advanced technology and science as the solutions to these problems. The precariousness of Crake's "Paradice" lies in its presupposition that there is a human essence, distinct from non-human animals, and it yearns for a time before this essence. From Crake's perspective, which has been influenced by a wistful yearning, there is a fixed point in human's past, and it is possible to go back to this point of origin. As a species, we have been separated from this imagined, pre-historic, and pre-cultural origin due to our "destructive features", which influenced our culture and civilization. However, the Paradice Project's reenactment of paradisiacal existence is unable to provide a solution to environmental problems because it is informed by the Judeo-Christian heritage, an inherently human-centered ideology. Through literary and Biblical allusions, Atwood exposes that the roots of technological utopianism lay deep in the human-centered thinking, and when inspired by a wistful yearning for the pre-cultural existence, these utopian solutions are neither desirable nor viable.

2.3 Trouble in 'Paradice': Snowman's search for the self

While the critique of human-centered thought was at the center of Atwood's questioning of Crake's utopian project, the European colonial project is under scrutiny through Snowman's plan to re-create human. After Crake annihilates all human beings except for Jimmy, he leaves him as the protector of the hybrid beings, the Children, or the Crakers. Critics such as Shuli Barzilai (2008) points out the ideological opposition between Crake and Snowman: Crake is presented in the novel as the world destroyer due to his annihilation of humanity, whereas Snowman is the world builder (p. 91) as he devises a creation myth for the Children. However, there

is no such stark black and white opposition between Crake and Snowman. If Crake is a nostalgic who clings into science and technology to restore what has been lost, Snowman represents the same aspect of nostalgia: the desire to revive the bygone past. In that sense, Atwood's representation of Snowman is not a photographic negative of Crake but as the embodiment of the failure of the ideals of self-realization, and domination of one's environment through invention. Acknowledging that with his death, as the last human, the human-centered world will be lost and forgotten forever. His utopian plan is based on the re-creation of the human through rewriting the Children's history and assimilating them into the human-centered world. Snowman's utopia can be read as an extended allegory for European colonial history through references to Daniel Defoe's *Robinson Crusoe* (1719). To understand how the novel problematizes Snowman's utopian project, first, I will discuss Snowman's liminal status in the post-pandemic world of the novel. Second, by making references to the myth of "Noble Savage" and Defoe's *Robinson Crusoe,* I aim to point out the Eurocentric vision of Snowman's project of creating his narcissistic image in the Children. Finally, by analyzing how Snowman assimilates the Children into the human-centered world through language, I will analyze his undoing of Crake's technological utopia.

The intertextual echoes of Defoe's *Robinson Crusoe* portray an antithesis of the Enlightenment idea of the thinking, intelligent subject. While Defoe's Crusoe is a self-educated, self-realizing subject, through flashback scenes to the pre-plague world of the novel, Atwood represents Snowman as a dissociated and troubled survivor of a global massacre. Defoe's novel belongs to the tradition of formation novel where the protagonist goes through spiritual and intellectual enlightenment by means of countless adversity. Thus, Crusoe is the representative of the ideals of a

self-educated, self-realizing male subject who overcomes his isolation through contemplation ("of his deliverance"), invention (of the tools to his survival) and domination (over nature). Contemplation and reflection are the keywords in understanding Defoe's protagonist, as John Locke (1690/2004) defines "person" as the "thinking intelligent being, that has reason and reflection, and consider itself as itself, the same thinking thing at different times and places" (p. 115) in the second book of his *An Essay Concerning Human Understanding*. Personal identity for Locke, then, is not only the consciousness of one's condition in the present but the reflection on it within a duration of time. Even though he is in isolation, Crusoe, as the perfect Lockean hero, can reflect on his past actions and thoughts. Whereas in *Oryx and Crake*, Snowman can neither exist in the present nor is he able to reflect on his past actions.

Atwood shows the illusory nature of nostalgia that fixing the past would cancel out the wistful feeling of fall through Snowman's liminal status as the inability to let go of the past or the ability to exist in the present. At the beginning of his journey with the Children, Jimmy forges himself a new identity, "the Abominable Snowman", and tries to forget his former self as well as all his connection to the past: "He needed to forget the past – the distant past, the immediate past, the past in any form. He needed to exist only in the present, without guilt, without expectation" (Atwood, 2003, pp. 348-349). While a hyphen is used to describe different forms of past, within a short sentence of 17-words, "past" is repeated four times, almost the quarter of the sentence. As the repetition emphasizes the recurrence of the past, Snowman cannot help but haunted by the recollections of his past. Trapped in a state which Victor Turner (1974/1987) calls "liminality", a state in which the subject is "neither here nor there, betwixt and between all fixed points of classification" (p.

232), Snowman cannot have a place in the Craker community, though he feels that he needs to exist only in the present. He is "[t]he Abominable Snowman" he reflects, "existing and not existing, flickering at the edges of blizzards, apelike man or manlike ape, stealthy, elusive" (Atwood, 2003, pp. 7-8). The name, Abominable Snowman, referring to the folkloric ape-like creature, the Yeti, is symbolic because it reflects Jimmy's post-plague condition as the last member of his species. He stands between a race of legendary beings, the human, and the ones who inherited the earth, the Crakers. As the legendary creature Yeti escapes from being photographed or captured, Snowman also does not feel real or tangible in this liminal state. With the recognition that home as a physical space has never existed, Snowman re-creates the lost human in the form of Crakers. Snowman's project to revive the image of lost human species in the Children is not simply a search for belonging but an attempt at restoring his sense of self. However, the novel problematizes this search by pointing its roots in European colonialism.

The novel presents Crake's nostalgic yearning for the golden age is not as innocent as it appears by revealing its connections to the images of "Noble Savage". In *The Myth of the Noble Savage*, Terry Jay Ellingson (2001) suggests that the idea that human had degenerated in their rise in culture and civilization, whereas the non-European other, or the so-called "Noble Savage", enjoyed the privilege of an Arcadian existence dates back to the Renaissance ethnographic discourse on the New World (p. 29). As the Italian humanist Peter Martyr reports in 1511: "[The Indians] seeme to lyue in the goulden worlde, without toyle, lyuinge in open gardens, not intrenched with dykes, dyuyded with hedges, or defended with waules. They deale trewely one with another, without lawes, without bookes, and without Iudges" (as cited in Ellingson, 2001, p. 25). The fact that the non-Christian and non-European

"savages" lived in harmony without the building blocks of civil society (laws, books, and judges, Martyr observes) posed a problem to the "civilized" European ethnographers. Underneath the fascination with their lives, however, we see that Martyr's description silences the Indians as children who are unable to communicate. It is, as if, the report on their dealings with one another imitates childish babbling through the alliteration of dental consonants (dikes, divided, defended, truly). Despite their existence is free from toil and suffering, they need a European interpreter to tell their story. Their projection as the civilized European subject's pre-civilization, infantile past provided the colonizer with the pretext to disseminate "progress" and "civilization" to the non-European other.

Snowman's description of the Children in "the Paradice dome" is identical to Martyr's account of the Indians, which suggests the Eurocentric aspect in his understanding of these hybrid beings. Checking on the Children "like a voyeur", Snowman observes that:

> [The Children] grazed, they slept, they sat for long hours doing what appeared to be nothing. The mothers nursed their babies, the young ones played. The men peed in a circle. One of the women came into her blue phase and the men performed their courtship dance … Then there was a quintuplet fertility fest, off among the shrubbery. (Atwood, 2003, p.339)

In concert with their environment, Children do not need any tools, shelter, or clothes. Like their predecessors in the colonial imagination, Crake's noble savages appear to exist in the Garden of Eden without the need for complex social structures to regulate their behavior and their exchanges with one another. The aspect which this description shares with Martyr's account is the lack of verbal communication. Although they bear human form, for Snowman, they resemble non-human animals. They do not feed on but "graze". They either sit without doing anything or play with one another in harmony. Even their reproduction is based on a non-verbal courtship

display of signals or performances, as opposed to human mating strategies. In "The Rani of Sirmur", Gayatri Chakravorty Spivak (1985) argues that "Europe had consolidated itself as sovereign subject by defining its colonies as 'Others,' even as it constituted them, for purposes of administration and the expansion of markers, into programmed near-images of that very sovereign self" (p. 247). In other words, the colonizer's vision of the non-European others served a consolidating function for the colonizer. In the imagination of the European ethnography, the image of an infantile and inferior counterpart of the Europeans constituted the rational, scientific European. The colonizer's narcissistic re-imagining of the non-European other is imitated by Snowman's vision of Children as non-human other. This perception does not only reinforce Snowman's superiority over the Children but also inspires him to recast them as human. This vision to re-create the Crakers mirrors Robinson Crusoe's "mission to civilize", and the connection of these two missions reveals Snowman's complicity in human-centered thought which brought humanity its end.

A comparison of the first scenes where Snowman meets the Children and Crusoe meets the unnamed captive reveals how Snowman assumes the role of Crusoe. In his first dialogue with the Children, Snowman boasts in his position as a superior being:

> He was beginning to find this conversation of interest, like a game … [The Children] were like blank pages, he could write whatever he wanted on them ... Snowman marvelled at his own facility: he was dancing gracefully around the truth, light-footed, light-fingered. (Atwood, 2003, pp. 349-350)

Answering their questions appears almost like a game to Snowman. Alluding Locke's concept, *tabula rasa,* Snowman realizes that he has the power to shape these beings through his game of language. What is more appealing to him, though, is his position as a prophet, as he is at the center of the Crakers' search for meaning. To Snowman, language is a dance that he can lead. Snowman's recreation of the

Crakers' identity echoes Crusoe's relationship with Friday. Recalling his first encounter with the cannibals on the island, Crusoe expresses that: "It came now very warmly upon my Thoughts … that now was my Time to get me a Servant, and perhaps a Companion, or Assistant; and that I was call'd plainly by Providence to save this poor Creature's Life" (Defoe, 1719/2007, p. 171). This unnamed "poor creature" has the potential to assume any role that Crusoe sees fit to him: a servant, a companion, or an assistant. As his original name is never revealed in the novel, Friday is also a white paper for Crusoe to write on: "I made him know his Name should be *Friday* … I likewise taught him to say *Master*, and then let him know, that was to be my Name" (Defoe, 1719/2007, p. 174). Although he was unsure initially on how to employ Friday, as soon as he teaches him to speak English, Crusoe transforms the native individual into the colonized subject. In the same vein, he assumes the subject position, master. In the light of Crusoe's mission to "civilize" the colonial subject by baptizing, thus, removing his original identity, Snowman's vision to shape the Crakers in the image of the human becomes more apparent. Recasting them as human beings does not only answer his search for belonging but also create a facsimile of himself.

To create an image of himself, Snowman distorts the harmony between the Children of Crake and their environment by introducing them into human-centrism. By deifying his love interest Oryx and his friend Crake, Snowman produces "the myth of Oryx and Crake". In his creation myth, Snowman differentiates the Crakers from the non-human animals:

> Crake made the bones of the Children of Crake out of the coral on the beach, and then he made their flesh out of a mango. But the Children of Oryx hatched out of an egg, a giant egg laid by Oryx herself. Actually she laid two eggs: one full of animals and birds and fish, and the other full of words … The Children of Crake had already been created by then, and they'd eaten up all the words because they were hungry, and so there were no words left over

> when the second egg hatched out. And this is why the animals can't talk. (Atwood, 2003, p. 96)

Crake expresses that he designed the Paradice people as vegetarians, and they can recycle their excrement thanks to the hybridization of their genes with other animals (Atwood, 2003, p. 305). Likewise, Snowman also observes that they respect other non-human animals, as they are in tune with their environment. However, in his creation myth, there is a hierarchy in the chain of beings. While the Children of Crake are "made" and "created", in other words, came into existence via supernatural means, the Children of Oryx, or the animals, are "hatched". Within this hierarchy, the ability to function as an agent is indicative. If we look at the first sentence, Crake, as the creator, is the subject of the sentence, and the Children are passive objects who are being formed out of different organic materials. Whereas in the second part, as soon as they are created, they become the doer of the action of eating all the words. The non-human animals, on the other hand, are always passive. The egg breaks open so that the animals can come out: it is not an active process. The ability to use language provides the Crakers with the superiority over the non-human beings, mirroring Genesis 2:19-20 (The New King James Version), where God brings animals to Adam so that he can name, hence, assert his dominance over all non-human animals. Ambiguity in this passage; however, lies in the agency of the Crakers. The sentence "they'd eaten up all the words because they were hungry" can be read both literally, as Snowman intends to, as an act of devouring language, and metaphorically, as in buying into all the words that Snowman utters because the Crakers are hungry to knowledge.

The ambiguous nature of the Children's assimilation into the human-centrism ultimately shows the failure of Crake's perfect society. Although created as an alternative to a species that is inherently evil from Crake's perspective, the Children

do not prove to be a more hopeful species than humans. Guided by Snowman's primitive creation cult with Oryx and Crake, the Crakers seem to assimilate into symbolic thinking fully. During the period when Snowman goes to the compounds to find supplies, the Crakers make an idol of Snowman:

> What's the thing – the statue, or scarecrow, or whatever it is? …
>
> "Snowman! Snowman!" They touch him gently with their fingertips. "You are back with us!" …
>
> "We made a picture of you, to help us send out our voices to you."
>
> *Watch out for art,* Crake used to say. *As soon as they start doing art, we're in trouble*. Symbolic thinking of any kind would signal downfall, in Crake's view. Next they'd be inventing idols, and funerals, and grave goods, and the afterlife, and sin, and Linear B, and kings, and then slavery and war. (Atwood, 2003, p. 361)

There are two implications of this scene. First, this is the downfall of Crake's utopia, as Crake intended the Children to be free from human qualities. Second, as Sarah A. Appleton (2008) points out, "[the Children] have grown beyond their naiveté and are manifesting signs that are distinctly human" (p. 20). In the same vein, Eduardo Marks de Marques (2015) focuses on "the central role of language in the construction of humanity" (p. 141), arguing that Snowman "allows the Crakers' entry into the symbolic world of culture, and subsequently a return to humanity (or humanism), the very traces of which Crake tried to erase in his creation" (2015, p. 140). It is a double-edged sword for Snowman: through his success in introducing the Crakers into the symbolic world of ideas and representation, Snowman takes his revenge on Crake, who left him as the last human on earth. At the same time, when the Crakers show the signs of becoming human, they no longer need Snowman, as his effigy compensates for his lack; hence, they no longer need his guidance. He invalidates the idea that belief in science and technology can achieve utopia by reversing the Crakers' evolution, but at the same time, commences a vicious circle. As discussed above, Snowman's myth relies on the human ascendancy over the environment;

hence, the Children are bound to repeat the same mistakes that brought humanity its end. If "the ultimate message of Defoe's story" is that "[t]he most desolate island cannot retain its natural order; wherever the white man brings his rational technology there can only be man-made order, and the jungle itself must succumb to the irresistible teleology of capitalism" (Watt, 1951, pp. 100-101), then the ultimate message of *Oryx and Crake* is that even a perfect society of engineered beings cannot maintain its paradisiacal existence when the last man introduces them to man-made order of language, and the garden of Eden must succumb to the paradoxes of human centrism.

The post-pandemic world of Atwood's *Oryx and Crake* highlights some of the problematic aspects of Crake's utopian thought through intertextual references to *Robinson Crusoe* and the creation story in the Hebrew Bible. Perceiving the human as a plague on the earth, Crake resets the world and starts a clean slate. The protector of the new race of beings, Snowman's critical reception often refers to him as the opposite of Crake. However, as I have illustrated, Snowman is not so different from Crake: the former represents the failure of the myth of individual as a free and reasoning agent; the latter represents the intensified version of the ultimate belief in scientific knowledge and technology. Both have utopian aspirations of recreating humans, either to achieve an existence akin to the garden of Eden or to recreate their own self. The flashback scenes, narrated by Snowman, undermines Crake's search for a home by showing that the home he is searching for is an absent referent. It is unable to provide the individual with a sense of security and belonging. Through allusions to *Robinson Crusoe* and the ideas of Locke, the novel problematizes Crake's Hobbesian view of human nature. Following the poststructuralist claim that the reality is only available to us through language, Snowman's use of myth and

language to shape the Children shows the centrality of language in the formation of identities. The Children's transformation through language overrides their supposedly genetic programming, as they do not have an evil or good essence.

While the novel questions the possibility of unified identity and human's perceived superiority over their environment, the implications of human - animal or animal - animal hybridity is not welcomed in the novel either. Hybridity, as presented in the novel, is used as a technique to intensify certain genetic characteristics of a species by splicing their genes with another species. This type of hybridity is always artificial and depends on the fusion or grafting of different animals. Hybridity is neither a viable nor a desirable solution to Atwood's dystopian imagination. The hybrid beings are a threat to their habitat, as they are the creations of a misdirected group of scientists whose aim is the commercial benefit. The myth of Chimera captures the terrifying presence of hybrid beings in the novel. As the fire-breathing lion, goat, and a serpent hybrid, the Chimera is the product of an unusual combination of species. An example of the threat that chimeric beings pose is the wolvogs. A hybrid of a certain wolf and canine species that is created for security purposes for CorpSeCorps, a private police force. However, when they got out of the control of their creators, the third person narrator describes their rampage: "As for the real dogs: they never stood a chance: the wolvogs have simply killed and eaten all those who'd shown a vestigial domesticated status" (Atwood, 2003, p. 108). We should also note the narrator's emphasis on the distinction between "real" dogs and what is perceived as unnatural wolvogs. As the products of a social Darwinist ideology, they represent the survival of the fittest. Hybridity does not present a solution to the environmental collapse in the novel. Rather, it serves a parodic purpose to criticize the ultimate faith in science and reason.

Even though the novel criticizes the human-centered ideology or questions the possibility of a unified identity, its nostalgia critique is paradoxical because the novel believes in a white, European, human-centered vision. As the hybrid beings in *Oryx and Crake* are the creations of out-of-control bioengineering, they threaten their habitat. Pigoons, the human - pig hybrids, or wolvogs, the wolf - dog hybrids, are a threat to Snowman, as they are to the other life forms in their habitat. The hybridity of human and non-human, in the case of the Children, can neither produce a positive change nor is able to promise a better future. Children became human at the end of the novel by internalizing human-centrism, which brought humanity's end in the first place. Hence, guided by the Snowman's primitive religion, they are doomed into repeating the same vicious circle. Secondly, the novel's literary and philosophical sources are composed of exclusively white, European, male writers, and philosophers. Even in its criticism of a unified identity, the novel relies on references Defoe's *Robinson Crusoe* to create a contrast but does not make any outside connection to its white European sources.

In conclusion, Atwood's *Oryx and Crake* is an ambiguous work of science fiction that combines utopian and dystopian elements into its narrative to criticize human-centered thought. The two utopian yearnings, Crake's rewinding, and resetting history to achieve an Edenic existence and Snowman's rewriting history to rebuild the lost humanity and his sense of self, are problematized on a simple basis. However well their intentions are, so long as they depend on the source which they seek to contest, the solutions these projects offer are unviable. In both cases, this source is the human-centered ideology that causes environmental degeneration. Crake's nostalgia for an idyllic existence and his utopian solution to the environmental catastrophe are informed by his reliance on scientific knowledge. Yet,

the solution he offers is unable to provide an alternative to the environmental or societal issues because it does not directly address the main contradictions and assumptions of the human-centered world. Instead of addressing institutional, social, and cultural causes of habitat loss, pollution or overpopulation, the solution is sought in authoritarianism and the elimination of all differences. Snowman's nostalgia is for a unified identity which he tries to recover through recreating his missing human link. His engagement with the undoing of Crake's utopia mirrors the European colonial project. Although they have a silent presence in the novel, the hybrid beings, or the Children, are at the center of both narratives. They represent the failure of both Crake's utopian plan and Snowman's last attempt at recovering his sense of self.

CHAPTER 3

DESTABILIZING HOME AND QUESTIONING HUMAN IDENTITY IN PAOLO BACIGALUPI'S *THE WINDUP GIRL*[1]

This chapter investigates the politics of imagining home and a stable and unified identity in the American writer Paolo Bacigalupi's novel, *The Windup Girl* (2009). Although it depicts a dystopian future, *The Windup Girl* speaks to the twenty-first century readers by imagining the logical conclusion of the devastating effects of global capitalism resulting in environmental catastrophe. Set in the twenty-third century Thailand, the novel deals with the events in the aftermath of a catastrophe called "the Contraction" (2009/2012, p. 62), where agricultural corporations dominate the food market through genetically modified organisms while the rest of the world suffers from various manufactured plagues. Through analyzing "home" as a fantasy corresponding to an authentic origin to which the characters yearn to go back, this chapter aims to illustrate that the novel advocates a future society with the co-existence of human and human-machine hybrid identities.

The Windup Girl mirrors the yearnings of the characters who 'wind up' in the post-apocalyptic Bangkok through the literary and cultural allusions. While the juxtaposition of references to the stories and myths from both the Buddhist and the Judeo-Christian traditions support the novel's multicultural agenda, the references to the Western literary canon emphasize the cyclical understanding of history in the novel. As opposed to a linear, progressive vision of Eurocentric history, "winding up" in history, as the title of the novel suggests, advocates a non-linear, repetitive

[1] An earlier version of ideas presented in this chapter appeared in an article published in the English Language and Literature Research Association of Turkey special issue of the *Gaziantep University Journal of Social Sciences* on December 2019.

vision. The monster's search for belonging in Mary Shelley's *Frankenstein* (1818) and the robots' search for reproduction in Karel Čapek's *R.U.R. (Rossum's Universal Robots)* (1921) coincide with the characters' quest for the sense of security and belonging in *The Windup Girl*. The ontological questions regarding the difference between human and non-human or the questioning of ultimate reliance on scientific knowledge keep resurfacing from the texts from the nineteenth century to the novel's publication date. In this chapter, the aim is to understand the nature of the textual dialogue that Bacigalupi's novel is engaging to gain more insight into the relationship between nostalgia as a wistful yearning for home and the politics of race and gender in a post-apocalyptic setting.

Literary scholars generally focus on various aspects of *The Windup Girl* from ecocritical, political, and ethical perspectives. As Sean Donnelly (2014) observes, some of the concerns of the early twenty-first century speculative fiction include the awareness of peak oil, genetically modified food production, the rampant neoliberalism, global terrorism, the awareness of global climate change (pp. 157-158). While Donnelly criticizes the novel's inability to imagine a future beyond capitalism, he also emphasizes its utopian potential for its open-ended narrative (2014, p. 164). Derrick King (2016), on the other hand, argues that Bacigalupi uses "the dystopian form to imagine the possibilities for an alternative, post-capitalist future for biogenetics" (p. 5). Lastly, Andrew Hageman (2012) focuses on how Bacigalupi interrogates the dynamics between global capitalism and ecological sustainability and reads the environmental catastrophe at the end of the novel as a hopeful future formed through an alliance between human and non-human agents in contact with each other (p. 300). I aim to contribute to the literary scholarship on the novel first by focusing on how the novel questions nationalism by looking at

nostalgia for the imagined homeland. Second, how the novel depicts the blurring line between human and non-human to problematize the stability of human identity.

3.1 The politics of imagining home

In *The Windup Girl*, "home" does not have a physical site. Rather, it is located in one's fantasy or memory, representing belonging, security and wholeness. National identity, institutions of religion and family are connected to the concept of home in the novel. The yearning for the lost home is forged through uniformity and the fantasy of a homogeneous identity in each of these instances. However, the novel does not share this idealized image of home. It rather advocates for a heterogeneous society with the multiplicity of voices and identities. According to Biddy Martin and Chandra Talpade Mohanty (1986), there are two modalities of home: "being home and not being home" (p. 196). Being home designates the space "where one lives within familiar, safe, protected boundaries" (Martin & Mohanty, 1986, p. 196). In this sense of the word, home provides one with the sense of privilege, harmony, security, comfort, and familiarity. On the other hand, Rosemary Marangoly George (1999) points out that Martin and Mohanty's definition of "not being home" exposes the illusory nature of this sense of security, as it is the realization that "home was an illusion of coherence and safety based on the exclusion of specific histories of oppression and resistance" (Martin & Mohanty, as cited in George, 1999, p. 26). In other words, the concept of home is built on silencing the differences and excluding what is different. *The Windup Girl*'s exploration of nostalgic experience resurfaces these silent and excluded histories though questioning the meaning of home. The novel does not only expose the instability of home but also illustrates how the

longing for a homogenous homeland perpetuates ethnic cleansing and violence in the name of achieving a home that is believed to be free from external influence.

The novel presents the obsession with restoring the peaceful, care-free existence of one's childhood home at the beginning. One of the major characters, an American industrial agent named Anderson Lake, is obsessed with obtaining the seedbank that the Thai Kingdom holds. Using his "kink-spring factory" as a cover for his corporate espionage for the agricultural company AgriGen, Lake tries to seize the genetically unharmed seeds of the Thai government, as well as to find a former AgriGen scientist who is hiding in the Thai Kingdom, Gibbons. Lake's obsession is set early in the novel where he tastes a fruit called *ngaw*:

> It's as though he's back in the HiGro fields of Iowa, offered his first tiny block of hard candy by a Midwest Compact agronomist when he was nothing but a farmer's boy, barefoot amid the corn stalks. The shell-shocked moment of flavor — real flavor- after a lifetime devoid of it. (Bacigalupi, 2009/2012, p. 2)

In his recollection of the past, Lake still acknowledges his disadvantageous background, but the sensation is so strong that "the shell-shocked moment" is both ecstatic and violent at the same time. Tasting the fruit gives Lake glimpse of his childhood. Lake's childhood home in Iowa is associated with the "real" flavor of a candy, and this memory is evoked by tasting a lost fruit which should not exist in the first place. While the advancements in genetically modified species led to the destruction of natural ecosystem in the novel, the fruit *ngaw* was "revived" by the efforts of the Thai scientists after the collapse of the ecosystem. The major wish that runs through tasting the fruit to Lake's recollection is that if an object from the bygone past can be revived, it is also possible to revive his lost childhood.

The obsession with the lost fruits is further elaborated in a passage where a photograph serves as a nostalgic object that offers a view of a world that no longer

exists to Anderson Lake. While looking for clues for a genetic engineer named Gibbons' whereabouts, Lake looks at an old photograph from the Expansion period:

> [N]one of these pomelos, none of the yellow things … *lemons*. None of them. So many of these are simply gone.
>
> But the people in the photo don't know it. These dead men and women have no idea that they stand in front of the treasure of the ages, that they inhabit the Eden of the Grahamite Bible where pure souls go to live at the right hand of God. Where all the flavors of the world reside under the careful attentions of Noah and Saint Francis. (Bacigalupi, 2009/2012, p. 64)

The narrator comments that while Lake "can usually ignore the foolish confidence of the past", this picture "irritates him" (Bacigalupi, 2009/2012, p. 64). The irritation is accompanied by fascination, however. As the genetically modified organisms replaced the organically grown fruits in the context of the novel, these objects gain almost mythical qualities ("the treasure of ages") for Lake. This scene's relationship with nostalgia can be read from two perspectives on photography. In "Rhetoric of the Image", Roland Barthes (1977) looks at the photographed object and its perception, arguing that the type of consciousness the photograph "establishes [is] not a consciousness of the *being-there* of the thing … but an awareness of its *having-been-there*" (p. 44). In other words, the photograph's audience acknowledges the photographed object's loss. As this new type of consciousness for Barthes creates "a new space-time category [that is] spatial immediacy and temporal anteriority", the photograph is the "illogical conjunction between the *here-now* and the *there-then*" (p. 44). While the lost fruits in the passage above belong to the *there-then* of the Expansion period, its photograph is the material link between Anderson Lake and his object of desire. In its paradoxical nature, then, a photograph is a nostalgic object, which offers a view of a world that no longer exists to its audience. In the same vein, in "In Plato's Cave", Susan Sontag (1973/2005) also argues that photography "actively promote[s] nostalgia … [as] an elegiac art … [which] participate[s] in

another person's (or thing's) mortality, vulnerability, mutability" (p. 11), as the act of taking a photograph freezes a moment by framing it. There is an emphasis in both accounts by Barthes and Sontag that the photographs carry an ambivalence of presence and absence at the same time. While pomelos and lemons are long gone, their photographic representation has a charming effect on Lake. In his musing, Lake keeps repeating "none", which evokes an elegiac tone. His lamentation over the riches of an ancient period is almost poetic with the repetition and the similar sounding "none" and "gone".

Anderson Lake's obsession with attaining what has been lost results from his juxtaposition of these lost objects of desire with the garden of Eden. Thus, it is no coincidence that "the flavors of the world" are protected by Saint Francis, the patron saint of the environment, and Noah who preserved each animal species from the Great Flood in the Hebrew Bible. The preservation of the species in the Judeo-Christian belief corresponds to the Thai Kingdom's 'seedbank' that Anderson Lake is trying to seize. This photograph is a source of nostalgia for Lake not only because of its religious connotations but also his association of the lost fruits with his childhood. The childhood home where he tasted "real flavor" is equivalent to the prelapsarian existence in the garden of Eden for Lake. As Scott Selisker (2015) points out, the religious group in the novel, the Grahamites, heavily informs his view, and the Grahamites' understanding of nature is also nostalgic:

> With frequent reference to Eden and the Biblical flood, the Grahamites' desire to reclaim the natural becomes tantamount to a desire for time travel or global annihilation, since these are the only solutions for returning the world to a state of natural purity. (p. 504)

The state of "natural purity" is the key term in Selisker's observation because these religious references serve as the intersection between nostalgia and utopianism. While nostalgia involves "a yearning for a return, albeit accompanied often by an

ambivalent recognition that such is not possible" (Davis, 1979, p. 21), the utopian impulse can be defined, in the broadest sense of the term, as an expression of the desire to reclaim the Edenic existence on earth, i.e., a reconfiguration of the present through the elimination of toil and suffering. The Grahamites' desire to reclaim what they deem as "natural", in that sense, is both utopian and nostalgic.

This pseudo-religious aspect; however, is nothing more than a cover for Lake's capitalistic venture. Even Lake is not aware of his changing discourse in the following chapters: "Thousands, perhaps hundreds of thousands, of carefully preserved seeds, a treasure trove of biological diversity … And from this gold mine, the Thais are extracting answers to their knottiest challenges of survival" (Bacigalupi, 2009/2012, p. 86). His perception of the seedbank changes from "the flavors of the world" to "a treasure trove" and "gold mine". As much as it seems like a personal or a religious obsession with past, Anderson Lake's romanticization of nature before the Contraction is rooted in business and politics. Furthermore, there is something that does not meet the eye in Lake's description of the Thai seedbank. "[The] knottiest challenges of survival" that he mentions, for instance, are the direct result of the involvement of agricultural monopolies such as AgriGen and their "calorie man" like Anderson Lake in the first place. If it were not for the interference of the global food monopolies to the local governments or their impact on the loss of biodiversity, The Thai Kingdom would not have been adopted an isolationist position. The novel, on the other hand, avoids depicting Anderson Lake as a caricature of a capitalist Westerner. As illustrated above, his changing discourse from a religious one to a materialistic one exposes the contradictions of his yearning for a state of natural purity. If nothing else, Lake is a utopian projector whose religious

associations of home with the garden of Eden clouding his judgment and does not allow him to see how he is implicated in the environmental catastrophes.

Through examining the nature of Lake's yearning for the golden age, the novel targets the neoliberal attitude towards the ecological problems. In *Living in the End Times*, Slavoj Žižek (2010) claims that the global capitalism is approaching a catastrophe and "the four riders of the apocalypse" are "the ecological crisis, the consequences of the biogenetic revolution, imbalances within the system itself … and the explosive growth of social divisions and exclusions" (p. x). *The Windup Girl,* published only a year before Žižek's book, addresses each rider in detail and it is not unambiguous in its treatment of its main concerns. One of the concerns that informed the novel, as we have seen in Lake's utopian project of reclaiming the lost fruits, is biogenetic research. While King (2016) argues that *The Windup Girl* provides "the possibilities for an alternative post-capitalist future for biogenetics" (p. 5), the reality of the situation in the novel is not as uncomplicated as King conceives. Early in the novel, there are mentions of animals called megodonts, which are genetically engineered species of mammoth for heavy manual labor. While Fukuyama argued that with the advancement of capitalism, we reached 'the end of history' where no development is needed, Žižek is critical of this notion. As illustrated above, Bacigalupi's future society is also critical of such a utopian vision that global capitalism or advanced biogenetic research would deal with the problems of our present condition. On the contrary, in the example of megodonts, biogenetic research is used as an instrument by capitalism to reinstate its power in a changing world. As Schmeink (2016) points out, even though these hybrid beings "are not part of any natural habitat, they are nonetheless harmlessly integrated into both natural and anthropological order – they have an economic purpose" (p. 84). While the fictional

world of *The Windup Girl* changes with global catastrophes and climate change, global capitalism also reconfigures itself into adapting into this new environment.

In terms of global capitalism and the issue of home, the paradoxical state of mobility reflects today's world, which allows capital and goods to roam freely across the globe but limiting the mobility of the people who are displaced and homeless. As a Chinese merchant whose family is slaughtered by an Islamic faction called "the Green Headbands" (Bacigalupi, 2009/2012, p. 21) in Malaya, Hock Seng is forced to take refuge in the Thai Kingdom. Hock Seng tries to recover his status as a wealthy man by stealing the factory blueprints and selling them to one of the competitors of Anderson Lake. He is despised as a "yellow card refugee" (Bacigalupi, 2009/2012, p. 4) in Thailand, and he is traumatized by the memories of the massacre in Malaya: "Memories scratch and peck at him, swirling like black crows, hungry to take over his head. So many friends dead. So much family gone. Four years ago, he was a big name. Now? Nothing" (Bacigalupi, 2009/2012, p. 31). His character is derived from one of Bacigalupi's early short stories, "Yellow Card Man" (2010), which is centered around a Chinese refugee who escaped from "the men with their green headbands and their slogans and wet wet blades" (2006/2010, p. 163). While devising a plan to steal the factory plans, Hock Seng recalls his life before the massacre that took his family:

> He misses the marble-floored halls and red lacquer pillars of his ancestral home …
>
> He misses his clipper fleet and the crews (And isn't it true that he hired even the brown people for his crews? Even had them as captains?) who sailed his Mishimoto clippers to the far side of the world … carrying tea strains resistant to genehack weevil and returning with expensive cognacs that had not been seen since the days of the Expansion. And in the evenings, he returned to his wives and ate well and worried only that a son was not diligent or that a daughter would find a good husband. (Bacigalupi, 2009/2012, p. 69)

This passage impeccably illustrates how Hock Seng's memory of the past and the material reality of his involvement in the environmental catastrophes are distorted by nostalgia. This is a very traditional, masculinist, and romanticized way of perceiving the past when "brown people" were "treated kindly", and the role of the patriarch is to return his home and to enjoy the privileges of being the master of the bourgeois household. This romanticized past where the structures of class, gender, and family are clearly defined draws a stark black and white contrast with Hock Seng's current reality as a despised refugee. Hock Seng's privileged status in Malaya; however, is not limited to his social role. There is also the indication that the Hock Seng of this 'glorious past' had access to expensive and global commodities such as cognac, which belonged to the pre-plague world of "Expansion". The mention of "expensive cognacs" and virus-resistant tea strains in the middle of his recollection of his family should not escape our attention. It points out that prior to the Green Headband massacre in Malaya, Hock Seng was complicit to the crimes of the agricultural companies that both manufactured the plagues such as "genehack weevil" and produced the virus-resistant products to dominate the global food market. Hock Seng, unable to reflect critically on his past and acknowledging his role in the catastrophes, is enchanted by these recollections.

While nostalgia etymologically means "homesickness", we should note that there are mentions of two symbolic homes in Hock Seng's recollection of his past in Malaya. The first one is the "ancestral home", which connects Hock Seng's personal history and his roots into Malaya. The second one is the phrases that suggest "home" that are "his fleet", and "his Mishimoto clippers". In both cases, home is identified with his material possessions. The marble-floored halls qualify the ancestral home, not a cultural or religious connection to one's ancestors. In the same vein, home is

implied where “he returned to his wives”. As a dispossessed man, he is in an in-between state. He cannot reclaim the lost home in Malaya, and he cannot integrate into Thai society. Furthermore, Hock Seng defines his identity through the race and traditional values as his recollections of his workers as “the brown people” expose his perceived superiority to black workers in Malaya. While Hock Seng’s perception of hiring “even the brown people for his crews” hints that this action is something rather surprising or extreme, he is unable to reflect on the discrepancy of his perceived superiority over black workers, while at the same time he is seen as a second-class citizen in the Thai Kingdom.

As we have noted before, the nostalgic recollection is often accompanied by one’s recognition of the inability to reclaim an aspect of the subject’s past life. However, Hock Seng and Lake do not merely cherish the good memories of the past, but they have unattainable, almost utopian desires. Hock Seng’s yearning is for a “resurrection for himself and his clan” (Bacigalupi, 2009/2012, p. 32) to restore a simpler, more ordered existence as the patriarch, noting the emphasis on “his clan”; while Lake is in search of “the Eden of the Grahamite Bible” (Bacigalupi, 2009/2012, p. 64) through exploiting an independent nation’s natural resources. In both Hock Seng’s recollection of his family and in Anderson Lake’s rumination on “the Edenic existence” before the Contraction, their selective way of perceiving the past expose their latent complicity in the environmental catastrophe. Hock Seng and Anderson Lake’s roles as a former businessman and a corporate agent are rooted in politics, and their actions and decisions inform environmental politics. Yet, their inability to reflect on their role in the catastrophes take the form of romanticizing a time when “things were better (more beautiful) (healthier) (happier) (more civilized) (more exciting) then than now” (Davis, 1979, p. 18). Nostalgic recollection is the

mirror that exposes the complicity of the characters in local and global threats in *The Windup Girl*.

The obsession with the lost home presumes a linear understanding of history. From this perspective, home exists in the past but there is a way to revive it. In that sense, home is a destination. However, the novel does not share this nostalgia for the lost home. Rather, through its cyclical, non-linear form, it advocates a dialogue between past, present and future. The events in chapters 37 to 45 – the final outburst of violence between the White Shirts and the army- happen simultaneously, and they are narrated from the point of view of different characters. The non-linear form and style support the storytelling and the thematic significance of the cycle. Furthermore, the theme of *kamma* is repeated throughout the novel. In Buddhist doctrine, *kamma* or karma determines one's cycle of rebirth through one's conscious choices. *Kamma* dictates that the suffering in one's life is not inevitable, and all our conscious choices have consequences in the next cycle of rebirth. In that sense, kamma is cyclical. In the case of Hock Seng, his attachment to a time that he cannot retrieve causes him to suffer: "Hock Seng, who didn't believe in or care about karma … when he was young, has come in his old age to understand his grandmother's religion … Suffering is his lot" (Bacigalupi, 2009/2012, p. 68). Anderson Lake, on the other hand, dies at the end of the novel because of what he unwittingly helped generate, a disease that spreads from his factory, which he used as a cover for his espionage. Natural, as well as manufactured disasters, are repeated as characters such as Anderson Lake and Hock Seng obsess over a past that is impossible to reclaim rather than taking responsibility for their actions and making meaningful decisions. In that sense, by sacrificing the characters who are complicit with the destruction of nature as a display of divine justice, the novel's exploration of the relationship between past and

present through nostalgic experience takes a didactic form for the sake of its environmental argument. Concerning the destruction of the novel's landscape, the intertextual references to the Biblical flood and *R.U.R.* will be discussed later in the chapter.

Homeland is under the threat of foreign intervention and immigration from the perspective of the police force in the novel, the White Shirts. While they hold the foreign influence responsible for the economic and political instability in Bangkok, they are unable to acknowledge that these crises are the direct result of hyper-capitalism and ecological catastrophe. Their denial is exposed through analyzing how the nationalist discourse of the White Shirts is formed through nostalgia. In *The Future of Nostalgia*, Svetlana Boym (2001) argues that the concept of restorative nostalgia is "a transhistorical reconstruction of the lost home" (p. xviii) and it is complicit to the nationalist discourses because it feeds the conspiratorial view of such discourses:

> The conspiratorial worldview is based on a single transhistorical plot, a Manichaean battle of good and evil and the inevitable scapegoating of the mythical enemy. Ambivalence, the complexity of history and the specificity of modern circumstances is thus erased … "Home," imagine extremist conspiracy adherents, is forever under siege, requiring defense against the plotting enemy. (Boym, 2001, p. 43)

As we can observe from both the historical and the modern populist right-wing movements, such nationalist discourses are motivated by the restorative type of nostalgia, which aims to restore the lost home. However, from the point of view of the conservatives, Boym suggests, the return to this imagined home, or the origin, is always threatened by an external force, which is transubstantiated into a metaphysical evil. This type of nationalism is evident in the rhetoric of the lost home that is illustrated at the walls of the Wat Phra Seub, which can be translated as "the temple of God Seub". While Seub is not a deity in Thai Buddhism, there are several

mentions of him in the novel, such as "[the scientists] pray[ing] to Phra Seub Nakhasathien" (Bacigalupi, 2009/2012, p. 80). The real life influence for the novel, an environmental activist Seub Nakhasathien, who committed suicide in 1990 to draw attention to the preservation of two wildlife sanctuaries in Thailand, is venerated as a deity in *The Windup Girl* and the scene described on the temple wall describes "the fall of Old Thailand" from a nationalist perspective:

> The *farang* releasing their plagues on earth, animals and plants collapsing as their food webs unravelled; his Royal Majesty King Rama XII mustering his final pitiful human forces, flanked by Hanuman and his monkey warriors. Images of Krut and Kirimukha and an army of half-human *kala* fighting back the rising seas and plagues. (Bacigalupi, 2009/2012, pp. 142-143)

As the third person narrator describes these apocalyptic scenes, the war between the agricultural monopolies called *farang* (a European or a foreign in Thai), and the Old Thailand are given mythic qualities. While the outside forces threaten the territorial integrity of the Thais with manufactured plagues, the royal forces are accompanied by the divine power, such as Hanuman who is the destroyer of evil in Buddhism, to defend the motherland. The stakes are not limited to Thailand's security; however, its ecosystem is also in danger. The mythic enemy, *farang*, is also capable of poisoning the entire ecosystem. In this narrative, however, "the complexity of history", as Boym points out, is omitted. The element that has not been raised in this apocalyptic scene's description is Thailand's regression from a capitalist state to an absolute monarchy. There are indications in the novel that before the environmental catastrophe, Thailand's capitalist stage was "fueled by petroleum and technology" (Bacigalupi, 2009/2012, p. 211). But as "the Old Thailand" falls, the new Thailand's survival is guaranteed by the mythical help from the Buddhist figures such as Hanuman and *kala*. While the royal forces withstand the siege laid by the *farang* forces, this official narrative, erected in the temple dedicated to "the biodiversity

martyr" (Bacigalupi, 2009/2012, p. 277) Phra Seub, obscures the nation's transformation to a monarchy that refuses technology altogether.

The inscriptions on the temple wall also comment on the idea of a homogeneous, unified home. From the nationalistic perspective of the White Shirts, "home" is free from the foreign, or the *farang*, influence. Hence, it is not enough to demarcate the boundaries of "the Old Thailand" in the collective imagination by representing it on the temple walls, but the invention of an "other" is also crucial in sustaining the belief in the purity of this imagined home. However, even in the passage, where the official White Shirt ideology is presented on the temple walls, the third person narrator hints that the unified, singular vision of identity is not as uncomplicated as the White Shirts would like to believe. The choice of word for foreigners, *farang*, is important in that aspect. The words or phrases from Thai or Chinese languages are neither translated nor explained in the footnotes in the novel. The organic unification of English, Thai, and Chinese languages in the novel forces the reader into checking the meaning of the foreign words to engage with the fictional world of *The Windup Girl*. The novel's vision of identity, in that sense, is not pure in the sense that the nationalist discourse exemplified in the ideology of the White Shirts. Instead, it contains a multiplicity of voices and languages.

The novel also tackles the refugee crisis in relation to the constitution of a national identity that imagines a homogeneous home. Hock Seng, who is running away from a fundamentalist group in Malaya, is caught up in another conflict between the capitalist expansionist powers of the agricultural monopolies and the nationalist faction in the Kingdom. It is worth noting that there are frequent references to Judeo-Christian heritage or Buddhism, whereas apart from the references to the extremist Islamic group called the Green Headbands, Islam is

mentioned only once in the novel where the White Shirts captain Jaidee despises the refugees: “If the Malayan Chinese had been half as clever as the Chaozhou, they would have converted to Islam generations ago, and woven into the tapestry of that society” (Bacigalupi, 2009/2012, p. 117). The Chaozhou Chinese, according to Jaidee, are well-integrated into the Thai society for generations, as opposed to “the pathetic Chinese refugees who have flooded in from Malaya” (Bacigalupi, 2009/2012, p. 117). This passage not only provides context for the hatred towards the refugees that is prevalent in all parties in the novel, but Jaidee’s take on the refugee crisis in the Thai Kingdom also reveals that religious practice is of secondary importance. What constitutes national identity for Jaidee is cultural integration. The Chaozhou is praised for “speak[ing] Thai … [and taking] Thai names” (Bacigalupi, 2009/2012, p. 117), whereas the Malayan Chinese have no place in this imagination of what the Thai Kingdom is, even though the state religion is Buddhism. Even in a passage where Islam is alluded to in relation to the refugees, the novel carefully avoids associating a religious view with fundamentalism. Rather, the massacre perpetrated by the fundamentalist group called the Green Headbands is a commentary on the nationalist zeal of the White Shirts.

The Green Headbands, which is in pursuit of ethnic cleansing in Malaya, parallels the White Shirt atrocity against the refugees. Malaya, the Malaysia of the fictional universe of *The Windup Girl*, is a multi-ethnic and multi-religious country, while certain ethnic groups such as the Malayan Chinese were targeted by the massacre called “the Incident” (Bacigalupi, 2009/2012, p. 13). The same approach is adopted by the White Shirts, whose abuses are evident in passages where Hock Seng comments on the White Shirts: “The Environment Ministry sees yellow cards the same way it sees the other invasive species and plagues it manages. Given a choice,

the white shirts would slaughter every yellow card Chinese" (Bacigalupi, 2009/2012, p. 282). Also, in one of the previous chapters, the White Shirt captain Kanya contemplates on 'the Malayan problem':

> If the Environment Ministry had anything to say about it, all these yellow card refugees would be on the other side of the border. A Malayan problem. The problem of another sovereign country … But Her Royal Majesty the Child Queen is merciful, compassionate in a way Kanya is not. (Bacigalupi, 2009/2012, p. 208)

While the former faction's atrocities are not given a background other than religious reasons, the latter is motivated by a nostalgic view of Old Thailand, which was thought to be free from the reins of economic dependency. Hence, the White Shirt tyranny is justified to overcome external threats both in the form of illegal immigrants and agricultural monopolies. However, the illegal immigrants are not the cause of Thailand's economic dependency but the scapegoat from the perspective of the White Shirts as they threaten "the tapestry of society" (Bacigalupi, 2009/2012, p. 117) which can be seen in Jaidee's lines. Home as a concept that is pure and homogeneous depends on the exclusion of the immigrants, as well as all sorts of foreign influence. However, the novel does not participate in the vision of uniformity.

By exposing that the idea of home is constructed through the exclusion and omission of differences, Paolo Bacigalupi's *The Windup Girl* problematizes the idea of home. Representing belonging, safety, and wholeness, home serves as an anchor for the characters by creating a link between their past and present. However, the novel, analyzing its various forms, the lost childhood, ancestral home, and homeland, asserts that yearning for the lost home only obscures the character's involvement in the political, social, and environmental problems. Understanding nostalgia as an obsession with a certain aspect of the past, which is irrecoverable, the novel

advocates a vision that requires moving on and taking responsibility for one's actions, instead of fixating on the past. The novel problematizes the concept of home, as well as the stability of the human.

3.2 The posthuman question

The term "posthuman" has been suggested following the developments in computer science and biogenetic research, which problematized the ontological and the epistemological position of the human. Francesca Ferrando neatly captures the essence of posthumanism defining it as a philosophical framework rejecting all hierarchies and centers, and it is "pluralistic, multilayered, and as comprehensive and inclusive as possible" (2013, p. 30). While *The Windup Girl* advocates this pluralistic agenda in its questioning of human, it also engages in a critique of a branch of posthumanist thought. As Cary Wolfe (2010) points out in "What is Posthumanism?", in contrast to posthumanism as a philosophical moment of the de-centering of the human, transhumanism is "an *intensification* of humanism" (p. xv) as it aims to perfect the human being by eliminating the human limitations. This ideal of transcending the human limitation was already present in Immanuel Kant's "What is Enlightenment?": "Enlightenment is mankind's exit from its self-incurred immaturity … *Sapere aude!* [Dare to know!] Have the courage to use your *own* understanding! is thus the motto of enlightenment" (1784/1996, p. 58). In other words, the Enlightenment's legacy of the utmost belief in human science and reason is revived with the transhumanism's goal. Also, Ferrando points out that, "[t]he emphasis on notions such as rationality, progress, and optimism is in line with the fact that, philosophically, transhumanism roots itself in the Enlightenment" (2013, p.

27). *The Windup Girl* questions the viability of the transhumanist project as well as exposing its inherent connection to the Enlightenment humanism.

Similar to its literary ancestors, *Frankenstein* and *Rossum's Universal Robots*, *The Windup Girl* also engages in questioning of human. Take this instance in the novel: while the White Shirt captain Kanya questions the manager of the company creating the androids in the novel, the manager Yashimoto says: "New People value discipline. Order. Obedience. We have a saying in Japan, 'New People are more Japanese than the Japanese'" (Bacigalupi, 2009/2012, p. 300). Playing humorously on the racial stereotypes imagining the Japanese as obedient people, what Yashimoto actually suggests is that the android race called the New People are more human than human. But it does not answer the question of what human is. The monster was born out of Shelley's interest in the scientific advancements of her age: "Perhaps a corpse would be re-animated; galvanism had given token of such things: perhaps the components of a creature might be manufactured, brought together, and endued with vital warmth" (Shelley, 1818/2008, p. 9). The robots in Čapek's play are intended to be a metaphor for the working class raging against their oppressors. The play debuted in the turn of the century stage, and the human-machine hybridity of the robots forced their audience to question the relationship between technology replacing the human workers. *The Windup Girl*, in the same vein, takes its roots in the real-life scientific research and imagines their next logical step. Igniting the 'divine spark' in Shelley finds its equivalent in Bacigalupi's creation of a new life form, the new people. In that sense, we are caught up in the same concern from a Romantic text to the twenty first century, that is the question of human.

To understand the eponymous windup girl, Emiko's connection to the posthumanist thought that is advocated as an alternative to human centered thought

in the novel, mentioning Emiko's literary and real-life antecedents is in order. The term, robot, meaning "slave" in Czech, was first coined by the Czech writer Karel Čapek. Indeed, Emiko is in the position of a slave in the novel. She survives a series of immense humiliations as a sex slave at the sex club she is working. As it will be mentioned later in the chapter, Emiko's relation to Čapek's robots is no coincidence, and *R.U.R. (Rossum's Universal Robots)* has a thematic significance in terms of the novel's ending. As for the real-life influences for Emiko's creation, Jessica Riskin's article "The Defecating Duck, or, the Ambiguous Origins of Artificial Life" focuses on the origins of automata, or the self-operating machines, in the Enlightenment with a focus on "Digesting Duck" and "The Flute Player" androids created by the French inventor Jacques de Vaucanson. The flute-playing satyr attracted Diderot's attention, and this satyr was the first example of an "*androïde*" that is "a human figure performing human functions" (as cited in Riskin, 2003, p. 613). It also should not escape our attention that even the first android in history is defined in relation to the human figure and human action, albeit it has a nonhuman figure, a satyr. As opposed to Vaucanson's automaton, "the New People" are not merely the imitation of appearance or form. They also have biological functions, as Emiko expresses that her body is a "collection of cells and manipulated DNA" (Bacigalupi, 2009/2012, p. 34).

The hysteric fear of the other in the form of hostility towards nonhuman beings is the point where the ultimate nostalgic attitude is observed in the novel, the yearning for humanity. The humanoid beings called "the New People" by the Japanese are despised both by the Thais and the Grahamites "as a joke [and] an alien toy" (Bacigalupi, 2009/2012, p. 36). A similarly hostile manner to the windups is also present in one of the early stories of Bacigalupi, "Yellow Card Man" (2010): "Mishimoto is full of windup import workers, they say. Full of illegal generipped

bodies that walk and talk and totter about in their herky-jerky way — and take rice from real men's bowls" (Bacigalupi, 2006/2010, p. 172). As the manual workers speculate on the "generipped bodies" that act like a human, their concern reflects the fear of getting replaced by machines since industrialism, which is a central theme to many of the turn of the century science-fiction. In this case, the replacement is even more terrifying to the laborers because the human laborers are replaced by the humanoid beings. The hysteria permeated into everyday life dictates that the enemy, or the windups, may not be so different from us and may already be among us. Furthermore, Kanya's reaction to one of the windups reveals a crucial element. When Kanya interrogates the manager of Mishimoto Company through the middle of the novel, she is, for the first time, confronted by the gaze of a windup. As Yashimoto speaks Japanese, his servant Hiroko translates his owner's words. While they discuss the reason why the Japanese created such obedient robots whom they call "the new people", it is not the content of the dialogue that is disturbing for Kanya, but the terrifying presence of a humanoid being: "Kanya keeps her impression impassive. It is difficult. The creature beside her is beautiful. Her skin is sleek, her movements surprisingly elegant. And she makes Kanya's skin crawl" (Bacigalupi, 2009/2012, p. 297). As there is "no trace of emotion on [Hiroko's] face as she speaks with her owner's voice" (Bacigalupi, 2009/2012, p. 298), the windup girl is without a voice of her own in this scene. She is a pair of eyes confronting Kanya. This confrontation comes right after Kanya speaks with Gibbons on the dichotomy of natural and unnatural, which will be mentioned shortly. This interaction cannot be simply read as the fear of the other because of the ambivalent reaction of Kanya. It is a certain kind of fascination combined with anxiety that is

making her skin crawl. There is an alternative way of reading Kanya's hostility towards the windups in the novel.

The windup robots or "the new people" in *The Windup Girl* can be read as Bhabha's "mimic men". In "Of Mimicry and Man", Homi Bhabha (1984) defines colonial mimicry as "the desire for a reformed, recognizable Other, as a subject of a difference that is almost the same, but not quite" (p. 126), i.e., it reflects the colonizer's desire to produce a Westernized subject who is not seen as an equal. Bhabha also points out that "mimicry emerges as one of the most elusive and effective strategies of colonial power and knowledge" (p. 126). It should be noted that this quotation itself is elusive since Bhabha only mentions "colonial power" but does not directly indicate to whom the colonial mimicry empowers. The colonizer is "threatened by the displacing gaze of its disciplinary double" (p. 127) through this ambiguous and subversive side of mimicry. In other words, "the mimic man" who is Anglicized exposes the artificiality of the English identity through his gaze. Acknowledging that Bhabha uses the term to designate how the colonized subject employs mimicry to confront the colonizer, it can be reappropriated to understand Kanya's confrontation with Hiroko in the context of the human/nonhuman relationship. If we refer back to the siege metaphor that Boym uses in her definition of restorative nostalgia, from the perspective of Kanya, the position of human is under the siege of "the new people", as the Thai Kingdom is under the attack of the agricultural monopolies. Hiroko's presence, in other words, undermines the ontological stability of "human" that Kanya holds on to. As opposed to the nostalgic reflexes of Hock Seng and Anderson Lake, in Kanya's case, nostalgia is not a cognitive process triggered by certain events or objects of importance. Instead, it is a drive that motivates the nationalistic discourse of the Kingdom, informing seemingly

independent agents to act in certain ways. The anxiety that she feels when confronted with the gaze of the windup, which forces her to question the ontological distinction between human and nonhuman, provides yet another aspect to her complex nostalgic attitude.

Focusing mainly on the political or environmental issues in *The Windup Girl*, the existing scholarship overlooks the eponymous windup girl, Emiko's vital role in Bacigalupi's criticism against the human centered thinking. The machine-human alliance formed by Emiko and Gibbons provides a comment on both the wistful yearnings of Hock Seng and Anderson Lake and the regressive reaction of Kanya through exposing the shortcomings of their ideology. The novel, however, does not use Emiko as a plot device but provides her with the agency to overcome her servile state. As Emiko distorts the boundaries between human and nonhuman, there are multiple references to Emiko as an animal. While some of the references point out her servile state, as in "an animal. Servile as a dog" (Bacigalupi, 2009/2012, p. 176), the others refer to her feral, animalistic state. Her inability to reproduce is repeated throughout the novel that she is "a genetic dead end. Doomed to a single life cycle" (Bacigalupi, 2009/2012, p. 114). Her role and her body are defined by her Japanese creators. As a slave in Thailand, she is stripped of her name, called only as the windup, and is not in control of her body. On the surface, Emiko's nostalgia is for a time and a place where she was treated almost like a human. Each scene of sexual torture is interrupted by the recollections of her past in Japan:

> Gendo-sama used to say she was more than human. He used to stroke her black hair after they had made love and say that he thought it a pity New People were not more respected … But that had been in Kyoto, where New People were common, where they served well, and were sometimes well-respected. Not human, certainly, but also not the threat that the people of this savage basic culture make her out to be. (Bacigalupi, 2009/2012, pp. 34-35)

Later on in the same chapter, as the customers torment her at the sex club, she thinks to herself that: “she is nothing but a silly marionette creature now, all stutter-stop motion … with no trace of the stylized grace that her mistress Mizumi-sensei trained into her” (Bacigalupi, 2009/2012, p. 37). However, her self-perception as a powerless automaton stems from the human centered thought that would not give her agency. Her condition as a survivor resembles Hock Seng’s condition, who is also treated as a subhuman in the Thai Kingdom. Hock Seng and Emiko are both other to the Thais as well as to the Grahamites, and they yearn for an unattainable past. Yet, their difference lies in what Fred Davis (1979) calls “reflective nostalgia” which is the attempt to reflect upon the significance of nostalgic recollection (p. 25). Her past where she was treated almost as a human is not compatible with her present condition; however, as opposed to Hock Seng, Emiko is able to critically reflect upon the significance of her recollections and the meaning of home: “Somewhere beyond the armies of war for shares of coal and jade and opium, her own tribe awaits her. She was never Japanese; she was only ever a windup. And now her true clan awaits her” (Bacigalupi, 2009/2012, p. 102). Unlike Hock Seng, Emiko does not allow her recollections to distort the reality of her condition in Japan. She yearns for the past but, at the same time, acknowledges her position in the eyes of her Japanese creators. She recalls that even though she was respected as a nonhuman being, she was still disposable: “[Emiko] remembers how Gendo-sama took her and showered her with affection and then discarded her like a tamarind hull” (Bacigalupi, 2009/2012, p. 252). Emiko does not allow her wistful yearning to cloud her judgment. Instead of compensating her longing with her new patron, Anderson Lake, she is in search of a windup enclave populated by the runaway robots without owners, in other words, in search of a home where she can be free.

While Anderson Lake's nostalgic regard for nature is related to his belief that the pre-plague world was akin to the Arcadian existence, there is also a contrasting attitude in the novel that is both complimentary and contradictory to the posthuman approach. The last approach comments on Lake's view from a critical point of view. Gibbons is an aging genetic engineer who is helping the Thai Kingdom to preserve their genetic treasure. As illustrated above, while the New People are shunned by the Thais and the Grahamites alike, Gibbons is the only character who shows hospitality to them. For Gibbons, the obsession with retrieving the lost fruits or the fixation with what is natural and unnatural are nothing but regressive reactions to change and progress. During a heated debate with Kanya, Gibbons draws attention to the absurdity of this dichotomy: "The food web you talk about is nostalgia, nothing more. Nature … *We* are nature. Our every tinkering is nature, our every biological striving. We are what we are, and the world is ours. We are its gods" (Bacigalupi, 2009/2012, p. 243). Gibbons' views show the interpretative side of nostalgia. In this respect, his view on the connection between nature and human contrasts Lake's beliefs. At the end of the novel, Gibbons finds Emiko among the ruins of the city and promises her the ability to procreate. As King (2016) observes, the human-machine alliance between Gibbons and Emiko is "an ideological negation of the White Shirts and Kanya" (p. 12). However, even though Gibbons seems to be engaging in a critique of human being's relationship with nature, his discourse is very much aligned with the Enlightenment ideology that perceives human as "the paragon of animals" when he emphasizes the position of human as the god of nature. Moreover, he continues by promising the garden of Eden to Kanya: "If you would just let me, I could be your god and shape you to the Eden that beckons us" (Bacigalupi, 2009/2012, p. 243). Even though he seems to be more conscious of the shortcomings

of the White Shirt ideology than the other characters, he also cannot overcome the paradoxes of his discourse, which relapses into Judeo-Christian register. As the other characters rely on the symbols, objects, or recollections of the past in the hope of a return to a coherent time, they seek refuge in nostalgia. The only difference, in Gibbons' case, is that nostalgia is not directed towards the past but the future. His seemingly pluralistic attitude is poisoned by the messianic tone of his dialogue.

As it is evident in the paradoxes of his own discourse, even Gibbons, who is the most critical of the conservative attitudes of the other characters, is not a viable model to rebuild the fictional world of *The Windup Girl* after the catastrophe at the end. He is very much transhumanist, as the following excerpt from his monologue to Kanya illustrates:

> You die now because you cling to the past. We should all be windups by now. It's easier to build a person impervious to blister rust than to protect an earlier version of human creature … You cling to some idea of a humanity evolved in concert with your environment over millennia, and which, you now, perversely, refuse to remain in lockstep with. (Bacigalupi, 2009/2012, p. 243)

While he criticizes the human's adherence to millennia-old ontological categories by clearly defining the boundaries between the human and the nonhuman, Gibbons' discourse lingers between the strands of posthumanism and transhumanism. Gibbons never makes it clear whether he wants to improve the human condition or create a new one until the end of the novel. While Gibbons employs a transhumanist approach by promising the improvement of human species when addressing Kanya, the same discourse shifts into a posthumanist one at the end when Gibbons plays the role of god for Emiko. What motivates his actions is his god complex.

Intertextuality as a tool can only function within a literary and artistic context. In *The Windup Girl*, the web of references is so dense that without breaking down each element, we cannot talk about the novel's main object of criticism. From

Christianity to Buddhism, and from East-West to human-nonhuman dichotomies, Bacigalupi weaves different conflicting ideas and identities together in a post-apocalyptic setting, which is combined with the elements of the cyberpunk genre. By deriving its themes from the most influential science fiction texts, *The Windup Girl* employs intertextuality to attack the Enlightenment claims for the stability and wholeness of the human subject from two different fronts. First, while relying on religious textual references, *The Windup Girl* offers an alternative posthuman future through its rewriting of the Biblical flood. Second, by bringing different textual sources together around the elements of cyberpunk, *The Windup Girl* comments on the questions raised by its sources.

The cosmology of *The Windup Girl* is built upon a synthesis of Judeo-Christian heritage and Buddhism. The novel's first scene opens with a direct quote from the Christian Bible: "*And he shall come with trumpets, and Eden shall return…*" (Bacigalupi, 2009/2012, p. 2). In this scene, Anderson Lake is looking at a *ngaw*, a fruit that survived the natural catastrophes due to the Thai Kingdom's genetic engineering. This modified quote from Isaiah 27:13 and Matthew 24:31 sets the setting for an apocalyptic world. For Lake, the resurrection of these fruits with genetic engineering is a sign of the resurrection of Jesus Christ. Yet, religion and religious symbols are disappearing with the ecological crisis. The White Shirt captain Jaidee watches the death of a bo tree with a lament: "A *bo* tree. Sacred. The tree under which Buddha attained enlightenment. And yet they could do nothing to save it. Not a single varietal of fig survived, despite their best efforts" (Bacigalupi, 2009/2012, p. 80). Again, in the following chapters, Jaidee mourns over the loss of these religious figures:

> [The Grahamites'] stories of Noah Bodhisattva, who saved all animals and trees and flowers on his great bamboo raft and helped them cross the waters

> … But there is no Noah Bodhisattva now. There is only Phra Seub who feels the pain of loss but can do little to stop it. (Bacigalupi, 2009/2012, p. 169)

Jaidee's lament is over the loss of spirituality, as well as over the lack of a savior such as Noah Bodhisattva. These references to Paul's letters and the disappearance of religious figures determine the reader's expectation from the novel's ending by setting an apocalyptic tone. Kanya and Gibbons are transformed into the figures of saviors at the end of the novel through a postmodern rewriting of the flood myth. At the end of the novel, one of the major characters, Kanya floods the entire city to protect the Thai seedbank from the agricultural monopolies. Kanya's motivation in the final act is to return to an irretrievable past. Yet, Donnelly (2014) reads Kanya's final act of resistance as "suggestive of an underlying ironic futility" (p. 165) since her revolt neither disrupts the capitalist expansionist system nor eliminates the monopolies. The final act merely prolongs or temporarily hinders the agricultural monopolies.

The novel's references to various religious texts, as well as the works of speculative fiction, are thematically important for two reasons. Firstly, Bacigalupi juxtaposes Mary Shelley's *Frankenstein* (1818), and Karel Čapek's *R.U.R. (Rossum's Universal Robots)* (1921), to support the novel's questioning of scientific knowledge and the blurring line between human and non-human. Frankenstein, or "the modern Prometheus", as the subtitle suggests, who steals the 'divine spark' to create life, becomes the victim of his own hubris at the end. Yet, what is being problematized in the novel is not so much the creation of life but the inability to face the consequences of one's actions. The monster, who has been abandoned in disgust, returns to his creator to reclaim his identity. It is precisely the same concern of human's confrontation with the non-human in Čapek's play. The sentient beings in the play are at the crossroads of human and machine. The only known survivors of

the said flood are Emiko, the social Darwinist scientist Gibbons, and one of his humanoid servants. This approach of cleansing the fictional world of *The Windup Girl* has its echoes in the Czech writer Čapek's dystopian play, as it has its origins in the Hebrew Bible. The robots in the *R.U.R.* are flesh and blood rather than machinery. The last scene of the play opens with Alquist, the last surviving human being, working on a formula to create robots, as they are unable to procreate, thus doomed to annihilation. Recognizing that two of the robots, Helena and Primus have developed human feelings and fallen in love, Alquist hails them as the new Adam and Eve: "Go, Adam, go, Eve. The world is yours" (Čapek, 1921/1928, p. 187). The same concern with the procreation and annihilation is also reminiscent of Shelley's *Frankenstein*, where Frankenstein refuses the monster's request of creating him a wife for fearing that their "joint wickedness might desolate the world" (Shelley, 1818/2008, p. 145). In the epilogue of *The Windup Girl*, Gibbons promises Emiko to create a new race of humanoids from her genetic material (Bacigalupi, 2009/2012, p. 359). While the flood in "Genesis" is caused by Yahweh's dissatisfaction with his creation and ends with his destructive flood, the act of retribution in *The Windup Girl* rewrites the flood narrative from an ecological and posthumanist perspective. Its environmental aspect comes from the fact that the flood is caused by the crimes of the humankind, that is, their role in global warming and the rising sea levels. The new narrative also assumes a posthumanist aspect since the only known survivors are two windups and a posthuman genetic engineer. Those who hold on to the millennia-old ontological distinctions perish with an act of divine retribution.

Secondly, in *The Windup Girl*, Bacigalupi revisits myths and religious stories both from the East and the West, and two canonical works from the West to scrutinize the concept of humanism. To have a better understanding of the novel's

interrogation of the humanist/modernist claims, we should investigate Bacigalupi's use of cyberpunk elements in *The Windup Girl.* Originating in the writings of Philip K. Dick, Isaac Asimov, and J. G. Ballard, cyberpunk is a particular mode of science fiction with an emphasis on corporate greed, advanced technology, and its effects. The most prominent examples include William Gibson's *Neuromancer* (1984) in literature, and Ridley Scott's *Blade Runner* (1982) which was loosely adapted from Philip K. Dick's novel *Do Androids Dream of Electric Sheep?* (1968). *Blade Runner* (1982), one of the influences of *The Windup Girl*, was also preoccupied with the question of what it means to be human through its interrogation of memory. *The Windup Girl* reproduces the same concerns and combines them in a cyberpunk setting of hyper-capitalism and advanced technology. As the cyberpunk novels are set in the far East and distant future, Bangkok serves as a bridge between the East and the West. While the setting is limited in one location and a distant time in the future, the concerns, whether it is global climate change or an ontological one, are universal.

As mentioned above, the cyclical understanding of time allows Bacigalupi to discover the implications of these concerns. From the point of view of *The Windup Girl*, these concerns are transhistorical, they exceed periods and societies. Whether it is a nineteenth-century novel or a genre-defining cyberpunk film, the questions keep surfacing without finding an answer. The only mutable thing is immutability itself. Even if the characters hold on to the millennia-old ontological categories or obsess over a time or a place that is impossible to reclaim, change comes for all of them. Gibbons is not only the mouthpiece of change and revolution but an homage to "the mad scientist" trope in its literary and artistic repertoire from Dr. Frankenstein to Dr. Eldon Tyrell in *Blade Runner*. However, as Frankenstein and Tyrell fell victim to

their own hubris, Gibbons not only survives at the end of the novel but also promises to create a new generation of windups.

As Stuart Tannock (2006) points out in "Nostalgia Critique", nostalgia has been regarded with skepticism in the literature (pp. 454-455), while utopian writing is deemed as forward-looking. However, I argue that utopian fiction and the sadness of separation from one's home have an intrinsic connection due to their conception of past, present, and future. Yearning is an aspect to utopian writing in the form of grief for the loss of Eden after 'the Fall'. On the other hand, there is an idealistic, forward-looking vision in the experience of nostalgia in the form of the recreation of the prelapsarian unity on earth. In other words, the yearning for the lost home and the drive to recreate it on earth coincide in the experience of nostalgia in utopian fiction. As we have seen in Anderson Lake's discourse which he adapted from the religious group in the novel, the Grahamites, there is this nostalgic utopian vision of recreating the human condition before the environmental catastrophe that devastated the earth. Nostalgia serves a practical purpose that gives certain characters a seemingly solid sense of existential security. It is, for them, a means to hold onto certain nationalist values, memories or objects of importance which connect them to secure ground. Yet, this reactionary state removes them from their current reality. In a sense, their obsession with a past that cannot be reclaimed is their tragic flaw. That leads us to our third point, reconciliation. If, nostalgic attitude is regressive and reactionary, what is the solution that *The Windup Girl* offer?

In "Passages, Margins, and Poverty: Religious Symbols of *Communitas*", Victor Witter Turner (1974/1987) argues that a temporary suspension or destruction of a formal social structure is required for a sense of *communitas* to be established (p. 251). *The Windup Girl*, in that respect, creates the prerequisite suspension of the

social order by destroying the city at the end. Yet, we shall avoid the pitfall of reading the novel's end as the creation of a utopian community. Anderson Lake, or the foreign devil as Hock Seng calls him, dies because of what he unwittingly helped generate, a disease that spreads from his king-spring factory which he used as a cover for his espionage. In the same vein, Gibbons' utopian project depends on a recreation of the garden of Eden. On the other hand, Hock Seng, who is complicit to the crimes committed by the agricultural companies, has his defining moment when he amends his selfish ways by sacrificing his life to save a Thai girl, named Mai. Even though he is homesick, Hock Seng's reflection on the nature of his yearning, that is rebuilding his family, helps him to bestow meaning upon his present condition and considers Mai as his daughter.

The Windup Girl is an understudied work of science-fiction, which is powerful in its implications for a future society that is haunted by the issues that are not altogether different from our present concerns. Set in the twenty-third century, *The Windup Girl*'s nostalgic past is our present. As Anderson Lake yearns for an idyllic past where "the food web" has not yet been unravelled by the manufactured plagues and global climate change, the dangers are imminent, and we are approaching a catastrophe, as Žižek claims. Bacigalupi's commentary on the anxieties of the twenty-first century neither provides with a blueprint for an ideal post-capitalist society nor gives a pessimist account. Instead, it is a meditation on the postmodern human condition from various perspectives. The novel's richness and multiple responses to the issues of home, longing and belonging resist neat classifications. Bacigalupi represents different nostalgic attitudes towards home without privileging one over the others. Hence, the multiplicity of voices creates a

composite image of reconciling this dystopian future with an ambiguous one, leaving the reader to contemplate on the uses of nostalgia.

CHAPTER 4

CONCLUSION

Margaret Atwood's *Oryx and Crake* (2003) and Paolo Bacigalupi's *The Windup Girl* (2009) are both post-apocalyptic novels that challenge the tenets of progressive, human-centered Western worldview through interrogating the politics of nostalgia. The cataclysmic events that brought humanity's end in both novels are a metaphor for the inconsistencies within our prevailing worldview and the environmental and ethical concerns of the twenty-first century: the effects of the ecological crisis and the consequences of biogenetic research. Writing on the difficulty of representing our present concerns in "On the Present in Literature", Ernst Bloch (1988) states that "without distance … you cannot even experience something; not to speak of representing it … all nearness makes matters difficult, and if it is too close, then one is blinded" (pp. 207-208). The immediacy of our problems, which Bloch likens to a light source, blinds our judgment and critical thinking. It is the function of utopian fiction to create a critical distance between the reader and their present (Bloch, 1988, p. 209). Atwood and Bacigalupi create this distance by imagining the logical conclusions of these environmental and ethical issues in the near future settings and question whether the civilization as we know can survive and flourish after such cataclysmic events. The time travel between the publication dates of both novels and the possible futures that await us is mediated through intertextual references and the critique of nostalgia in both novels.

Both novels question the characters' nostalgia for a time before the catastrophe and their desire to reconstruct the world in its untainted state to achieve a perfect state. As the fictional worlds of Atwood and Bacigalupi are destroyed by

genetically engineered diseases and environmental collapse, the characters yearn for authenticity and belonging in some romanticized version of their past. I argue that at the core of their yearning there is the fantasy of homogeneity. Nostalgia for home/homeland, for instance, appears as a common theme in both novels. Signifying belonging, comfort, and wholeness, home provides one with existential security. Both novels, however, point out the instability of home through exposing that home is constructed with eliminating and silencing different voices and histories. Yearning for a unified image of humanity obscures the characters' complicity in the political, social, and environmental problems. *The Windup Girl* criticizes the rise of the conservative and nationalist movements in the twenty-first century and their rhetoric of lost home through exposing that the idea of a homogeneous homeland is but a fantasy based on the exclusion of the other. Crake, on the other hand, achieves the apex of totalitarian control through his "Paradice Project". In *Oryx and Crake*, the Children do not have the freedom of choice because of genetic alteration. Through problematizing Crake's "Paradice", the novel criticizes genetic engineering as the modern practice of eugenics. In that sense, through exploring the implications of imagining home and stable and unified identity, both novels talk to the social and political concerns in their publication date.

In both novels, the wistful yearning for the past is not the main problem but a major symptom of a larger cultural and social problem. A utopian future cannot be built upon the identity politics of the past which is based on nostalgia, purity, and homogeneity of identity, and nationalism. Anderson Lake, who is complicit to the destruction of nature, or Captain Kanya, who longs for a unified, homogeneous nation, do not belong to the posthuman future of *The Windup Girl*. In the same vein, Snowman, who is unable to adapt to the hybrid future in *Oryx and Crake*, introduces

human-centrism to the Children's imagination and poisons Crake's already precarious utopia. Once the sense of historical continuity is severed in these dystopias, yearning for a bygone time or place is but a morbid engagement with an idealized past. This type of attitude is neither able to reflect on the consequences of human's past actions nor able to build a better future. In that sense, the nostalgia critique in both novels serves as a warning against the dangers and pitfalls of yearning for authenticity and belonging in some romanticized past.

The intertextual references to the eighteenth- and nineteenth-century texts in these novels are also used as tools to criticize a unified vision of human identity. The references to Mary Shelley's *Frankenstein* and Karel Čapek's *R.U.R. (Rossum's Universal Robots)* undermine the stability of human as a final and unified ontological category. The claim of human ascendancy over all non-human beings, the perfectibility of humans, the conquest of nature, and the ultimate belief in science and reason are the ideals that we inherited from the Enlightenment thought. Therefore, *Oryx and Crake* and *The Windup Girl* keep referring to the eighteenth- and nineteenth-century novels to contest, parody or support the ideas present in these texts. However, *Oryx and Crake* is mournful and nostalgic towards the death of human after the apocalypse, whereas *The Windup Girl* celebrates the death of human and the birth of human and non-human hybridity. The Buddhist circle of life connects these ideas in *The Windup Girl*. Karma, or *kamma*, as mentioned in the novel, is the constant flux of life which binds human and non-human together. Human's regressive attitude towards the non-human and the nostalgia for a unified, homogeneous, final human identity are discarded and a human and human-machine alliance is celebrated. As opposed to Paolo Bacigalupi's *The Windup Girl*, Margaret Atwood's *Oryx and Crake* does not revel in its implications of the death of the

human. Atwood's account of the environmental catastrophe and the extinction of humanity is bleaker than Bacigalupi's account. While *The Windup Girl* offers a more diverse, pluralistic future in the form of unification of human and non-human, as the hybrid beings in *Oryx and Crake* are the creations of out-of-control bioengineering, they threaten their habitat.

Both novels are also critical of scientific and technological utopianism that promotes the idea that with the right amount of capital, energy, and resources, science and technology can solve all our problems and they are able to recreate a secular paradise on earth. However, both novels expose the technological utopianism's roots in Enlightenment thought by referring to the texts from the eighteenth- and nineteenth-century texts, which are critical of ultimate belief in science and reason. In *The Windup Girl*, the idea that global capitalism is capable of meeting our social and ecological challenges is questioned. In *Oryx and Crake*, Crake's utopian plan does not only annihilate the entire human race but also cannot provide a viable solution to ecological problems.

Although I aimed to point out the political implications of nostalgia in the present study, for further studies on these novels, the role of nostalgia for the golden age can also be explored further from a psychoanalytic perspective. The recurring obsessions represented in *Oryx and Crake* and *The Windup Girl*; the fantasies of the golden age, the fixation with reviving/resurrecting one's lost home, and the obsession with a unified, homogeneous identity may serve as a case of primary narcissism. Furthermore, in future studies, how the history of human civilization and the creation story in *Oryx and Crake* are re-written in the other installments of the MaddAddam Trilogy can also be incorporated into the discussion of the religious references in these novels.

Oryx and Crake and *The Windup Girl* are far from recycling of centuries-old questions of what it means to be a human, or how to actualize an ideal state. Rather, they carry a sense of urgency. The problems and challenges that they depict, from environmental degeneration to the rise of nationalist movements, are our present concerns and problems. “Reveal” is at the etymological root of the word apocalypse. What these novels reveal about our present condition by imagining alternative apocalyptic scenarios is how unprepared we are to meet these social and ecological challenges. Both novels suggest that to be able to address the issues of environmental crisis and exponentially growing technologies adequately, we must devise a utopian future beyond our human-centered vision.

REFERENCES

Ankersmit, F. R. (2001). The sublime dissociation of the past: Or how to be(come) what one is no longer. *History and Theory, 40*(3), 295-323. Retrieved from https://www.jstor.org/stable/2677968

Appleton, S. A. (2008). Myths of distinction; Myths of extinction in Margaret Atwood's *Oryx and Crake*. In S. A. Appleton (Ed.), *Once upon a time: Myths, fairy tales and legends in Margaret Atwood's writings* (pp. 9-23). Newcastle upon Tyne: Cambridge Scholars Publishing.

Atwood, M. (2003). *Oryx and Crake.* New York: Nan A. Talese.

Atwood, M. (2011). *In other worlds: SF and the human imagination.* Toronto: Signal/McClelland & Stewart.

Bacigalupi, P. (2010). Yellow card man. In P. Bacigalupi, *Pump six and other stories* (pp. 163-195). London: Night Shade Books. (Original work published 2006)

Bacigalupi, P. (2012). *The windup girl.* San Francisco: Night Shade Books. (Original work published 2009)

Barthes, R. (1977). Rhetoric of the image. In R. Barthes, *Image text music* (S. Heath, Trans., pp. 32-51). London: Fontana Press.

Barzilai, S. (2008). "Tell my story": Remembrance and revenge in Atwood's *Oryx and Crake* and Shakespeare's *Hamlet*. *Critique: Studies in Contemporary Fiction, 50*(1), 87-110. doi:10.3200/CRIT.50.1.87-110

Bellamy, E. (2007). *Looking backward, 2000 - 1887*. New York: Oxford University Press. (Original work published 1888)

Benjamin, W. (1969). Theses on the philosophy of history. In H. Arendt (Ed.), *Illuminations* (H. Zohn, Trans., pp. 253-264). New York: Schonken. (Original work published 1955)

Bhabha, H. (1984). Of mimicry and man: The ambivalence of colonial discourse. *October, 28*, 125-133. doi:10.2307/778467

Bloch, E. (1988). On the present in literature. In E. Bloch, *The utopian function of literature: Selected essays* (J. Zipes, & F. Mecklenburg, Trans., pp. 207-223). Cambridge: The MIT Press.

Boym, S. (2001). *The future of nostalgia.* New York: Basic Books.

Čapek, K. (1928). *R.U.R. (Rossum's universal robots): A fantastic melodrama.* (P. Selver, Trans.) New York: The Theatre Guild. (Original work published 1921)

Catton, W. R., & Dunlap, R. E. (1980). A new ecological paradigm for post-exuberant sociology. *American Behavioral Scientist, 24*(1), 15-47. doi:10.1177/000276428002400103

Claeys, G., & Sargent, L. T. (Eds.). (1999). *The utopia reader.* New York and London: New York University Press.

Davis, F. (1979). *Yearning for yesterday: A sociology of nostalgia.* New York: Free Press.

Defoe, D. (2007). *Robinson Crusoe.* New York: Oxford University Press. (Original work published 1719)

Derrida, J. (2001). Structure, sign, and play in the discourse of the human sciences. In J. Derrida, *Writing and difference* (A. Bass, Trans., pp. 351-370). London: Routledge. (Original work published 1967)

Derrida, J. (2008). The animal that therefore I am (more to follow). In J. Derrida, *The Animal that therefore I am* (D. Wills, Trans., pp. 1-51). New York: Fordham University Press. (Original work published in 2006)

Donnelly, S. (2014). Peak oil imagining in Cormac McCarthy's *The road* and Paolo Bacigalupi's *The windup girl*. *English Academy Review: Southern African Journal of English Studies, 31*(2), 156-169. doi:10.1080/10131752.2014.965428

Dusenbury, D. L. (2018, November 20). Utopia's borders. *American Affairs*. Retrieved from https://americanaffairsjournal.org/2018/11/utopias-borders/

Ellingson, T. J. (2001). Lescarbot's noble savage and anthropological science. In T. J. Ellingson, *The myth of the noble savage* (pp. 21-34). Berkeley and Los Angeles: University of California Press.

Etzler, J. A. (1836). *The paradise within the reach of all men, without labour, by powers of nature and machinery: An address to all intelligent men.* London: John Brooks.

Ferguson, J. (2005). Decomposing modernity: History and hierarchy after development. In A. Loomba, S. Kaul, M. Bunzi, A. Burton, & J. Esty (Eds.), *Postcolonial studies and beyond* (pp. 166-181). Durham and London: Duke University Press.

Ferrando, F. (2013). Posthumanism, transhumanism, antihumanism, metahumanism, and new materialism: Differences and relations. *Existenz, 8*(2), 26-32.

George, R. M. (1999). Home-countries: Narratives across disciplines. In R. M. George, *The politics of home* (pp. 11-34). Berkeley and Los Angeles: University of California Press.

Hageman, A. (2012). The challenge of imagining ecological futures: Paolo Bacigalupi's *The windup girl*. *Science Fiction Studies, 39*(2), 283-303. doi:10.5621/sciefictstud.39.2.0283

Hofer, J. (1934). Medical dissertation on nostalgia. *Bulletin of the Institute of the History of Medicine, 2*(6), 376-391. Retrieved from www.jstor.org/stable/44437799

Hollinger, V. (2006). Stories about the future: From patterns of expectation to pattern recognition. *Science Fiction Studies, 33*(3), 452-472. Retrieved from https://www.jstor.org/stable/4241464

Hutcheon, L. (1988). Theorizing the postmodern: Toward a poetics. In L. Hutcheon, *A poetics of postmodernism: History, theory, fiction* (pp. 3-21). New York and London: Routledge.

Hutcheon, L. (2002). Representing the postmodern. In L. Hutcheon, *The politics of postmodernism* (pp. 1-28). London and New York: Routledge.

Jameson, F. (1991). The cultural logic of late capitalism. In F. Jameson, *Postmodernism, or the cultural logic of late capitalism* (pp. 1-54). Durham: Duke University Press.

Jenkins, K. (2004). What history is. In K. Jenkins, *Re-thinking history* (pp. 6-32). New York: Routledge.

Kakutani, M. (2003, May 3). Lone human in a land filled with humanoids. *The New York Times*. Retrieved from https://www.nytimes.com/2003/05/13/books/books-of-the-times-lone-human-in-a-land-filled-with-humanoids.html

Kant, I. (1996). An answer to the question: What is enlightenment? In J. Schmidt (Ed.), *What is enlightenment: Eighteenth-century answers and twentieth century questions* (J. Schmidt, Trans., pp. 58-64). London: University of California Press. (Original work published 1784)

King, D. (2016). Biogenetics, the nation, and globalization in Paolo Bacigalupi's critical dystopias. *MOSF Journal of Science Fiction*, *1*(1), 4-16.

Locke, J. (2004). Book 2: Of ideas. In J. Locke, *An essay concerning human understanding*. Retrieved from https://www.earlymoderntexts.com/assets/pdfs/locke1690book2.pdf. (Original work published 1690)

Lovejoy, A. O., & Boas, G. (1973). Prolegomena to the history of primitivism. In A. O. Lovejoy, & G. Boas, *Primitivism and related ideas in antiquity* (pp. 1-22). New York: Octagon Books.

Marks de Marques, E. (2015). Children of Oryx, children of Crake, children of men: Redefining the post/transhuman in Margaret Atwood's MaddAddam trilogy. *Aletria*, *25*(3), 133-146. doi:10.17851/2317-2096.25.3.133-146

Martin, B., & Mohanty, C. T. (1986). Feminist politics: What's home got to do with it? In T. De Lauretis (Ed.), *Feminist studies/Cultural studies* (pp. 191-212). London: The MacMillan Press.

Marx, K., & Engels, F. (2015). *The communist manifesto.* London: Penguin Books. (Original work published 1888)

Marx, K. (1971). The position of labour in capitalist and communist society. In K. Marx, & D. McLellan (Ed.), *The Grundrisse* (D. McLellan, Trans., pp. 141-143). New York: Harper and Row.

Marx, K. (1982). The development of machinery. In K. Marx, *Capital: A critique of political economy* (B. Fowkes, Trans., Vol. 1, pp. 492-508). London: Penguin Books.

Mitchell, T. (2000). The stage of modernity. In T. Mitchell (Ed.), *Questions of modernity* (pp. 1-34). Minneapolis: University of Minnesota Press.

Montaigne, M. (1993). On cannibals. In M. Montaigne, *Essays* (J. M. Cohen, Trans., pp. 105-119). London: Penguin. (Original work published 1958)

Moretti, F. (1987). The Bildungsroman as symbolic form. In F. Moretti, *The way of the world: The Bildungsroman in European culture* (pp. 3-13). London: Verso.

Morton, O. (2003, May 9). Oryx and Crake. *Entertainment Weekly*. Retrieved from https://ew.com/article/2003/05/09/oryx-and-crake/

Parry, J. (2009). *Oryx and Crake* and the new nostalgia for meat. *Society and Animals, 17*(3), 241-256. doi:10.1163/156853009X445406

Rao, E. (2006). Home and nation in Margaret Atwood's later fiction. In C. A. Howells (Ed.), *The Cambridge companion to Margaret Atwood* (pp. 100-113). New York: Cambridge University Press.

Riskin, J. (2003). The defecating duck, or, the ambiguous origins of artificial life. *Critical Inquiry, 29*(4), 599-633. doi:10.1086/377722

Rosaldo, R. (1989). Imperial nostalgia. *Representations, 26*, 107-122. doi:10.2307/2928525

Rubenstein, R. (2001). *Home matters: Longing and belonging, nostalgia and mourning in women's fiction*. New York: Palgrave.

Schmeink, L. (2016). The Anthropocene, the posthuman, and the animal. In L. Schmeink, *Biopunk dystopias: Genetic engineering, society and science fiction* (pp. 71-118). Liverpool: Liverpool University Press.

Selisker, S. (2015). "Stutter-stop flash-bulb strange": GMOs and the aesthetics of scale in Paolo Bacigalupi's *The windup girl*. *Science Fiction Studies, 42*(3), 500-518. doi:10.5621/sciefictstud.42.3.0500

Shelley, M. (2008). *Frankenstein, or the modern Prometheus.* New York: Oxford University Press. (Original work published 1818)

Somay, B. (2010). From ambiguity to self-reflexivity: Revolutionizing fantasy space. In B. Somay, *The view from the masthead: Journey through dystopia towards an open-ended utopia* (pp. 183-198). Istanbul: Istanbul Bilgi University Press.

Sontag, S. (2005). In Plato's cave. In S. Sontag, *On photography* (pp. 1-19). New York: Rosetta Books. (Original work published 1973)

Southey, R. (1837). Botany bay eclogues: Elinor. In R. Southey, *The poetical works of Robert Southey* (Vol. 2, pp. 91-75). London: Longman, Orme, Brown, Green, and Longmans.

Spivak, G. C. (1985). The Rani of Sirmur: An essay in reading the archives. *History and Theory, 24*(3), 247-272. doi:10.2307/2505169

Swift, J. (2005). *Gulliver's travels.* New York: Oxford University Press. (Original work published 1726)

Tannock, S. (2006). Nostalgia critique. *Cultural Studies, 9*(3), 453-464. doi:10.1080/09502389500490511

Turner, V. W. (1987). Passages, margins, and poverty: Religious symbols of communitas. In V. W. Turner, *Dramas, fields, and metaphors: Symbolic action in human society* (pp. 231-271). Ithaca and London: Cornell University Press. (Original work published 1974)

Watt, I. (1951). *Robinson Crusoe* as a myth. *Essays in Criticism, 1*(2), 95-119. doi:10.1093/eic/I.2.95

Wolfe, C. (2010). What is posthumanism? In C. Wolfe (Ed.), *What is posthumanism?* (pp. xi-xxxiv). Minneapolis: University of Minnesota Press.

Žižek, S. (2010). *Living in the end times.* London: Verso.