

THE UNIVERSITY OF HULL

**The Posthuman Condition and the Problem of Youth in Twenty-First
Century Fiction and Poetry (2000-2010)**

being a Thesis submitted for the Degree of Doctor of Philosophy
in the University of Hull

by

Waha Sawas, MA

February 2016

Contents

Introduction	1
Chapter One: The Clone as Alien: Past Human versus Posthuman in Twenty-First-Century Fiction and Poetry	61
Chapter Two: The Computerised Body of the Future: Information Technology and the Techno-Teen in Twenty-First-Century Poetry and Young-Adult Dystopian Fiction	120
Chapter Three: Mortality, Legacy, and Familial Sacrifice in Twenty-First-Century Poetry and Dystopian and Post-Apocalyptic Fiction	189
Conclusion:	243
Bibliography	285

Introduction

In the twenty-first century, poetry, speculative fiction, science fiction, and young-adult fiction introduce new representations of youth in relation to contemporary social changes that arise from the application of technology to everyday life. The figure of youth in twenty-first-century dystopian, post-apocalyptic, and science-fictional settings is used to emphasise the future challenges facing the younger generation. This thesis breaks new ground in examining contemporary literature that engages with youth and the repercussions of certain scientific developments while addressing the interstitial value of young-adult fiction, science fiction, and poetry. The originality of my argument lies mainly in the comparative analysis of poetry and fiction in the twenty-first century focusing on youth and the impact of scientific development on contemporary society and culture. This thesis also demonstrates how the boundaries between the different genres are gradually diminishing when engaging with the topics of technology and youth which is becoming more important to authors and readers than the literary categorisation of texts.

This thesis explores the contemporary literary representations of modified bodies in twenty-first-century fiction and poetry. These representations include organically modified bodies (Chapter One) as well as artificially devised ones (Chapter Two). Another primary objective is to investigate the literary representations of social attitudes towards the generation of youth through adult characters such as parents and guardians (Chapter Three). The following three chapters aim to identify the literary standpoints regarding the cultural dominance of new technologies in contemporary societies, especially since

advanced technology made its way into people's lives through social media and the internet. I will examine poetry and narrative poetry as well as post-apocalyptic and dystopian fiction and young-adult fiction in the twenty-first century representing the role of advanced technology in creating the posthuman.

Three major points arise from my exploration of the topic of youth in relation to technology and the posthuman in contemporary literature. The first is the way posthuman bodies are treated as vulnerable individuals who are worthy of empathy and compassion. In this respect, I argue that the recurring representations of modified bodies in contemporary literature help accept and identify with the alien or the posthuman individual. Thus, such literary works demonstrate how the globalisation of information technology makes it easier for social individuals to understand that the Other is another form of the self. The second finding shows how the discussion of new technologies in literature creates new forms of narrative since the majority of the literary works discussed in this thesis have interstitial qualities. They are sometimes difficult to categorise because they draw on different genres. This leads to the third finding which proves that the preoccupation with the topics of youth and technology in contemporary fiction and poetry is not a literary trend that will diminish in the near future because these two topics are closely related to the discussion of the posthumanism which is constantly evolving and acquiring new shapes with the help of advanced science.

Through introducing the main topics and primary texts, this introductory chapter focuses on genre overlap in the twenty-first century while engaging with

literary-critical views on the development of young-adult fiction since the cloning of Dolly the Sheep and the way contemporary poetry represents technology and youth. This chapter reconsiders twenty-first-century poetry from a new perspective related to science and technology and the way poetry is adapting to contemporary concerns about the impact of scientific developments on life. I will argue that Interstitial Arts have helped new literary genres and subgenres to emerge. The final section of this chapter will provide an overview of Chapters One, Two, and Three.

When Genres Overlap: Hybridity and Interstitial Literature in the Twenty-First Century

According to American author, editor and contributor to *The Interstitial Arts Foundation*, Terri Windling, in 'Artists without Borders' (2003 *Interstitialarts.org*), the Interstitial Arts movement represents 'art that moves between worlds, or comes to us out of the borderlands' (Windling, *Interstitialarts.org*). This explains why some contemporary authors such as Margaret Atwood and Kazuo Ishiguro reject the classification of science fiction for their novels. In 'Genre Benders: How Interstitial Fiction Is Bringing Speculative Fiction and Literary Fiction Together' (2009), New Zealand poet, author, and editor of interstitial literature, Tim Jones, mentions that authors such as 'Margaret Atwood in writing *The Handmaid's Tale* and *Oryx and Crake*, refused to admit that they were writing SF at all, much to the frustration of authors within the SF field.' (Jones 9). Atwood prefers the term 'speculative fiction' to describe her work. In an interview about *The Handmaid's Tale* (1985), Atwood says that this novel 'certainly isn't science fiction. Science fiction is filled

with Martians and space travel to other planets, and things like that.' (Atwood qtd. in Wisker 122).

According to American novelist, Ursula K. Le Guin, in her review of Atwood's *The Year of the Flood*, Atwood justifies her position by suggesting that the level of scientific fictionalization is what distinguishes speculative fiction from science fiction arguing that 'everything that happens in her novels is possible and may even have already happened, so they can't be science fiction.' (Le Guin *Theguardian.com* 2011). However, Margaret Atwood's *Oryx and Crake* (2003) discusses some important social issues such as child pornography and the effect of technology on society despite being set in an imaginary future world and containing science-fiction elements. The Crakers, the modified humans in the novel, are the product of a breakthrough discovery in genetic engineering. Research in stem-cell technology and gene editing makes it possible to predict that genetic modification may be applied comprehensively to humans in the near future. Kazuo Ishiguro's *Never Let Me Go* (2005), which will be discussed in Chapter One, is less directly involved in the scientific topic than Atwood's novel, but, there are similarities between the two narratives. They both have an adult first-person narrator whose present is deeply rooted in a devastating past. They are also set in an alternative world in which childhood is both abused and neglected. In this respect, the two genres of science fiction and speculative fiction do not seem to be mutually exclusive. Atwood's 'arbitrarily restrictive definition seems designed to protect her novels from being relegated to a genre still shunned by hidebound readers' (Le Guin *Theguardian.com*, 2011). However, contemporary literary responses to

scientific developments feature in other genres including fiction, poetry, and also drama.

The various debates on biological sciences and computer technology highlight the confusion regarding the use of correct terminology, but these differences hardly matter in interstitial terms which disregard the necessity to follow certain genre rules in literature. For example, Atwood's definition of speculative fictions as representing ideas that already exist in reality in fantastic or dystopian settings as opposed to the completely invented world of ideas in most science fiction stories does not apply to many science fiction classics, such as Aldous Huxley's *Brave New World* (1932). *Brave New World*, which is usually described as a dystopian science fiction novel, is not set in space – as Atwood suggests science fiction narratives usually are – and it also employs some references to reality such as the scientific debate regarding reproductive technology which, again, refutes Atwood's claim that aspects of reality are exclusive to speculative fiction, and that they do not exist in science fiction. Interstitial literature solves this controversy regarding the genre placement of literary works. Tim Jones, who is a contributor to interstitial arts, is an advocate of the idea that contemporary literature could successfully manifest itself without having to abide by strict genre principles. Jones' co-edited poetry anthology, *Voyagers: Science Fiction Poetry From New Zealand* (2009), which will be explored in the following chapters, won the *Sir Julius Vogel Award* for best Collected Work in 2010. He suggests that speculative fiction is only 'a portmanteau term for science fiction, fantasy and horror' (Jones 7) which makes Atwood's argument that *Oryx and Crake* belongs to speculative fiction but not science fiction seem unconvincing. However, this controversy regarding genre

definition signals the relevance and dominance of scientific and technological innovations in contemporary literature generally which will be explored in this thesis.

Atwood's concerns about definitions of science fiction as a genre and the widespread interest of authors in the impact of new developments in science provide the context for this thesis, which argues that contemporary literary genres are overlapping. The forms these contemporary genres take are more hybrid than definitive; poetry may appear in a narrative form engaging with features typical of science fiction (for instance, Deryn Rees-Jones' *Quiver* (2004)), and novels could feature aspects of science-fiction, dystopian fiction, and young-adult fiction at the same time (such as M. T. Anderson's *Feed* (2002)). Hybridity as a term applied to social sciences and literature is associated with postmodernism and contemporary culture. Hybridisation in contemporary terms has been theorised by Homi Bhabha who builds on Jacques Derrida's postmodern philosophical studies on continental culture inspired by his multicultural background. However, Bhabha is 'credited with taking the concept of hybridity from biology to language and culture' (Kraidy ix). Marwan M. Kraidy in *Hybridity, Or the Cultural Logic of Globalization* (2005) suggests that hybridity is the outcome of the marriage between two or more different cultures and the privilege of having access to more than one voice. As argued by Antony Easthope in 'Homi Bhabha, Hybridity and Identity, or Derrida Versus Lacan' (1998), 'Bhabha develops his notion of hybridity from Mikhail Bakhtin, who uses it to discriminate texts with a "single voice" (lyrical poems) from those with a "double voice" (such as novels, whose narrator cites characters speaking in their own voice - these texts are hybridic).' (Easthope

145-146). However, hybridity in contemporary literature is not limited to Bakhtin's 'double voice' although it does not exclude it since new literary forms offer new platforms of expression. In the twenty-first century new forms of writing surfaced contributing to the new hybrid face of literature. Internet publishing including online journals and personal blogs are part of contemporary literary hybridization which, according to José Augusto Mourão in 'Hybridization and literature' (2006), 'is no longer the exception, but a central form of communication and knowledge, especially of new media.' (Mourão, *inst.at* 2006). My thesis analyses the focus on Bakhtin's 'single' and 'double' voices in hybrid texts that investigate the Other which could be an alien, a posthuman, or a psychologically conflicted human.

In the introduction to Part III, 'Cultural Hybridity', in *Contemporary British Fiction* (eds. Richard J. Lane, Rod Mengham, and Philip Tew 2003), Lane and Tew suggest that '[h]ybridity is not simply an issue of migration but of plural cultural identities.' (143). Twenty-first-century 'plural cultural identities', according to Lane and Tew, extend beyond the geographical and political borders of nations. This hybridity defines contemporary literature as well. Lane and Tew suggest that:

In the world of a variable culture and many sources of identity, books written in this vein are undertaking what might be seen as an interrogation of culture. They combine the real, the illusory and the often fantastic. Thereby, they offer new viewpoints. Such texts question prejudices, often playfully. A variety of cultural elements are refashioned by their very illusion of texts, aware of the potential within hybrid forms. Each one

becomes a space of new possibilities, supporting marginal cultures by admitting their presence and questioning the very factors that make them marginal or neglected. (Lane and Tew 144)

Contemporary literature is open to experimentation with multi genres and, sometimes, unexpected combination of opposing themes. The 'prejudices' (144) such literature overcomes, as established by Lane and Tew, work their way up from encouraging the experimentation of form (for example, the use of both prose and verse in Deryn Rees-Jones' *Quiver* (2004)) to the discussion of controversial topics related to the treatment of the Other in social and political contexts (Malorie Blackman's *Noughts and Crosses* (2001)). This liberal manifestation of contemporary literature and culture is relevant to the discussion of the concept of the 'other' in twenty-first-century literature in the following chapters in the sense that the alien subject in the texts discussed is often introduced with curiosity rather than rejection. Like Haraway's *Cyborg Manifesto*, Bhabha's cultural hybridity encourages readers 'to remain sure of themselves even when confronted with the appearance of difference on all sides' (Easthope 148). Literature is also witnessing a major transition that transcends the limitations of genre. Hybrid or interstitial literature is the new 'Other' in contemporary literature which readers and literary critics are invited to explore and appreciate.

According to Tim Jones, interstitial fiction is 'helping stories that previously fell in the gap between literary fiction and speculative fiction [...] to find a home' because 'it has developed out of science fiction and fantasy' and 'it relates to both speculative fiction and literary fiction.' (Jones 7). In an interview

with American author and contributor to *The Interstitial Arts Foundation*, Delia Sherman, which appeared in *Journal of the Fantastic in the Arts* in 2004, Sherman establishes the open borders of interstitial arts by arguing that:

A work of art should be judged by its own terms. This sounds self-evident, but it is not, in fact, what happens. In a culture where the boundaries are growing increasingly blurred, where it is not always easy even to draw a firm line between high art and low, the popular discourse remains remarkably conventional. Art is clearly in flux. It's time to bring all the people who are interested in that flux together, whatever their backgrounds or disciplines, so that they can add their voices to what I find a very interesting conversation. (Pilinovsky and Sherman 250).

M. T. Anderson's *Feed* (2002), which will be discussed in Chapter Two, is an example of a narrative in 'flux' (250), according to Sherman. Although it is categorised as young-adult fiction, it also features dystopian, speculative and science fiction aspects. Such works belong to the kind of fiction that 'crosses the borders between fiction genres, or exists in multiple categories at once' (Jones 7), according to the definition of interstitial fiction as set by *The Interstitial Arts Foundation*. The term 'interstitial' refers to 'literature, music, visual and performance art found in between categories and genres' (Jones 7). Tim Jones' 'Genre Benders' (2009) traces the development of speculative fiction since the beginning of the twentieth century and explains how it became separated from literary fiction to the point where it eventually transcends genre categorization by gradually taking an interstitial form. Since speculative fiction is still struggling to occupy a status that makes it equal to literary fiction, Jones

finds that the 'impetus behind the concept of interstitial fiction came from the speculative fiction side' (8) because the categorisation of a certain literary work as interstitial liberates the text from being considered inferior.

What is relevant to the argument in this thesis is that the majority of the works that will be discussed in the following chapters resemble aspects of cyberpunk since these narratives elaborately deal with social crises of the future brought about by the misuse of technology. William Gibson's *Neuromancer* (1984) is a relevant example of the literary representation of the control of technology over humans. Gibson's novel, which won the *Hugo*, the *Nebula*, and the *Philip K. Dick* awards of science fiction, is a striking example of medical science offering a cure to a vulnerable individual in exchange for his expertise in computer technology that might bring down the nation. Cyberpunk in the 1980s 'married thriller narratives and a noir sensibility with near-future SF in tales of how pervasive information technology interfaced with human life and culture.' (Jones 9). However, twenty-first-century fiction about technology is no longer read as mere cyberpunk. Such narratives have graduated to an interstitial position. Margaret Atwood's *Oryx and Crake* (2003) and Cormac McCarthy's *The Road* (2006) feature cyberpunk aspects, but, at the same time, they have the characteristics of dystopian and post-apocalyptic fiction. They also explore the topic of alienation in a more profound manner by focusing on the unique experience of the individual. The alien no longer comes from outer space; humans have become the new alien figure in such narratives in which individuals undergo certain physical and psychological changes with which they try to reconcile. In this respect, contemporary literature is more about reconciliation rather than rejection. Jones persuasively argues that it has always

been a challenge for science fiction writers 'to make the transition to becoming respected authors of literary fiction' (Jones 9), but since authors of literary fiction such as Atwood, McCarthy, and Ishiguro are borrowing aspects of science fiction and cyberpunk in their fiction, the lines that separate one literary genre from the other become blurred, especially in the twenty-first century. Interstitial literary thinking started to flourish towards the end of the twentieth century making 'a sustained attempt to tear down or break through the wall dividing speculative fiction from literary fiction.' (Jones 9). This thesis, therefore, examines both poetry and fiction including the different subgenres of fiction demonstrating the diversity of twenty-first-century literature; the narratives are evolving to reflect 'an impulse or a mood' without 'becoming overly codified.' (Jones 10). Since it is still in its beginnings, interstitial fiction could help many recently published works which reflect creativity and 'willingness to let the story have its head' (Jones 10) to become free from genre constraints. This thesis will explore one of Jones' contributions to interstitial fiction which is *Voyagers: Science Fiction Poetry from New Zealand* (2009), a poetry collection edited by Tim Jones and Mark Pirie from an interstitial perspective.

Although there are many critical explorations of the topic of science in contemporary literature, there is little published critical material considering the relationship between contemporary fiction and poetry of the twenty-first century in analysing aspects of prospective future life and the future generation represented by young adults. Since my thesis focuses on crossing genre borders with reference to genre hybridity and interstitial literature, I will examine literary texts published in the first decade of the twenty-first century that deal with the topic of youth and focus on the technological side of science in

dystopian and post-apocalyptic settings. This particular time span (2000-2010) engages with topics related to genetic engineering, information technology, and cloning which was officially announced in July 1996 with the birth of Dolly the Sheep as the result of an experiment in stem cell biology at the Roslin Institute by Ian Wilmut and Keith Campbell. In addition, the proliferation of internet-based technology, social media, and virtual communications that influenced science-fiction writers and poets started in 1998 with Google, the most comprehensive search engine on the web. This world of social media started to expand in 2004 with *Facebook* although *Geocities*, one of the first social media websites, was launched a decade earlier, but there was limited public access to the internet at the time. The different chapters in this thesis highlight the representation of the contemporary status of the relationship between technological sciences and future generations in fiction as well as poetry. Tim Jones suggests that 'personal communicators and personal computers are now part of everyday life,' but 'the literary reputations of science fiction, and speculative fiction in general, have not risen in parallel.' (Jones 11). Therefore, exploring contemporary texts that are varied in terms of genre but selected for their engagement with contemporary scientific phenomena in this thesis proves that what literary critics consider as less reputable genres such as young-adult fiction and science fiction poetry are beginning to flourish and become more creatively engaged with contemporary society values.

I will explore contemporary young-adult fiction as discussed by Marc Aronson (2001) and Heather Booth (2007) in relation to notions of posthumanism and transhumanism introduced by Francis Fukuyama (2002) and N. Katherine Hayles (1999). This thesis argues that contemporary literature

has focused on the future of the younger generation witnessing recent technological advances in contemporary culture. Literary texts analysed in this thesis indicate cultural fear of technology represented by contemporary dystopian and post-apocalyptic fiction drawing briefly upon arguments by Fredric Jameson in *Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions* (2005). I will also apply the idea of accepting the Other in twenty-first-century fiction and poetry, drawing on Donna Haraway's 'A Cyborg Manifesto' (1991).

Issues regarding the literary value of science fiction are becoming less relevant to writers and critics as well as the public than they used to be in the twentieth century since science and technology are now embedded in everyday life. *Publishers Weekly* mentioned a recent study conducted in 2012, *Understanding the Children's Book Consumer in the Digital Age*, an ongoing biannual study from Bowker Market Research that explores the changing nature of publishing for kids.' (*Publishersweekly.com*, 2012). The study shows that 55% of young-adult-fiction readers are adults. In an article published in *The Guardian*, Georgina Howlett suggests that young-adult narratives 'have appealed to so many people beyond their target audience ... [because a] dominant part of any book's success is its escapist appeal, and YA excels at providing this. The fantastical worlds and sheer inventiveness and imagination of YA is rarely rivalled by adult literature' (Howlett, *Theguardian.com* 2015). Escapism here refers to a human search for a better life; for victory over everything that might control and limit the human ability to survive. Readers find in novels such as Suzanne Collins' *The Hunger Games* (2008) heroes that enrich the imagination and inspire the human quest for

freedom and justice. On the other hand, Atwood's, Ishiguro's, and McCarthy's novels may appeal for young readership because they discuss the topic of childhood and youth although they are not classified as young-adult narratives.

One of the issues highlighted by Margaret Atwood is the definition of science fiction and the recurrent stereotypical representation of the genre as an escapist form of literature. With reference to interstitial fiction, I argue that this notion is widely inaccurate because there is no clear distinction between science fiction and speculative fiction which Atwood tends to associate with her fiction. The term 'speculative fiction' in the twentieth century has been officially introduced by Robert Heinlein, a very well-known twentieth-century science fiction author, in an editorial essay in *The Saturday Evening Post* in 1947 as a synonym for science fiction excluding fantasy (Heinlein, 1947). In 'The Time Machines' (2000), Michael Ashley argues that Heinlein's short stories which appeared in *The Saturday Evening Post* were 'science fiction only by convention' since they 'focused squarely on the human element.' (196). This demonstrates that literary criticism always considers the degree to which contemporary speculative fiction or science fiction is engaged with real-world problems. This is represented in literary discourse by portraying modern society in twenty-first-century dystopian or post-apocalyptic literature under the dominion of science. Literature could, in this respect, be offering an account of the public prospect of the future of humanity governed by science being unprosperous and infertile. Although not written for children and young adults, Margaret Atwood's *Oryx and Crake* (2003) and Kazuo Ishiguro's *Never Let Me Go* (2005) both focus on children and young adults. These representations of the young-adult character in science fiction settings in both contemporary

literature and film have become increasingly popular. Since the beginning of the twenty-first century there have been many adaptations of science fiction literary texts in films. *Never Let Me Go* has already been released as a film with the same title in 2010. *The Hunger Games* dystopian young-adult series by Suzanne Collins (2008-2010) has also been made into a film sequel with the first part released in 2012. This series quickly became extremely popular among film viewers, adults, young adults, and children, a point which will be discussed later in the chapter. The pessimistic approach to addressing the topic of the social consequences of scientific developments exemplified by *Oryx and Crake* and *Never Let Me Go* represents a general public concern regarding the possibility that science will govern every human choice in the near future. This thinking existed since the early nineteenth century in Mary Shelley's *Frankenstein* (1818) which exemplifies society's fear of science; the irrational and over-ambitious scientist who experiments without regard for any ethical or social consequences. Tim Jones argues that:

Though Dr Frankenstein's anguished creation had Gothic antecedents, the spark that brought him to life was scientific, not supernatural: thus, *Frankenstein* marked a break from its Gothic predecessors, and was the first novel which set out to investigate the powers, limits and moral challenges of the scientific method and scientific experimentation. (8)

This thesis will demonstrate that in a similar way to that used by Shelley to liberate her work from the Gothic values of the nineteenth century, twenty-first-century authors of fiction and poetry about science and technology are avidly

trying to break away from the limitations of the cyberpunk tradition of the previous century.

Contemporary literature portrays science as the primary subject of utopian/dystopian thinking in the twenty-first century. Many twenty-first-century fiction and poetry works about youth and science are dystopian or post-apocalyptic in nature. One example discussed in Chapter Three is Cormac McCarthy's *The Road* (2006), a post-apocalyptic narrative tackling the issues of environmental crisis and the devolution of humans by resorting to savagery and cannibalism in a world where Earth's natural resources are utterly exhausted. However, the reasons behind this devastation are unknown. The reader is left unclear about whether McCarthy's world in *The Road* is anti-utopian or dystopian since both terms are distinctly different, according to Gordin, Tilley, and Prakash in the introduction to *Utopia/Dystopia: Conditions of Historical Possibility* (2010):

A true opposite of utopia would be a society that is either completely unplanned or is planned to be deliberately terrifying and awful. Dystopia, typically invoked, is neither of these things; rather, it is a utopia that has gone wrong, or a utopia that functions only for a particular segment of society. (Gordin, Tilley, and Prakash 1)

The deliberate creation of chaos and destruction is the essence of anti-utopian thinking while contemporary dystopias often emerge after humans' attempts to create a better world fail. I argue that the majority of twenty-first-century post-apocalyptic narratives are more dystopian than anti-utopian in nature since they usually portray how advanced technology could cause total destruction of the

world despite the good will of its creators to produce a better world. Crake, the mad scientist in Atwood's *Oryx and Crake* (2003), for example, destroyed the entire human race and created the new generation of perfect humans, making Atwood's a post-apocalyptic dystopia. Crake's intentions were not evil according to the way he views the world; hence, he cannot be seen as the typical anti-utopian hero according to the above definition of anti-utopia. This is clearly not the case in *The Road*, but one could assume that it is in the absence of a body of authority that holds itself responsible for world destruction. McCarthy's focus on human violence when it comes to survival suggests that, although it is not clear whether the destruction was deliberate or not, this post-apocalyptic world was brought about by humans trying to improve the quality of life, and, in other words, to survive, but they failed in the process. However, through introducing the character of the Father as a representation of human moral conscience, McCarthy suggests that salvaging the damage inflicted on humanity is still possible because of the willingness and resilience of the Father to save the Child.

In 'Utopia as Method, or the Uses of the Future' (2010), Fredric Jameson, argues that:

[T]he last gasp of a properly utopian vision, the last attempt at a utopian forecast of the future transfigured, was a rather perverse one: so-called free-market fundamentalism as it seized the moment of globalization to predict the rising of all boats and the wonder-working miraculous powers of worldwide unregulated global markets. (Jameson, 22)

The models of real-world Utopia, according to Jameson, are those based on materialism and 'global markets' (22). Science, in this respect, is another commodity, advertised and utilized to serve political and economic utopias. This includes, but is not limited to, information technology, robotics, medical engineering, and the media which dominate contemporary society and control the ecosystem. Since these global technological models are spreading rapidly, contemporary dystopian literature is concerned with envisioning what will happen to the world if these models fail to deliver their utopian prospects. In 'Fredric Jameson: The Utopic/Dystopic Imagination' (2013) on *Social Ecologies* website, American essayist and contributor to *Social Ecologies* website, Steven Craig Hickman, defines dystopia as 'the outcome of the failure of the myth of progress' arguing that 'Jameson portrays utopian imaginings as a failure beyond which we cannot go' (Hickman, *socialologies.wordpress.com* 2013). Hickman agrees with Jameson's approach to introducing dystopia as the 'failure' of utopian visions. Therefore, literary representations of failed societies and post-apocalyptic worlds which reflect this dystopian point of view express human uncertainty regarding whether the world is headed towards a brighter future or a terrifying apocalypse.

In dystopian terms, science equally carries hope for a better future and poses a threat to the most fundamental utopian visions if deviated to serve destructive ends. Hickman argues that in the modern world 'the commodification of utopian desire has far outstripped our ability to envision either dystopic critiques of the present or utopic dreams of the future' (Hickman, *socialologies.wordpress.com* 2013). Modern technologies such as online libraries or scanning machines in supermarkets are treated by the public as

mere commodities in the sense that they are either considered a useful facility or a sort of robotic enemy made to replace humans. This testifies to the tendency of literature to represent this kind of uncertainty regarding the future. Such uncertainty is often represented in contemporary young-adult fiction which portrays science as a means of bringing about chaos and loss as Jameson suggests when he refers to the dystopian vision in George Orwell's *Nineteen Eighty-Four* (1949) in *Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions* (2005). Contemporary fiction for young adults portrays similar dystopian worlds, and according to Jameson, dystopian fiction represents an escalating social 'anxiety about losing the future which is analogous to Orwell's anxiety about the loss of the past and of memory and childhood.' (Jameson 233). Novels such as McCarthy's *The Road* (2006) and *Blackman's Noughts and Crosses* (2008) express this uncertainty regarding the future of youth through the representation of dystopian nightmares.

However, only Blackman's novel is categorised as a young-adult dystopia which 'is becoming a wide-spread social phenomena and drifting into the academic world as well', according to Hickman in 'YA Dystopian Novels: Strange Tales of Youth' (2013) on *Social Ecologies* website. The argument here testifies to the interstitial nature of contemporary literature including young-adult fiction with dystopian aspects. Hilary S. Crew, Farah Mendlesohn, Leona W. Fisher, and Mark Aronson are among the literary critics who have focused on the representation of technology in young-adult fiction, often exploring the social aspect in such works by linking the utopian/dystopian anxieties of the real world regarding the future of youth to their literary representations in young-adult fiction. Hickman argues that:

Dystopia has become one of the most popular teenage genres. This sudden rise in YA Dystopian literature has gained as much criticism as praise. Reactionary conservatives within the neo-liberal world seen [sic] in these decadent fictions of dystopic mayhem a form of post-modern relativism and nihilism. While radical critics see the emancipatory visions of a post-capitalist vision of theory and praxis working its self out in the young minds of those who will inherit the wastelands of neoliberalist collapse. (Hickman, *social/ecologies.wordpress.com* 2013)

Literary critics tend to either argue for or against the relevance of young-adult fiction to contemporary literary debate. I argue that such controversy is what gives contemporary young-adult fiction a fundamental value as a genre since the attention it received since the beginning of the twenty-first century has dramatically increased. Twenty-first-century young-adult fiction provides insight into the contemporary anxieties about the future through the portrayal of young-adult characters who are trying to cope with the aspects of contemporary life including technology. In describing the relationship between present time and historical time in utopian and dystopian terms, Fredric Jameson associates transhumanism with anti-Utopia. He argues that 'the loss of (bourgeois) individuality is certainly one of the great anti-Utopian themes.' (Jameson 7). However, although 'the transcendence of individual life has found rather different representations in Science Fiction, where it often functions as a readjustment of individual biology to the incomparably longer temporal rhythms of history itself' (Jameson 7), this 'loss of individuality' (Jameson 7) translates itself into manufactured or altered human forms that function under a strict social code in dystopian worlds in contemporary fiction for young adults. In

Atwood's *Oryx and Crake* and Ishiguro's *Never Let Me Go*, for instance, the modified humans represented by the Crakers in the former and the children of Hailsham in the latter exhibit a clear lack of individuality. They are a generation of enhanced humanity, but their lack of individual thinking and dependence on authoritative figures of ordinary humans highlights contemporary authors' attitude towards transhumanism which Jameson describes as an aspect of anti-Utopia. Atwood's and Ishiguro's novels are not in any means described as young-adult books; however, they do share with other contemporary young-adult narratives (such as M. T. Anderson's *Feed* (2002) and Suzanne Weyn's *The Barcode Tattoo* (2004)) aspects of posthuman, transhuman, and dystopian thinking.

Thus, my thesis focuses on Hickman's second classification of literary criticism arguing for the importance of contemporary young-adult fiction as a multi-faceted genre. McCarthy's *The Road* (2006), Ishiguro's *Never Let Me Go* (2005), and Blackman's *Noughts and Crosses* represent the generation of youth as subject to manipulation drawing attention to social concerns regarding the future of youth in contemporary culture. In 'YA Dystopian Novels: Strange Tales of Youth' (2013), a part of the *Dystopian Reflections* series on Social Ecologies website, Steven Craig Hickman argues that young-adult dystopian fiction that portrays youth as victim usually shows some kind of 'imposed tyranny by some form of totalized vision of governance over the commons. For those that do not fit into this totalized vision there is either death or exclusion.' (Hickman *socialecologies.wordpress.com* 2013). This 'exclusion', as Hickman suggests, is the essence of Foreignness and Alienation which was explored by Julia Kristeva in *Strangers to Ourselves* (1997). Exclusion is also discussed in Elaine

Scarry's *The Body in Pain: The Making and Unmaking of the World* (1985) and Jo Shapcott's *Of Mutability* (poetry collection 2010), both arguing that physical as well as emotional pain imposes some kind of alienation that separates the affected individual from their social surroundings. This sense of alienation characterises contemporary culture which constantly imposes 'codes of discipline that excludes [sic] the other, the stranger, the one who does not fit into the vision of paradise we have invented.' (Hickman, *social ecologies.wordpress.com*). This recalls the previous discussion about how the utopian/dystopian vision of contemporary culture is blurred when faced with social 'codes' (Hickman, *social ecologies.wordpress.com*) that aim to construct the necessary social hierarchies for a better more organized future society while, in reality, these hierarchies only help to escalate the sense of alienation among the different components of society.

Cloning is one of the most recurrent topics in contemporary young-adult fiction that is concerned with representing this sense of social alienation. The clone character represented in fiction usually feels different from her/his peers in the sense that s/he does not fit into the social norm of having biological parents and siblings. In 'Not So Brave a World: The Representation of Human Cloning in Science Fiction for Young Adults' (2004), Hilary S. Crew argues that the 'discourses on human cloning in young adult texts are part of the larger ethical, moral, and scientific discourse on cloning.' (Crew 205). Human cloning only exists in fiction. Still, the sense of alienation the clone evokes in the world of the novel resembles the various examples in reality where a child or a group of children become excluded or bullied for deviating from the norm or not fitting into a specific social code. Crew explores a variety of young-adult narratives

about cloning in order to shed light on the applicability of such narratives to current literary and social debates about alienation.

Among the texts she examines (Ira Levin's *The Boys From Brazil* (1976), Aldous Huxley's *Brave New World* (1932), and C. J. Cherryh's *Cyteen* (1988)) is Nancy Farmer's *The House of the Scorpion* (2002), a young-adult novel in which the protagonist is Matt, a boy who has been cloned from a rich and merciless landlord for organ-donation purposes. According to Crew, 'Farmer's novel enables young readers to explore what it means to be human through the narrated thoughts and feelings of Matt, who struggles to understand and deal with the terrible significance that the term "clone" has for him.' (Crew 206-207). Fidelito, one of the 'Lost Boys', the less fortunate children in the novel, says that 'people's souls are like gardens. [...] you can't turn your back on someone because his garden's full of weeds. You have to give him water and lots of sunshine.' (Farmer, 312). This boy's words question the essence of foreignness and alienation in society where difference means exclusion. From this perspective, the role of young-adult fiction 'is to teach teenagers about the real world by using young protagonists' (Hickman, 2013) who can mediate the message to young readers that embracing difference means accepting the other and being open to life possibilities. Although such 'books are very didactic [...] what we discover in them is not a message to be learned so much as the possibility of a new mode of life' (Hickman, *socialcologies.wordpress.com* 2013). In 'The Alien Body' in *Archaeologies of the Future* (2005), Fredric Jameson argues that 'genuine difference, genuine alienness or otherness, is impossible and unachievable, and that even there where it seems to have been successfully represented, in reality we find the mere structural play of purely

human themes and topics.' (Jameson 124). This liberal approach to difference as mentioned by Jameson suggests that no matter what someone's colour, ethnicity, and social background are, they will eventually be able to see that their experiences are mirrored in those of others. Contemporary young-adult fiction adopts the same open-minded approach to difference and, thus, aims to reconcile the way society views the other. Although the dystopian nature of most of the contemporary young-adult narratives that will be discussed in the following chapters expresses a conservative attitude as far as posthumanism is concerned, this sort of rejection is directed towards the principle of creating posthumans rather than towards the posthumans themselves. The way these texts deal with the posthuman other is to a great extent liberal. What distinguishes these twenty-first-century texts from those written in the previous century is the way the authors represent the alienated subject. The clones or the modified humans, for instance, are not represented as the enemy the way cyborgs have been in twentieth-century fiction. While literature is still somehow technophobic, it is gradually becoming less and less xenophobic, and this is a major step in the literary history of speculative fiction, science fiction, and dystopia.

The Preoccupation with Young-Adult Fiction and the Posthuman Other in the Twenty-First Century

Since the publication of E. Leyland's *The Public Library and the Adolescent* in 1937 as the first critical study about young-adult literature, the genre has developed and changed dramatically throughout the years with more extensive critical material dealing with young-adult publications becoming

popular. In *Exploding the Myths: The Truth about Teenagers and Reading* (2001) in which he provides an account of the history of young-adult fiction, Marc Aronson suggests that contemporary young-adult fiction is stepping into the adult-fiction territory by arguing that it 'overlaps with every other genre of literature, from books clearly for children to those entirely aimed at adults, and yet it has some identity of its own.' (Aronson 52). For example, in the same way that J. D. Salinger's *The Catcher in the Rye* (1951) attracted a young readership despite the fact that this 'book was originally published for adults' (Owen 11), adult readers can also enjoy reading Malorie Blackman's young-adult novel, *Noughts and Crosses* (2001), half a century later. Another example is Jon Scieszka's *The Stinky Cheese Man and Other Fairly Stupid Tales* (1992) which was published as a children's book but eventually became widely appreciated by older young-adult readers. The evolution of young-adult writing since the 1990s stepping out of 'age limit and format of the teenage "problem" novel,' according to Mary Owen in 'Developing a Love of Reading: Why Young Adult Literature is Important' (2003), helped young-adult fiction establish a 'closer connection with adult literature.' (Owen 12). The incorporation of science in everyday life has created a common interest between adults and young adults who are now facing new mental and psychological pressures with '[s]ocietal changes, technological advances and the mass media [which] have, in many ways, pushed young people to an earlier maturity.' (Owen 12). Thus, categorizing fiction for the different age groups has become less important to readers nowadays because the common human experience that fiction represents is what matters to readers and since 'there is virtually no topic that is off-limits' (Owen 12) in today's young-adult fiction, especially with the

emergence of new publication methods such as internet self-publishing on blogs and wikis. However, this expansion of the young-adult-fiction thematic frame is not limited to topics about science. Young-adult fiction is becoming increasingly involved with discussions about society, politics, foreignness, illness, and other human issues. In support of this view Marc Aronson stresses that 'modern' young adult fiction 'engages the profoundest, deepest, and richest issues that we face as a nation.' (Aronson 8). Since Aronson specialises in American history, here, he is specially referring to the status of contemporary young-adult fiction in American society. However, my research explores a range of young-adult and science fiction authors from different parts of the world including the UK, US, New Zealand, and Canada. Young-adult fiction has evolved over the last decade showing inventiveness in themes and styles in order to reflect and keep pace with present-day 'matters of ethnicity and race, issues of faith and religion, markers of gender and sexuality, problems of home and society, choices of politics and belief, concerns about money and the future.' (Aronson 8). One example is Malorie Blackman's socio-political young-adult dystopian series, *Noughts and Crosses* (2001-2008), which was well-received by the young-adult readership despite its didactic political approach. Young-adult fiction is stepping forward towards adapting a more genuine approach to young-adult-related issues addressing real-life problems of the younger generation including those relating to scientific innovations of the present.

Since twenty-first-century science fiction is witnessing a transition from space-related themes to detailed explorations of the effects of advanced technology on the future of humanity represented by young characters, young-

adult fiction has started to examine the relationship between the younger generation and advanced technology. Thus, Mary Owen argues that 'there is no doubt that the rapid pace of technological change in the way information is presented and received will continue to have a significant influence on the YA novel of the future' (Owen 15). Melanie Debra Koss also refers to the role of electronic communication in shaping the character of today's teens which is represented in young-adult-fiction characters in her PhD thesis, *A Literary Analysis of Young Adult Novels with Multiple Narrative Perspectives Using a Sociocultural Lens*, arguing that children and young adults 'are becoming increasingly competent in and reliant on aspects of digital technology in all areas of their lives' (Koss 3). This wider exposure of the public, whether being adults, teens, or even children, to science and technology is a contemporary phenomenon that found its way into literature mainly since the beginning of the twenty-first-century. Science as a cultural phenomenon is a recurrent topic in contemporary literature which argues that new information technologies equate to biological and genetic science in its effect on youth; while the latter changes the body, the former contributes to reshaping human perception of the self and the other. Although literature about science did exist in the previous century, I am arguing that twenty-first-century science fiction offers a credible approximation to reality since the technology represented in much of this fiction already exists or is still being developed in reality. Therefore, science fiction in the twenty-first century could be an almost-believable representation of what human life and society would look like in the near future. Computer chip implants, organ transplants, cloning, cyber tracking and other modern technologies are represented in science fiction, but, of course, in a fictional,

futuristic, and exaggerated manner. This revolutionary phenomenon in contemporary literature has influenced the young-adult novel since, Koss argues, '[t]he young adult market has expanded from its traditional format of the problem novel into the many forms and genres it takes today' (Koss 5) including social and political dystopia as well as science fiction, according to Koss' thesis on young-adult fiction (2008).

Attitudes towards the choice of literary reading material for the different age groups are becoming more and more liberal. However, in the twenty-first century, books could still be categorized according to the target audience. In *Understanding Children's Literature* (1999), Peter Hunt argues that '[c]hildren's books are different from adults' books: they are written for a different audience, with different skills, different needs, and different ways of reading' (Hunt 3-4). However, the twenty-first century has allowed for a multitude of reading materials to become available for children and young adults to access that are not exclusive to books. As mentioned above, hybridity in contemporary literature is not only limited to the different modes of print or web publishing, but to the content of the reading material itself. According to Heather Booth in *Serving Teens Through Readers' Advisory* (2007), 'researchers have discovered the academic benefits of self-selected recreational reading. When teens voluntarily read about topics of interest to them, their attitudes about reading improve' (Booth 9) regardless of the nature of the reading material. This approach is characteristic of the contemporary age, promoting freedom of thinking and choice for individuals which naturally extends to education and literary taste of teens and young-adults. Booth argues that this makes forms of writing such as '[g]raphic novels or comics, newspapers, magazines, [...] and topics of interest

on the Internet [...] significant forms of reading from which [...] [readers] gain information' (Booth 9) despite being considered as less-valuable 'nonscholastic' (Booth 9) reading materials. On the other hand, books for adults such as Dan Brown's *The Da Vinci Code* (2003), according to Booth, could also be a stimulus for young-adults or teens to seek answers about the 'religious mysteries' (Booth 11) that the novel evokes as well as the novel itself being packed with information about 'art history' (Booth 11). The same could apply to some nineteenth-century novels such as Jane Austen's *Pride and Prejudice* and *Emma* which could also appeal to a young readership. However, the youth figure in Victorian times was not as well-defined as it is today. A nineteen-year-old girl is considered to be an adult ready to get married and have children. However, contemporary adventure and mystery novels which Booth refers to here offer a chance for teenagers to explore horizons that are new to them through books that are not directly aimed at their age group and a way in which adults or parents can reflect back on their teenage self in young-adult books and rediscover the emotional and mental makeup of their younger descendants. Booth also includes another example regarding teens' reading choices in a young female reader who commented on Asta Bowen's *Wolf: The Journey Home* (1997) as the kind of book that interested her. Bowen's novel, which has been nominated for the *American Library Association's Teens' Top Ten* award in 2006, offers an autobiographical narrative of a female wolf that has unwillingly left her pack to start a new life in a different land. The novel captures the attention of teen readers by the excellent personification of the animal, serving as a connection between the different worlds of humans and animals. Similarly, the exploration of the representation of cloning in contemporary fiction

and poetry in the following chapters highlights the new attitude towards alien bodies by enabling them to speak to the reader directly. However, while Booth suggests that teenagers resort to this kind of book as an 'escapist' (11) way of dealing with their own age crisis by encountering worlds and characters different from their own, I interpret these reading choices as a way of embracing difference and accepting the Other. The Other, in this respect, could be an older individual, someone with a different personality from one's own, or even another species; an animal or an alien.

Twenty-first-century young-adult narratives including those with science fiction elements may attract a larger audience because of the universal scientific and social concerns that they introduce. I am arguing that since advanced science and technology dominate contemporary society and culture, it is to be expected that fiction about science and technology attracts readers from different age groups. Thus, contemporary science fiction opened new horizons for contemporary literature to transcend age restrictions and topic limitations. The release of J. K Rowling's *Harry Potter* (1997) and J. R. R. Tolkien's *The Lord of the Rings* (1954) as films in 2001 exemplifies this appeal of young-adult fictional material to the adult audience as well as the commercial value of such film productions. However, there is another aspect to this increasing popularity of these film adaptations of young-adult and children's books. Contemporary culture is drawn to the image of youth through market advertising and imaging. This infantilisation of contemporary culture is, according to Benjamin R. Barber in *Consumed: How Markets Corrupt Children, Infantilize Adults, and Swallow Citizens Whole* (2008), 'closely tied to the demands of consumer capitalism in a global market economy' (Barber 3). Since the film industry has become a part of

the consumer market advertising images of heroic characters played by young celebrities, film-makers have been constantly looking for new young-adult-fiction material to adapt because of the large audience this kind of film seems to attract, the largest percentage of which are adults accompanying their children or even by themselves. This phenomenon has already peaked with the film adaptation of Stephenie Meyer's young-adult *Twilight* series (2005 - 2008) starting in 2008 and, later, Suzanne Collins' *The Hunger Games series* (2008 - 2010) starting in 2012. Another recent young-adult novel that also received great success both as a book and a film adaptation in 2014 is John Green's *The Fault in Our Stars* (2012). These contemporary Bildungsroman narratives feature a main young-adult individual trying to fit into the world around them. There is an aspect of alienation in characters' attitude towards society or family, but there is also an emphasis on how they could overcome being an outsider by embracing their own differences and those of others whom they consider foreigners. This is similar to Asta Bowen's *Wolf* novel. The main female character in *Twilight* falls in love with a vampire who seems to understand what she is going through more than her friends and family do. From a similar perspective, Green's *The Fault in Our Stars* (2012) offers the reader or the film viewer an insight into the life of young cancer patients, those of whom healthy people might not have the slightest knowledge of what they are experiencing emotionally and mentally (aside from physically) unless they are in direct contact with an ill person. The novel tackles a sensitive subject which is the feeling of alienation of children who are cancer patients. These children are not only physically vulnerable but also socially estranged by their peers because of their illness. The use of illness as a metaphor of foreignness will be discussed

comprehensively in Chapter Three in fiction and poetry with reference to Julia Kristeva (1991) and Susan Sontag (1989). The former's exploration of the concept of 'Otherness' and the latter's discussion of the idea of physical pain lie at the heart of my argument about the relationship between the sense of alienation in contemporary society and adults' fear for the future of their children epitomized in the experience of illness and physical pain.

Young-adult narratives, such as Blackman's *Noughts and Crosses* (2008), show some kind of thematic profundity by introducing topics such as racial discrimination, teenage mothers, maternal sacrifice, and physical illness. This evolution of the young-adult novel might have been influenced by economic and political reasons, but what is relevant to my purposes is that the literary structure of young-adult books transformed from the problem novel focusing on typical teenage life issues to a more mature form embracing the change in character of the contemporary young-adult individual. According to Mark Aronson, a children's and young-adults' author, three main techniques were adapted by publishers to achieve this transformation: 'the series, the changing meaning of YA, and the exceptional book' (57). The series style proved to be a financially successful and attractive way of gathering readers who will be attracted to the characters in the first book of the series so that they feel curious to read the other parts once published. In addition, 'the changing meaning' (Aronson 57) of the young adult with the introduction of more responsible and mature young-adult characters in these books means that they would appeal to the younger audience finding a new idol or role model in the revolutionary young-adult character as well as to the older audience who will appreciate the level of emotional maturity and social awareness of these

characters. Adults' interest in young-adult culture in literature and film could be attributed to the faster-paced maturity of teens and the shorter age of innocence in our society which is now governed by advanced technology, social media, and the Internet which make it easier for children and teens to have their own virtual private life from an early age seeking whatever information they want and being able to experience knowledge of the world independently without supervision (Owen, 2003 and Aronson, 2002). In 'Welcome to your juvenescence: why keeping up with the kids is becoming a trend' (2014), Rosamund Urwin comments on *The Hunger Games: Mockingjay* film release in 2014 as being 'an infantilising virus [which] is spreading through our culture' (standard.co.uk 2014). The contemporary 'trend' which 'is most pronounced in film' (Urwin, standard.co.uk 2014) is attributed to a growing obsession to stay young or become younger which is not just characterised by 'physical aging slowing down' (Urwin, standard.co.uk 2014) but in character and mentality as well.

According to Urwin, people now refuse to age whether gracefully or 'disgracefully' preferring 'not to grow up at all' (Urwin, standard.co.uk 2014) probably because of 'a wholesale biocultural transformation that is turning large segments of the human population into a "younger" species – younger in looks, behaviour, mentality, lifestyles, and, above all, desires', according to Robert Pogue Harrison's study of age and aging in contemporary culture in *Juvenescence: A Cultural History of Our Age* (2014). The twenty-first century is gravitating towards ideals of youth that challenge and transcend the limitations of age. Harrison suggests that '[i]f it is true that the child is father of the man, it is because the child obliges the man to become a father, that is, to develop a

degree of social, political, and moral maturity' (40). Contemporary society is devoted to youth. Adult parents, for example, familiarize themselves with everything related to children from books and educational material to toys and TV shows. Since contemporary society is becoming more and more technologically oriented, reshaping the life of the younger generation accordingly, the number of adult guardians who read young-adult fiction about technology and science in order to familiarise themselves with the contemporary aspects of youth is bound to increase.

The growing preoccupation in twenty-first-century culture with the topic of youth is evident in contemporary literature in which this topic usually appears in speculative forms of fiction, whether it is dystopian, adult, young-adult, or science fiction. Contemporary literature represents human life as largely dependent on technology, and, therefore, tends to assume that in the future, human experience will be even further embedded in the use of new technologies. I am taking the first successful cloning experiment in 1996 of Dolly the sheep (the creation of a mammal by somatic cell nuclear transfer), which was the scientific highlight of the end of the twentieth century, as the first major inspiration for literary writings in the new century. This experiment was the outcome of research in developmental biology and cell biology by scientists Ian Wilmut and Keith Campbell at Roslin Institute in the University of Edinburgh. It has been documented by Wilmut and Campbell in an essay, 'Viable offspring derived from fetal and adult mammalian cells' (1997). Since cloning is described here as an 'offspring derived from [...] cell', the initial public reaction to this experiment was that the artificial creation of a new life in a laboratory has finally become a reality. This breakthrough in stem cell biology 'captured the public

imagination and instantly became a scientific sensation [...] but [it] also [drew] anger from some who raised questions about the ethics of cloning.' (*The Guardian*, 2012). Apparently, the cloning debate in the scientific community is different from that among the public. In 'The Importance of Dolly' from the Public Interest section on the *Roslin Institute* website, it is mentioned that

Dolly was also important because she captured the public imagination. A clone, a copy has been a very discernible strand within science fiction. The idea that there might be an exact copy of oneself somewhere around is a theme that has been pursued in science fiction and the prospect that it might be possible to clone a human being excited a lot of speculation and interest. (*Roslin Institute, roslin.ed.ac.uk*)

However, the imagination of the public was inspired by the cloning of Dolly in a fictional and more imaginative sense. It represents the possibility of encountering one's duplicate self or, in a more dystopian sense, creating an army of humans without history who could be used to destroy cultures and nations. On the other hand, scientists seem to be concerned with the therapeutic aspects of cloning because '[a]fter the birth of Dolly, Campbell ... was particularly interested in assisted reproduction in both animals and humans, and studied ways to develop reproductive technologies in farm animals to enhance breeding and maintain food security.' (*Theguardian.com*, 2012). On the other hand, public perception of cloning often concerns fears about the possibility of extending it to humans, especially in literature which started to interpret cloning as a means to create new life or the production of a revolutionary generation of enhanced humans.

Following years of research in bioethics, Arlene Judith Klotzko, who established the *Financial Times Magazine's* weekly Science Matters column, comes to the conclusion that '[h]uman reproductive cloning' is 'a matter of when, not a matter of if.' (104). Nevertheless, in *A clone of your own? The Science and Ethics of Cloning* (2006), Klotzko identifies two types of cloning: one is perceived to be 'natural' in that it involves 'embryo splitting; the rare but naturally occurring event that produces identical twins, and nuclear transfer, the technique used to create Dolly the sheep.' (xxiii). Cloning is, hence, not a scientific invention but a natural phenomenon comparable to that of identical twins, two different humans with different personalities shaped by their individual experience. Artificial human cloning would also result in humans that are different from the original cell source; that is humans who have not chosen to be created this way. Therefore, Klotzko argues that:

Given current levels of scientific understanding about the cloning process itself and the precise causes of the many abnormalities affecting cloned animals, any attempt at human cloning is patently immoral and would result in ostracism of the scientist by his or her peers. [...] The very thought of human cloning elicits fears that extend far beyond questions of safety. Unfortunately, cloning has become a proxy for more generalized fears about genetic engineering and about science and scientists out of control. (xxi)

Klotzko explains that although cloning of humans is not expected to happen in the near future from a scientific perspective, public opinion is already concerned about the negative consequences of prospective human cloning. These

concerns associate cloning with transhumanism or posthumanism, and they are translated in literature through the representation of a new generation of genetically modified humans with no family ties or connections to the past. Contemporary fiction about cloning tends to associate it with the status of future younger generations and expand the argument to discuss how life would be in the future if cloning was conducted on humans. Atwood's *Oryx and Crake* (2003) and Ishiguro's *Never Let Me Go* (2005), both shortlisted for the *Man Booker Prize* in 2003 and 2005, respectively, are among the most popular contemporary novels about this topic. Contemporary literature is associating the increasing dependence on technology with biological enhancement of humans which results in changes to the body itself and affects the family unit and other social relationships. This is exemplified by James Dashner's young-adult fiction series, *The Maze Runner* (2009-2011), which narrates the story of a group of young adults subjected to a series of tests by an organization training them to become the new generation in society. Their memory was completely erased so that they do not remember anything from their past including their families; the only thing they remember is their names. They would venture through the walls of the maze and get stung by the 'Grievors', the biotechnologically-designed monsters because 'They needed *memories*.' (from *The Maze Runner*, Dashner 165). The following chapters in this thesis will benefit from these representations of advanced technology in fiction in exploring the term 'contemporary' in young-adult fiction, dystopian literature, and poetry in light of the 'posthuman' state in which, according to Francis Fukuyama, human and machine become inseparable.

Both Francis Fukuyama and N. Katherine Hayles, in their groundbreaking studies of the relationship between literature and science, agree that in the near future modern science could change the public perception of what is human. Posthumanism and transhumanism are the two main terms used to describe future humans. Although these terms are often used interchangeably, they are different in the way they express the relationship between humans and advanced technology. Andy Miah argues that Fukuyama's interchangeable use of these two terms suggests that he 'is actually interested in neither of them' (Miah 4) since, according to Miah, both carry negative connotations. Professor of English, Kevin LaGrandeur, argues that there is a clear distinction between posthumanism and transhumanism in 'What is the Difference between Posthumanism and Transhumanism?' (2014) on the IEET website (Institute for Ethics and Emerging Technologies) which was founded in 2004 by bioethicist James J. Hughes and philosopher Nick Bostrom. LaGrandeur explains that while the interest of posthumanism in identifying modified species in terms of their information processing capabilities 'shift[s] the focus of humanness from our outward appearance to those information patterns' (LaGrandeur 2014), transhumanism 'is the project of modifying the human species via *any* kind of emerging science, including genetic engineering, digital technology, and bioengineering.' (LaGrandeur 2014). Nick Bostrom in 'Human Genetic Enhancements: A Transhumanist Perspective' (2003) also suggests that transhumanism 'promotes an interdisciplinary approach to understanding and evaluating the opportunities for enhancing the human condition and the human organism opened up by the advancement of technology.' (493) In this sense, transhumanism is concerned with improving the human both physically and

mentally while posthumanism may endanger human existence by its tendency to replace humans by more advanced information-processing forms. In other words, posthumanism means replacing rather than enhancing the human. Fukuyama's *Our Posthuman Future* (2002) disregards these differences by taking a somewhat moral and ethical trajectory in arguing against posthumanism and transhumanism as denoting the death of humanity. He believes that human enhancement and replacement are two sides to one coin while Hayles' *How We Became Posthumans* (1999) employs the term 'cyborg' to express the human desire to acquire a borderless body, one that transcends the limitations of gender and ethnicity and emancipates the human mental capacities from the biological constraints of the body. In this respect, Hayles' argument corresponds with LaGrandeur's in establishing that the transhuman state could mark a positive stage in the course of human history:

[M]y dream is a version of the posthuman that embraces the possibilities of information technologies without being seduced by fantasies of unlimited power and disembodied immortality, that recognizes and celebrates finitude as a condition of human being, and that understands human life is embedded in a material world of great complexity, one on which we depend for our continued survival. (Hayles 5)

According to Anthony Miccoli in *Posthuman Suffering and the Technological Embrace* (2010), Hayles' posthuman 'trajectory continues to define the leading edge of posthumanist discourse' (Miccoli x). However, Miccoli believes that Hayles' 'tendency [...] to elevate the "cyborg" as an ethereal, almost transcendent "other"' (x) is somehow exaggerated. I argue that Hayles' views on

the posthuman topic are valuable in the sense that they constitute a middle ground between Fukuyama's anti-posthumanism standpoint and Gregory Stock's pro-posthumanism argument in *Redesigning Humans: Our Inevitable Genetic future* (2002) and *Redesigning Humans: Choosing Our genes, Changing Our Future* (2003). In 'The Last Human' (2003) Stock argues that '[b]ioethicists and scientists alike worry about the consequences of coming genetic technologies, but few have thought through the larger implications of the wave of new developments arriving in reproductive biology.' (Stock 1). Stock believes that the future of humanity is 'technoprogressive', as Andy Miah describes it in his chapter on posthumanism in Gordijn's and Chadwick's *Medical Enhancements and Posthumanity* (2007). This technoproggression refers to the posthumanism that technology creates. In her review of Stock's *Residing Humans* (2002), Brenda Maddox argues that Stock 'looks at gene manipulation and artificial reproduction and sees hope, health and challenge. If we can make better human beings, why not do it?' (Maddox, *Theguardian.com* 2002). Stock believes that advanced technology is the solution to human limitations.

But, as far as literature is concerned, the moral and ethical legitimacy of posthuman thinking is usually questioned through dystopian narratives that portray the negative consequences of biological manipulation. This ethical debate about the influence of technology on humans is reflected in twenty-first-century literature which discusses topics such as human cloning in future societies and how to deal with the newly genetically-engineered bodies as in Margaret Atwood's *Oryx and Crake* (2003) and Kazuo Ishiguro's *Never Let Me Go* (2005) among others. These literary narratives adopt Fukuyama's argument

regarding the effects of technology on humans warning against the possibility that the human species could be gradually altered in the future by incorporating intelligent machines within the human organism. However, contemporary literature seems to approach posthumanism more cautiously through separating between the concept and the subject. Literature adopts a more liberal attitude towards the posthuman body. Donna Haraway's 'A Cyborg Manifesto' (1991) offers an account of how 'cyborg' bodies, which could be human bodies, have become a part of social reality. She argues that each human could be a cyborg because of the dichotomy between our 'imagination and material reality' (Haraway 150). This hybrid identity, according to Haraway, has become a feature of modern societies:

By the late twentieth century, our time, a mythic time, we are all chimeras, theorized and fabricated hybrids of machine and organism; in short, we are cyborgs. The cyborg is our ontology; it gives us our politics. The cyborg is a condensed image of both imagination and material reality, the two joined centres structuring any possibility of historical transformation. (Haraway 150)

Accepting the human 'cyborg', Haraway argues, manifests liberal contemporary ideals which are also represented in literature. In the context of my discussion of twenty-first-century literature in this thesis, authors may share Fukuyama's concerns about the posthuman future, but they treat posthuman subjects in their narratives as new reflections of the human image rather than alien enemies. This line of distinction between Fukuyama's philosophical approach to

posthumanism and Haraway's exploration of the cyborg (or the posthuman) in relation to literature will be explored further in the following chapters.

Literature has sometimes anticipated scientific discoveries. Long before the Manhattan Project and the nuclear bombing of Hiroshima and Nagasaki in 1945 during World War II, H. G. Wells, probably inspired by Marie Curie's discovery of radium as a nuclear source of energy wrote about the prediction of destructive nuclear weapons in *The World Set Free* (1914). The third-person narrator in the novel portrays how '[a]ll through the nineteenth and twentieth centuries the amount of energy that men were able to command was continually increasing. Applied to warfare that meant that the power to inflict a blow, the power to destroy, was continually increasing' (Wells 104). Moreover, Wells' novel shows how '[t]here was no increase whatever in the ability to escape ... destruction' (Wells 104). From this perspective, I argue that the conceptual configurations of posthumanism as a term have been well-represented in the literary texts examined in this thesis which focus not only on the biotechnological aspects of posthumanism but also on the other scientific applications of technology as well, nuclear power included. According to Andy Miah in 'Posthumanism: A Critical Study' (2007), 'an historical analysis of posthumanism is not synonymous with the history of medical enhancements. Indeed, claims pertaining to posthumanism are not even wholly consistent with or connected to discussions about enhancements at all.' (Miah 2). Hence, posthumanism is not solely and exclusively concerned with genetic modification since it involves countless applications in technological, political, and social sciences. Fukuyama, who mainly expresses what Miah describes as his 'bioconservative' (Miah 3) attitude towards posthumanism, should have also

considered that harvesting and developing nuclear power for the purpose of serving warfare could also be considered a posthuman phenomenon, the technology of violence also contributes to the gradual degradation and erosion of humanity. From another perspective, and according to Brenda Maddox' review of Stock's *Redesigning Humans*, technology has already reached a very advanced stage and that the 'fearful should recognise in some ways, the future has already arrived' (Maddox, *Theguardian.com* 2002) where the 'true challenge is to find a form of enforceable, internationally accepted regulation that will focus on real and present problems, not on future, imagined ones.' (Maddox, *Theguardian.com* 2002). Societies 'have already felt the impact of previous advances in reproductive technology' (Stock 2, 2003) such as the invention of birth control methods, vaccines, and organ transplants which have revolutionized surgical medicine.

However, literature has tended to deem the revolution of science as destructive. Ishiguro's *Never Let Me Go* (2005) shows how a whole generation is being cloned for the purpose of using these cloned humans for organ donations. They did not choose to be born, and they have no control over their lives which are shortened in order for the organ harvesting to take place. These fictional paradigms in literature seem to identify with Fukuyama's attack on posthumanism including cloning and other genetic modifications of humans. Certainly, there have been earlier examples in literature that employ the idea of cloning in a dystopian setting about a decade before the cloning of Dolly the sheep. Other examples are Ira Levin's *The Boys From Brazil* (1976), C. J. Cherryh's *Cyteen* (1988), and Fay Weldon's *The Cloning of Joanna May* (1989) in which cloning of humans does not focus on genetics as much as it focuses

on duplicating personalities by creating the same childhood memories the outcome of which are identical personalities of the original subject. In Atwood's *Oryx and Crake* (2003), on the other hand, the idea of posthumanism is manifested not only in the creation of the Crakers, the genetically modified humans, and the Pigoons for organ harvesting but also in the creation of a biological weapon, a deadly virus distributed all over the world in the form of a birth control drug that terminated countless lives. Therefore, although Fukuyama's argument does not directly attack technology outside its applications on humans, biological weapons which are the creation of advanced scientific research could also be classified as antihuman. Biological weapons may erase the current human species probably to replace it with a new modified generation. Thus, the selection of contemporary literary texts with posthuman elements in the first two decades of the twenty-first century engages with the main themes in these texts which usually focus on the generation of young adults. Their life is being manipulated either by biotechnological applications as in Atwood's and Ishiguro's novels or by governments/organizations controlling and recruiting them to serve their totalitarian interests as is the case in Suzanne Collins' *The Hunger Games* trilogy (2008-2010).

The posthuman argument is also evident in poetry that deals with scientific topics, and, although the treatment of posthumanism in poetry may appear indirectly in comparison to fiction, there is a common interest between the two genres in discussing the status of the younger generation in relation to revolutionary technology. Deryn Rees-Jones' narrative poem, *Quiver* (2004), is about a woman who encounters the clone of her husband's mistress during the latter's murder investigation. Being pregnant, the narrator, Fay, starts to

compare cloning to giving birth to a child, questioning what it feels like to be a clone with no family, no history. Jones' poem sees the clone with maternal compassion. As a would-be mother, Fay empathizes with the clone of the deceased woman being 'Sisters who for thirty years hadn't/ known each other, finding each other/ a birth and a death of the self, somehow.' (Rees-Jones 83). The word 'somehow' in this line signifies the uncertainty regarding whether the birth of the clone is an extension of life or the death of the human. Cloning creates an identity crisis in both the clone and the cloned subject in the sense that a clone could be seen as a posthuman, superior in its creation yet lacking a proper familial identity in the traditional social sense. In 'Psychological and Ideological Aspects of Human Cloning: A Transition to a Transhumanist Psychology' which appeared in the *Journal of Evolution and Technology* in 2009, Nestor Micheli Morales identifies this problem by arguing that if human cloning is to happen in the future, 'a cloned human will be an individual who will have his or her own mind, identity and personality' (10). Therefore, the general presumption that the clone will exactly mirror the cloned subject both mentally and physically will create an identity crisis in the prospective clone. On the other hand, Morales argues that humans 'who are considering the idea of accepting human cloning, and treatments that will reduce their biological limitations will experience conflicts, ethical dilemmas, and existential problems' (14).

These posthuman speculations are explored in literature and are usually set in dystopian worlds or futures which are 'apt for engaging with the construction of young adult subjectivity in novels in which radically ruptured post-apocalyptic societies struggle to create new – more caring – world orders based on the dismantling of social and biosocial inequalities', according to Alice

Curry in the first chapter of *Environmental Crisis in Young Adult Fiction: A Poetics of Earth* (2013. 1). In arguing for the connection between 'children and young adults alongside women and nature', Alice Curry believes that the tendency in literature and fiction to depict dystopian post-apocalyptic worlds carries some 'ecofeminist' (Curry 1) elements. The repeated pattern of biological and social generation crisis in recent young-adult narratives since the beginning of the twenty-first century suggests that authors are trying to protect and warn the younger generation of the present against the dangers and challenges that their offspring may have to face in the future. The portrayal of the post-apocalypse in Cormac McCarthy's *The Road* (2006) as discussed in Chapter Three, for example, echoes the same ecofeminist approach proposed by Curry by creating a dystopian world where nature is exhausted and the human species is trying to survive. *The Road* testifies to the validity of Curry's argument regarding the connection between the future of children and the future of nature by narrating the story of a man who is trying to save his son who may in the future contribute to restoring prosperity and fertility to Mother Nature and life on earth. There is some romantic aspect in McCarthy's dystopian vision in *The Road* since the destruction of nature and the ecological surroundings would eventually destroy humanity.

Contemporary Poetry on Technology and Youth

Poetry is becoming increasingly interested in representing areas of technology such as cloning, genetic mutation, and information technology and their role in contemporary life. As far as the topic of youth is concerned, fiction represents the young adult as an individual figure while poetry explores youth

as cultural and natural phenomenon. Therefore, although sometimes less directly involved with the young-adult debate, poetry still offers an insight into the way in which science shapes human life. Such poetry, which will be discussed throughout the chapters, varies from narrative poetry about cloning and motherhood (Deryn Rees-Jones) to web-published science fiction poetry and other poetry by different contemporary poets including Jo Shapcott (2010) and Lavinia Greenlaw (2003). In this thesis, I focus on twenty-first-century poetry about science, technology, modernity, and the new generation represented by children and young adults, discussing the common grounds between fiction and poetry on these matters.

Poetry is stepping into a new territory regarding the treatment of new technological inventions in poetry since the early twentieth century. Adam O’Riordan’s ‘Gooooogle’ (2010) and Felix Dennis’ ‘This Is the Server’ are among the many examples of twenty-first-century science poetry. However, the relationship between poetry and science goes back to the age of Romanticism. According to Edward Proffitt in ‘Science and Romanticism’ (1980), ‘romanticism is not simply divorced from science [...] it is in fact an ally to a very substantial degree.’ He argues that the romantic poet

[S]eeks to come to terms with natural phenomena through immediate experience; no less than the scientist in the laboratory, the romantic poet has his focus on the realm of the natural and proceeds via induction from the particulars of immediate experience. (Proffitt 56)

Proffitt argues that romantic poetry is more realistic than imaginative. The speculative aspects of poetry make it the artistic counterpart of science. The

poems in Shapcott's *Of Mutability* (2010), which won the *Costa Book Award* in the same year, are a perfect example of modern romanticism focusing on the mental and psychological reflections of illness as a physical experience which makes both poet and scientist 'motivated by humanistic as opposed to theological ends.' (Proffitt 56). The humanistic aspects in Shapcott's poetry are manifested in her transcendental acknowledgement of bodily changes since, according to Kate Kellaway's review of *Of Mutability*, 'her illness exists as an anarchic rabble of cells in the body of her texts' (Kellaway, *Theguardian.com* 2010) rather than an immediate focus on physical pain.

Deryn Rees-Jones' murder-mystery narrative poem, *Quiver* (2004), on the other hand, offers a different representation of modern romanticism in relation to science. Instead of exploring the scientific aspects of this reality, Rees-Jones' poem reflects her narrator's fears as she questions the social context of the clone. There is no direct attack on science. However, Fay, the narrator, knows that this reality would reshape her views on the meaning of life; her maternal instinct allows her to be protective of the clone who, unlike her yet-to-be-born child, was born and raised without parental protection. Edward Proffitt's 'Science and Romanticism' (1980) was published more than two decades before Rees-Jones' poem, but it tackles the same issue of how science is perceived in Romantic terms and how the marriage between Romanticism and science could be applied to real life experiences. This quasi-critical approach to science in contemporary poetry, as in Rees-Jones' poem, suggests that 'the romantic reaction was not against physics [...] but against ... the seeing of the world as mechanism rather than organism' (Proffitt 57-58). Clones are not only biologically-devised bodies; they are human beings, and so

are their children. Thus, the way science perceives reality in the physical and mechanical sense may threaten human culture. Science has a tendency to distance itself from social reality since scientific advances aim to change and improve the quality of life disregarding the effects of such changes on humans as social subjects. Years before Wilmut's cloning of Dolly, Lewis Mumford argues against the overdependence of humans on technology in *The Myth of the Machine: The Pentagon of Power* (1970):

[T]he technological world, which prided itself on reducing or extruding the human personality, progressively displaced both nature and human culture and claimed indeed a higher status for itself, as the concrete working model of scientific truth. (Mumford 60).

While both science and literature engage with human innovation and creativity, literature alone focuses on the psychology of change in human culture as science evolves through history. The direct involvement of twenty-first-century fiction and poetry in highlighting the effects of modern technology on human culture and the new generation of children and young adults as discussed in the following chapters varies from one literary work to another. For example, poems such as Deryn Rees-Jones' *Quiver* (2004) and Sophie Cooke's 'Forward Deck' (2011) are more engaged with the topic of posthumanism than Jo Shapcott's *Of Mutability* (2010) poems. However, this thesis focuses on such associations between poetry and fiction in addressing the topic of the physical, psychological, and mental evolution of the human in contemporary culture and the prospects of the younger generation of the future. This form of contemporary Romanticism which reconsiders human evolution from

technological and social perspectives is based on poets' direct involvement in the world's social structure in a similar way to that in which scientists operate according to natural laws, trying to make sense of how human and other species function within the larger structure of the universe. There is the natural scientist and the poet, who is the human scientist, and both are trying to expand human perception of life and the surrounding world.

Science fiction as the narrative manifestation of science is unexpectedly related to poetry. In *Romanticism and Science Fictions* (2001), Robert Corbett argues that:

Romanticism meant poets emoting about nature; science fiction meant battles in space. Romantic explorers looked inward; science fiction explorers looked (fantastically) outward. Romanticism was, above all, poetry, while science fiction was, above all, prose. Yet, even then, there remained links between romanticism and science fiction. (Corbett 1)

In the Romantic period, poetry seems to be the only legitimate representative of the spirit of the age, paying less or no attention to its fictional counterpart.

Corbett argues that Mary Shelley's *Frankenstein* (1818) is 'the kind of work that would put romanticism and science fiction together' (Corbett 3). The manipulation of nature and the human organism is at the core of romantic thinking characterised by endless imaginative possibilities. Corbett believes that the 'canonization of *Frankenstein* has reawakened critics to the generic diversity that is at the origin of romanticism.' (Corbett 3). Therefore, in the same way that Romantic poetry has evolved into speculative and science fiction poetry in the late twentieth and early twenty-first centuries, science fiction could also be an

extension of the type of fiction that started in the Romantic period with *Frankenstein*. Thus, Romanticism in fiction and poetry is related to science fiction in the sense that 'it was fully engaged in imagining the future in a way that is useful to remember and which certain texts, particularly science-fiction, continue to remember.' (Corbett 9). Martian poetry, which was a minor British poetry movement in the 1970s and 1980s, was a transition between romantic poetry and modern science fiction poetry. Martian poetry was named after Craig Raine's poem, 'A Martian Sends a Postcard Home' (1979), which celebrates nature and the ordinary aspects of human life through imagination. In Raine's poem, for example, books are described as 'mechanical birds with many wings/ perch on the hand/ cause the eyes to melt' (Raine, 1979) when seen from the eyes of a Martian. Martian poetry could be defined in interstitial terms because it employs unfamiliar metaphors and similes borrowed from natural surroundings. However, it is not quite Romantic or science fiction nor realistic. Like interstitial fiction, Martian poetry is a multi-faceted genre. Everything that is familiar to us as humans is defamiliarised in Martian poetry through the use of 'poetic language which "re-sees" the world by finding fresh ways to describe it', according to Luke Maxted in 'When the Martians landed' (2013) on the *New Statesman* website. This style of linguistic defamiliarisation still exists in twenty-first-century interstitial or science fiction poetry. Jane Matheson's poem in *Voyagers* (2009), 'An Alien's Notes on first seeing a prunus-plum tree' (102), is one example of linguistic defamiliarisation. It follows a similar style to Raine's poem, but it is recognised as an interstitial science fiction poem in contemporary terms. When Raine wrote 'A Martian Sends a Postcard Home', Interstitial Literature had not yet been established. In 1969 Edward Lucie-Smith published

Holding Your Eight Hands (1969), the first poetry anthology dedicated to science fiction poetry, a decade before Raine's poem. However, there are no existing accounts of this anthology at the time of its publication because it was one of the earliest efforts to recognise science fiction poetry as an independent genre. Nevertheless, this anthology was a major event in the history of science fiction poetry, followed by the efforts of science fiction author Suzette Haden Elgin who 'founded the *Science Fiction Poetry Association*, and soon issued a usefully supportive text, *The Science Fiction Poetry Handbook* [1986]', according to science fiction author and critic, John Clute, on *The Encyclopedia of Science Fiction* website (*sf-encyclopedia.com*, 2012).

An Introduction to the Topic of Youth in Chapters One, Two, and Three

Chapter One, 'The Clone as Alien: Past Human versus Posthuman in Twenty-First-Century Fiction and Poetry', is a study of the representation of the human clone in twenty-first-century science fiction and speculative poetry. By establishing a connection between the term 'posthuman' and the clone, I will use Mary Shelley's *Frankenstein* (1818) following Robert Corbet (2001) as a basis to examine ways in which posthumanism in literature is reflected. Francis Fukuyama's interpretation of posthumanism and the way it relates to literature and contemporary human societies will be vital to the discussion of cloning and biotechnology. The focus will be on the way the topic of cloning has been represented in science fiction and speculative poetry in the twenty-first century. The literary texts in this chapter explore the fears and potential advantages of human cloning with a new sense of urgency given the scientific developments that make it technically more possible. This view is expressed in both Margaret

Atwood's *Oryx and Crake* (2003) – the first novel in the trilogy followed by the publication of *The Year of the Flood* (2009) and *MaddAddam* (2013) – and Kazuo Ishiguro's *Never Let Me Go* (2005). Both novels offer a vision of a dystopian future narrated by an eyewitness on the society in which s/he exists and who has suffered a series of devastating changes. Atwood's text looks at the clones from an outsider's point of view (Jimmy) while in Ishiguro's text the clone (Kathy) speaks for herself documenting the human experience of the clone. The treatment of human clones as inferior subjects in Ishiguro's novel raises social, ethical, and political uncertainties about how to establish the rights for such posthuman species. Therefore, this chapter will consider the life of the clone from the perspective of both inner and outer circles; the clones themselves and those who are in their social surroundings. In Chapter One, I will argue that unlike Ishiguro's clone who is the first-person narrator in the novel, Deryn Rees-Jones' *Quiver* (2004) approaches the topic of cloning from the viewpoint of a non-clone character. I will also compare Margaret Peterson Haddix' *Double Identity* (2005) to Ishiguro's *Never Let Me Go* in introducing human clones and enabling them to speak for themselves.

Thus, the argument in this chapter summarises the representation of cloning in twenty-first-century literature in relation to critical theory by Hayles (1999) and Fukuyama (2002-2003) on posthumanism by examining the significance of the representation of posthuman youth in both fiction and poetry. This chapter proves that the interstitial quality of contemporary literature in exploring the topic of youth and the younger generation of the future as far as science is concerned extends to other aspects of science with relation to youth, being the role of information technology in creating the computerised body of

the new generation of humans. This shows how the interstitial aspect of contemporary literature has created a new dimension through which the different genres could escape literary categorisation by prioritising topic over genre. Social awareness of twenty-first-century literature is mediated through the recurring topic of youth in the different genres and subgenres.

In this sense, Chapter Two, 'The Computerised Body of the Future: Information Technology and the Techno-Teen in Twenty-First-Century Poetry and Young-Adult Dystopian Fiction', discusses the representation of the posthuman in twenty-first-century young-adult science fiction and poetry through extending the argument to include the integration of machine parts within the organic human body. This chapter will move from considering the literary representations of biotechnology and cloning to information technology and humans with technologically programmed bodies. The young-adult character and the future of humanity in relation to advanced technology in contemporary science fiction and poetry will be the centre of discussion. When Johnny, the protagonist in Mike Leigh's film, *Naked* (1993), speaks of future prophecies that humans will be soon barcoded just like consumer products on supermarket shelves, he was predicting that information technology and the media will take over people's lives. M. T. Anderson's *Feed* (2002) and Suzanne Weyn's *The Barcode Tattoo* (2004) explore the representation of the computerized human body in the young-adult character. These novels imagine a future world in which young-adults witness an identity crisis in being unable to decide whether they are humans or machines. In poetry, and from a different perspective, Lavinia Greenlaw's *Minsk* (2004) approaches the topic of identity crisis through exploring the relationship between childhood and adulthood. She

introduces images and memories from childhood and adolescence, both comforting and disturbing in order to represent individuals' anxiety as they grow up to become adults. Poems in *Minsk* are about the quest for freedom and redemption from the hopes and fears of the past. Dorothea Smartt's poem, 'Shake My Future', and other poems by Felix Dennis and Bruce Boston fluctuate between the past and the future through focusing on the role of technology and capitalism in shaping people's mentalities and leaving them confused between their history as humans and a possible posthuman future dominated by technology. Smartt's poem is particularly striking in the sense that it represents hope in the future while this kind of representation is quite unusual considering the dystopian aspects of the other narratives explored in this chapter as far as the topic of youth and technology is concerned.

These literary texts imply that the future generation will possibly witness human computerisation. However, my argument will also focus on how these texts suggest that this computerisation is challenged by the younger generation to which this technology is supposed to be applied. While these novels imply that the younger generation will be at the centre of biotechnological experiments, they also provide insight on how young people are able to question these bodily modifications. The chapters in this thesis argue for the necessity of taking into consideration the interstitial, hybrid, and/or multi-genre aspects of twenty-first-century literature in highlighting contemporary social concerns regarding the advancement of science into literature that introduces the topic of youth as one of the most important literary themes of the century. Therefore, the representation of the future of youth in such literary texts is not limited to genetic modification (or cloning) as discussed in Chapter One, but it

also extends to other areas of science that might be used to alter the human. This includes chip implants and barcoding which will be discussed in Chapter Two as the main computer technologies that could change the human body in the future.

Both Chapter One and Chapter Two discuss the effects of technology in producing a new posthuman generation with a troubled identity and the relationship between young adults and their peers. However, the same topic will be approached from a different perspective in Chapter Three, 'Mortality, Legacy, and Familial Sacrifice in Twenty-First-Century Poetry and Dystopian and Post-Apocalyptic Fiction', by introducing the relationship between the young adult and the family in twenty-first-century adult and young-adult fiction and poetry. This focus on the family is relevant because the majority of the texts discussed in the previous two chapters focus on how the younger generation is manipulated and controlled by higher authoritative figures represented by parents, school guardians, and even social systems. However, other twenty-first-century narratives offer a portrayal of how terrifying dystopian and post-apocalyptic worlds are for adults who find themselves responsible for the difficulties their younger descendants have to face in a posthuman future. Therefore, I will focus on the relationship between younger characters and their parents or grandparents through exploring the concept of parental sacrifice. Physical illness and emotional trauma affect adults' perception of life and the way they adapt their new knowledge of the self to help their children survive the constraints of their society. Chapter Three develops the exploration of the effects of science on humans analysing the concept of mutation on the physical as well as the spiritual level in Jo Shapcott's poetry collection, *Of Mutability*

(2010). The concept of Otherness in contemporary dystopian fiction is illuminated by Julia Kristeva's definition of the Other in *Strangers to Ourselves* (1997). This will be examined in Malorie Blackman's young-adult social and political dystopian series *Noughts and Crosses* (2001-2008). The analysis will focus on the mother-daughter relationship and the way familial love and sacrifice could be passed from older to younger generations in order to challenge the existing social structure based on discrimination and alienation among individuals.

The Conclusion chapter of this thesis will, then, summarise the critical theory involved with my research findings. This chapter will provide a summary of the discussion regarding the involvement of poetry in science in relation to Romanticism as explained by Simon Armitage in 'Modelling the Universe: Poetry, Science, and the Art of Metaphor' (2006). It will also analyse the relationship between twenty-first-century literature and the Interstitial Arts movement with reference to major contributors such as Theodora Goss and Delia Sherman and provide an overview of the preoccupation of the feminist theory in the discussion concerning the representation of youth in relation to technology in contemporary literature.

Conclusion

The aim of this introductory chapter has been to introduce the main topics that will be at the centre of the discussion in the following chapters. This has been achieved through establishing recurrent concepts, such as speculative fiction, dystopia, and young-adult fiction, and defining the key terms, such as posthumanism, genre hybridity, and interstitial literature, that are

related to the topic of youth in twenty-first-century fiction and poetry in relation to technology and changes of the body, society, and the family. The task appears to be more challenging than initially anticipated in the sense that the topic of youth in contemporary literature is so versatile, and it often overlaps with other topics and subgenres such as science fiction and dystopia as well as young-adult fiction. Including poetry and fiction in this thesis to address the topic of youth highlights the interstitial nature of contemporary literature when dealing with controversial real-life issues and the way they are represented in contemporary literary debates. The effects of advanced technology on everyday life and the dystopian or speculative representations of these effects in literature illuminate the discussion about the future of humanity, in general, and youth, in particular. This also allows for comparison between poetry and fiction regarding the way each genre tends to address these contemporary issues. While fiction approaches the topic of advanced technology by offering post-apocalyptic or dystopian portrayals of future generations and societies under the influence of misused technologies, the involvement of poetry in the scientific debate is rather less direct yet more versatile. With the exception of Malorie Blackman's *Noughts and Crosses* which focuses mainly on the social crisis of youth in a dystopian future based on racial discrimination, twenty-first-century fiction that focuses on the topic of youth usually involves scientific elements. This is even found in fiction that is not written for young adults such as McCarthy's *The Road* and Atwood's *Oryx and Crake* among others. Therefore, the amount of attention that the topic of youth with relation to technology receives in fiction is a defining aspect of twenty-first-century literature. On the other hand, poetry approaches technology from a wider angle, focusing on a broad spectrum of themes ranging

from cloning and transhumanism to molecular changes of the human body caused by illness. Poetry seems to be more interested in the transcendental human experience as a whole under the influence of, or living with, science and technology rather than particularly focusing on the single aspect of youth and the future generation. Although some of the poems analysed in this thesis address specific aspects of technology such as cloning, other poems (for instance, Jo Shapcott's *Of Mutability*) seem to be concerned with exploring bodily changes through illness.

Both fiction and poetry exhibit some interstitial quality not only in terms of the overlapping topics and styles of writing but through the literary approach to change or, in other words, the 'Other'. Twentieth-century ideals regarding the alien body or the foreign subject have been based on conservative views of the other. Aliens and cyborgs were often represented as enemies with fewer examples where such alien bodies are introduced otherwise. However, it could be that the widespread phenomena of the internet and social media in the twenty-first century as well as other changes in society that incorporated more liberal views when dealing with difference among individuals could have influenced the way literature is now representing technologically-modified bodies more liberally. My primary observation is that twenty-first-century literature is becoming more and more willing to accept difference when representing the alien body or the posthuman individual. Literature in the first decade of the twenty-first century also offers clearer representations of the difference between technophobia and xenophobia; rejecting cloning as a concept or a scientific practice, for example, does not mean feuding or hating the potential or prospective cloned subject. The open possibilities and limitless

knowledge that information technology now offers may contribute to a better-informed generation which makes it more equipped with the necessary knowledge to deal with difference and change. This idea will be discussed further in the concluding chapter, but, at this stage, I find it necessary to point out that globalization in the social and technological sense has started to influence literature. This thesis, therefore, includes some references to social studies and scientific discoveries when exploring some of the literary texts. This is influenced by the interstitial quality of contemporary literature and the more liberal approach to genre definitions helped establish a closer relationship between literature and real-life issues. Whether represented directly or otherwise, the topic of youth in contemporary literature stands for a more profound metaphor than the mere speculation of how the world would become in the future. Youth represents change, reconciliation, acceptance, liberation, and diversity. The direct question that this thesis addresses is whether twenty-first-century literature suggests that transhuman or posthuman youth will become a reality in the near future.

Chapter One

The Clone as Alien: Past Human versus Posthuman in Twenty-First-Century Fiction and Poetry

In the context of the growing preoccupation with the topic of stem cell technology in scientific research towards the end of the twentieth century, literature in the first decade of the twenty-first century has become more concerned with the representation of cloning as a relevant topic to contemporary science fiction by introducing fictional characters with technology integrated within their human system. This chapter will focus on the representation of posthuman youth in twenty-first-century fiction and poetry. The discussion will involve highlighting the representation of cloning in contemporary literature in relation to the concept of Otherness while arguing that fiction and poetry in the 2000s tend to humanise rather than alienate the posthuman. In 'A Cyborg Manifesto, Science, Technology, and Socialist-Feminism in the Late Twentieth Century' which appeared as a chapter in *Simians, Cyborgs and Women, The Reinvention of Nature* (1991), Donna Haraway establishes the 'cyborg' identity of the contemporary individual arguing that the 'boundary between science fiction and social reality is an optical illusion.' (Haraway 149). Haraway's argument is based on feminist theories regarding gendered bodies and hybrid cultural identities; yet, it offers an overview of how contemporary social values blur the lines that separate human and animal (152), 'human-animal (organism) and machine' (152), and 'physical and non-physical (153). This chapter will focus on the human/animal distinction as represented in twenty-first-century fiction and poetry about cloning. Although clones are not

animals by definition, they are represented in literature as an organic species that is not completely human.

In 'Refiguring the Posthuman' (2004), N. Katherine Hayles summarises this point by arguing that modern technology and posthumanism have become integral systems in contemporary human life. They 'cannot and will not mean only one thing. Posthumans are likely to be as complex and diverse, as historically and culturally specific as humans have been.' (Hayles, 316). In this respect, human clones, as represented in contemporary literature, are as complex and unpredictable beings as human twins; they are not a mere copy of the cloned subject. Literary preoccupation with the posthuman subject has preceded scientific initiatives in developing posthuman forms. When, for example, medical science was working on devising the first artificial pacemaker in 1926 with the help of Dr Mark C. Lidwell, Mary Shelley had already introduced an imaginary prototype of a scientifically created human/alien creature in *Frankenstein; or, the Modern Prometheus* (1818).

The comparison of *Frankenstein* as a work of fiction with real-life sciences is intended as a reference to the importance of imagination in the prediction and formation of advanced science. Fictional narrative, in general, carries a speculative quality in the creation of fictional characters and facts; therefore, authors of science fiction do not 'inform us about figures or events but directly [establish] them, [present] them [...] by the illusionary character', according to Victor Lange's 'Fact in Fiction' (1969, 261). This method of artistic creation in literature, in general, and in twenty-first-century interstitial literature, in particular, establishes a strong bond between the reader and the text not

through introducing life as it is, but through the formation of new scenarios that, although not realistic, remain possible. Whether directly or not, contemporary posthuman literature is informative of possibilities; it plays a vital role in shaping human expectations of the future before reaching it in the sense that, according to Hayles in 'Commentary, The Search for the Human' (2005), literature does not only 'respond to the world but actually ...help[s] form it through imagined situations.' (332). This phenomenon has become more recurrent in literature since the beginning of the twenty-first century which has responded to the need of expanding the domain of literature through introducing new literary forms that reflect this preoccupation in the posthuman topic. The term 'interstitial literature', as discussed in the Introduction, was introduced with the intention to liberate literature from former constraints. Print publishing is no longer the only approved platform for authors and poets since online journals and magazines started to become more and more widespread. In addition, the literary topics of posthumanism, science, and technology are no longer exclusive to fiction with the rising preoccupation in science fiction poetry or poetry about science and the posthuman.

For this purpose, this chapter will focus on some examples in twenty-first-century fiction and poetry written and published in various forms and that represent the human/clone topic in relation to the alien figure referring to the history of posthumanism in literature and theory. The discussion will start with Mary Shelley's *Frankenstein*, probably the first and most influential text in the history of literature to humanise the posthuman through focusing on the subject's individuality and sense of alienation. I will then introduce the key texts in this chapter that deal with the topic of cloning in contemporary speculative

fiction and poetry. Although the chapter will discuss two well-known texts, namely Margaret Atwood's *Oryx and Crake* (2003) and Kazuo Ishiguro's *Never Let Me Go* (2005), other literary texts by newly published authors, including the young-adult science fiction novel *Double Identity* (2005) by Margaret Peterson Haddix, are as vital to my argument of human cloning in contemporary fiction as Atwood's and Ishiguro's texts. The discussion of different genres serves the interstitial quality of twenty-first-century literature which maximises the representation of a certain topic through introducing it through multiple literary formats. Haddix' *Double Identity* is directed towards the young-adult readership; however, it will be studied in comparison to Steven Spielberg's *A. I. Artificial Intelligence* (2001) in film and to Atwood's and Ishiguro's texts in fiction which all fit into the context of the 'techno-teen' which I will establish in Chapter Two.

Cloning as a recurrent topic in contemporary literature is also represented and explored in poetry which will also be explored in this chapter. One of the poems that will be discussed is 'Past Human' (2011) by Ann K. Schwader, which appeared on *Strange Horizons* online magazine that publishes science fiction poetry, articles, and reviews for well-known writers along with other newly-published ones. Other poems discussed are Sophie Cooke's 'Forward Deck' (2011), and the long narrative poem, *Quiver* (2004), by Deryn Rees-Jones, both revealing human cloning as a future possibility. The above works will be considered for their relevance to the concept of cloning and posthumanism. I will compare the different representations of cloning in Atwood's and Ishiguro's narratives with those in Haddix', Schwader's, Rees-Jones', and Cooke's texts. From a contemporary perspective, the cloned characters in each of the above texts could be a representation of the alien

figure in literature since the first significant representation of the posthuman in Mary Shelley's *Frankenstein*.

***Frankenstein* (1818): The Mother of Posthuman Thinking in Literature**

Like Frankenstein's creature, the clones in Kazuo Ishiguro's *Never Let Me Go* develop a sense of alienation within the society that produced them and their self-knowledge is dependent on the way the outside world would react to their existence, the sense that is also found in Rees-Jones' *Quiver*. Mary Shelley's plot of resentment and revenge is dependent on the physical appearance of Victor Frankenstein's creature. The vitality of the theme of physical appearance in literature makes it a versatile tool through which an author's ideas could be conveyed considering that, according to Anthony Synnott's 'A Sociology of Beauty and the Face' (1990), '[b]eauty and the face are, as we know both by experience and from scientific research, extremely powerful symbols of the self' (67). In this sense, the grotesque outcome of the scientist's experiment revolts the viewer, and this gives rise to a firm presumption that things may go wrong for those involved in the situation.

References in the novel point to the fact that Frankenstein's creature is more monstrous than human based on his ugliness and enormous size which suggests that it was not fully constructed of human organisms. According to Chris Baldick in *In Frankenstein's Shadow, Myth, Monstrosity, and Nineteenth-century Writing* (1987), what makes Frankenstein's monster 'a full human creature' (45) is that he 'has no mechanical characteristic' (44-45); however, because this remains unclear in the novel, I tend to agree more with Baldick's following reference to the creature's 'articulate voice' (45) which helped him

express 'his range of sympathies and his need for companionship' (45). By exhibiting some human characteristics, this posthuman character becomes more likely to gain the reader's empathy. The creature's human characteristics are mainly responsible for developing a deep sense of social alienation resulting from his odd creation process and repulsive physical appearance. This image, of course, summons the many follow-up representations in science fiction of the alien figure that was introduced in many works as not only physically hideous, but, at the same time, as harmful and threatening to human existence. Whether the result of a scientific creation or a part of some space invasion, the alien figure has frequently been stereotyped in literature as the enemy of humanity.

However, according to Donna Haraway in 'A Cyborg Manifesto', contemporary thinking has witnessed some revolutionary changes in the treatment of non-human bodies, especially in the last few decades of the twentieth century. Awareness regarding any type of discrimination against or mistreatment of animal species is an example of contemporary human values. Haraway argues that '[m]ovements for animal rights are not irrational denials of human uniqueness; they are a clear-sighted recognition of connection across the discredited breach of nature and culture.' (152). In 'Becoming Other, Animals, Kinship, and Butler's "Clay's Ark"', Sherryl Vint argues for the relevance of Haraway's 'A Cyborg Manifesto' to the controversy regarding the treatment of other non-human species,

While much attention has been paid to the android and other machine-human hybrids that help us rethink what it means to be human, we often overlook how Haraway calls for us to rethink our relationship not only to

machines but also to animals, arguing that new meanings for human animality are part of our struggle to find new ways of theorizing political responsibility. (Vint 281)

This recognition of the importance of other non-human species has been frequently represented in late twentieth-century literature. This chapter will reconsider these representations in the reoccurrence of the clone figure as a non-human organism in twenty-first-century literature.

Towards the end of the twentieth century, there have been some striking examples in fiction where alien or posthuman bodies are represented as humanlike. Philip K. Dick's *Do Androids Dream of Electric Sheep* (1968) and Barry B. Longyear's *Enemy Mine* (1979), for example, focus on the relationship between a human and an alien (or a cyborg body). Longyear's open-minded approach to the alien character in this novelette which transcends the differences in culture and physical appearance between the human race and the alien one won him the *Nebula*, the *Hugo*, and the *Campbell* all in the same year. Literature has adopted an empathetic approach to the other since Shelley's *Frankenstein*, and the alien gradually became the modified human or the clone worthy of readers' compassion in the twenty-first century. In his essay 'Embracing the Alien, Science Fiction in Mass Culture' (1982), John Reider refers to the state of aliens in science fiction as on the verge of acceptance or repulsion where we face the dilemma of whether to welcome them as friends or fight them as enemies,

The SF alien tends to be a pathetic mixture of nobility and savagery. It often combines a fantasy of physical or intellectual power with a

grotesque provocation of sexual loathing or xenophobia or racism. It stands at the crossroads of love and aggression, desire and repression, utopia and reaction. (Rieder 26)

Rieder's argument applies to *Frankenstein* which explores the uncertainty towards the other represented by the posthuman creature and, at the same time, celebrates science as a master of creation. In fact, the Romantic aspect in Mary Shelley's novel testifies to the scientist's quest for human salvation in science that derives from nature and is built on it. In other words, Victor's intentions were to give life to a new creature hoping that science could one day become able to save the human race by the power of creation. The problem emerges when the resulting creature is physically extremely repulsive. Because of the ugliness of Frankenstein's creature, the utopian vision in the novel seems to be lost behind the stronger gothic atmosphere. Physical deformity is ominous in this context; however, 'just as the monster is shown to be humanlike, the human doctor mirrors the monster that he abhors' (Hayles 135) because of his destructive attitude towards his own creation. Contrasting 'nobility and savagery' as Reider notes above seems typical of the monstrous creature's acts of revenge on humanity and his remorseful self-destruction at the end of the story. His ugliness is ultimately not his fault.

The creature in *Frankenstein* could be seen as childlike since he has to develop and acquire knowledge through experience; he has to depend solely on himself being deprived of proper parental guidance. The movement from *Frankenstein* to twenty-first-century fiction creates a chronological link between the future of humanity as seen by Mary Shelley and the development of the

alien figure in contemporary terms. This link seems to be closely associated with the characters' sense of responsibility when making decisions about what is better for the continuity of humanity and nature.

The image of the ugly alien prototyped in Frankenstein's monster will accommodate itself to the requirements of the new century where aliens gradually adapt to their new environment and function within an ordinary human community. The Other in literature, whether it is an alien or a cyborg or a clone, could live harmoniously in their host environment if treated well by one or more members of the community. In Longyear's *Enemy Mine*, the Drac, an alien creature, was raised by a human and had the chance to understand what it means to be an alien in his social surrounding without becoming irrationally prejudiced towards the whole community. This is because the Drac was able to experience both acceptance and rejection by the other race, the humans. In fact, Victor Frankenstein is probably responsible for the monster's evil nature because the latter's first emotional experience was being hated by his own creator. Victor's rejection of the outcome of his experiment is the moment when the situation started heading towards a tragic climax. Failing to realize that accepting otherness comes from having objectified human standards caused nothing but misery and destruction to both himself and the creature. This idea of rejection versus acceptance in *Frankenstein* is commented on by Gordijn and Chadwick in their book *Posthumanism, A Critical History* (2007),

Despite its human form, the resulting being is grotesque and alien to the human world, within which it soon becomes monstrous and violent.

Importantly, the monster of Frankenstein becomes terrible only when it is

rejected from human society. As such, the text reveals an ambiguity about this creation; its monstrosity is not a product of its creation, but a consequence of its lack of acceptance by other humans who fail to embrace it. (12)

The concept of the alien figure, however, still appears in diverse forms including the robot, the android, the space invader, and the clone, which all could be read in science fiction as the estranged other. For this purpose, there will be a focus on the most recent concepts of alienation that started with the scientific experimentation of animal cloning by the end of the twentieth century and move forward to the contemporary preoccupation with genetic modification in twenty-first century fiction and poetry. Both literary forms consider, from utopian and dystopian perspectives, the interaction between the scientific element and the human knowledge and choice. Some of the poetry which will be discussed in this chapter carries a similar form to that of a typical science fiction novel with aspects of mystery and suspense as well. Rees-Jones' *Quiver* (2004) exemplifies this poetic style featuring the topic of posthumanism in relation to human cloning compared to the process of natural birth. This poem also has a strong lyrical voice expressed by its narrator who is subjectively involved in the story. These rather unusual literary writing styles in the twenty-first century suggest that arts and literature are becoming more liberal in imagining the world; we now live in the interstitial world of science and technology which is fulfilled by and documented in interstitial literary forms.

Posthumanism in Contemporary Literary and Social Studies

Although the preoccupation with exploring the posthuman topic in literature is mainly associated with modern and contemporary times, humanity has always been curious about the posthuman state represented by gods and goddesses and their super powers in prehistorical contexts. Jeff Wallace in 'Literature and Posthumanism' (2010) argues that posthumanism is the relationship between humanity and nature fulfilled by an urge to uncover the secrets of the latter by the former. He suggests that:

Distributed cognition, now more fully elaborated in neuroscience and informatics, suggests that the extension or franchising-out of consciousness is not simply a property of computer systems with highly developed faculties of memory and simulation, but has characterised [*sic*] human endeavour at least since the origins of toolmaking and agriculture. (Wallace 693)

Wallace argues that our 'distributed cognition' as humans constitutes our knowledge of ourselves and the world around us represented by nature and its mysteries. Human curiosity to raise knowledge of nature and unravel its unknown aspects by facilitating it to serve human life long ago could be, in this sense, the initial emergence of posthumanism which will come to its maturity with the employment of science in later historical stages. According to N. Katherine Hayles in 'Afterword, The Human in the Posthuman' (2003), posthumanism in relation to technology is not exclusively associated with the age of modernity and the revolution of science in the sense that 'humans have used technology since they stood upright and began fashioning tools' (Hayles

134). Coming to the realization that humanity is not the only unique form of life is in itself a basis for posthumanism to become active and effective. In *The Posthuman Condition, Consciousness Beyond the Brain* (2003), Robert Pepperell suggests that since technology became an integral part of everyday life, '[t]he tendency towards artificial life, synthesised intelligence, and telepresence is eroding the barrier between "natural" and "human-made" phenomena.' (161). Accepting to live and interact harmoniously with whatever we devise as humans means, first, that humans no longer claim superiority of being and, second, that other forms of existence whether mechanical or biological may not necessarily endanger the life of the human species.

When humans change aspects of life in order to survive, they have the responsibility of distinguishing between human development and human transformation and which one overrules the other. Human development as characterised by the *facilitation* of human life through science and technology would be something different from the *incorporation* of science and technology into the human system so that humanity and science become inseparable. This issue has been the concern of science fiction in contemplating 'the potential for humans [...] to become posthuman, or alien to, themselves.' (Wallace 694). Acknowledging posthumanism as a concept requires investigating what happened before this term emerged in the sense that it is strongly connected to the idea of human development. In fact, tracing the beginning of posthumanism in history as a concept related to the man/machine relationship, 'we could say that the foundations for our modern conception of the posthuman condition were laid in the period leading up to World War I.' (Pepperell 162). This was around the time when the first aeroplane was invented by the Wright brothers in

1903 which soon became an important role player in war which was used to transport destructive weaponry during and after World War I. In the second half of the twentieth century, however, literature started to focus on other forms of technological intelligence, namely surveillance systems, as well as new information technologies incorporated in everyday life which will be discussed further in Chapter Two. However, this chapter mainly explores the increased interest in genetic research which is represented in contemporary fiction and poetry by the new generation of posthumans in the form of genetically modified teenagers and young adults as main characters.

My argument for using twenty-first-century literary texts as a basis for inquiry rather than going back to the origin of posthumanism in literature is based on Francis Fukuyama's views in *Our Posthuman Future, Consequences of the Biotechnology Revolution* (2002) which regard posthumanism as a threat to human existence in the future. Fukuyama defines posthumanism in terms of genetic manipulation and the integration of the machine in human life and within the human body. According to Wallace, Fukuyama's argument

presents the posthuman as a condition of threat posed by allegedly invasive new technologies to the integrity of human nature ... [where] the sciences of genetics, neurology, cybernetics and informatics are seen to interfere with an otherwise pristine state of human nature and freedom. (692)

This chapter focuses on the genetic aspect in Fukuyama's definition of the posthuman and how his technophobic visions are adopted in contemporary fiction. This dystopian representation of the future of humanity in Ann K.

Schwader's 'Past Human', Margaret Atwood's *Oryx and Crake*, and Kazuo Ishiguro's *Never Let Me Go* could be the outcome of the first successful cloning experiment on a mammal in 1996 and the increased controversy about the possibility of future human cloning. The cloning experiment that produced 'Dolly' the sheep was a crucial achievement in genetic science, and it soon became the interest of science fiction and other literary genres. In spite of this negative concern about cloning as a form of posthumanism endangering the current human state, as Fukuyama suggests, it remains important to refer to Dolly's death at the age of six as a key to the controversy of whether it came naturally or because of a genetic fault. This incident might imply an alternative vision overlooked by Fukuyama which is that posthuman organisms, represented by Dolly the sheep, are endangered and manipulated by humanity and not the other way around.

This argument extends to contemporary science fiction which represents the application of cloning to human beings in order to further investigate its ethical, social, and natural liability. According to Gregory Stock in *Redesigning Humans, Choosing Our Genes, Changing Our Future* (2003), whatever starts on animals is doomed to end on humans following the nature of science referring to the fact that '[b]ioethics frequently discuss the potential challenges of enhanced human intelligence without fully acknowledging that such possibilities will necessarily be preceded by animal enhancements' (x). From vaccines to ailment remedies, animals have been the laboratory material for science, and, in this sense, we could come to the conclusion that considering Dolly a 'post animal' makes a cloned human being a 'posthuman' in science fiction. Similarly, Suzanne Weyn's *The Barcode Tattoo* (2004), which

will be discussed in the next chapter, employs reference to the future of human societies after applying the barcode technology to human bodies; being tattooed with a barcode may recall an image of animals in farms wearing rings and badges as means of identification. It could, thus, be argued that such science fiction works warn against dehumanisation as a future possibility.

In *Cyberculture, Cyborgs and Science Fiction, Consciousness and the Posthuman* (2006), William S. Haney tends to agree with Fukuyama that,

Posthumanism envisions a biology/machine symbiosis that will promote this extension by artificially enhancing our mental and physical powers, arguably at the expense of the natural tendency of the mind to move toward pure consciousness ...[and] the posthuman condition may undermine human nature. (Haney vii)

The more humans become dependent on technology, the more their innate nature might be lost in this search for a better transcendental state. Consciousness or knowledge of the self might be sacrificed at the altar of technology which is being sought for the purpose of becoming physically stronger or mentally more capable. In an article published on *Foreign Policy, the Global Magazine of News and Ideas* website in 2004, Fukuyama warns against transhumanism endangering humanity in its basic as well as enhanced form contemplating the possibility that transhumanism would give rise to a new form of discrimination between the enhanced and the unenhanced where the former gains superiority over the latter. He wonders that 'If we start transforming ourselves into something superior, what rights will these enhanced creatures claim, and what rights will they possess when compared to those left behind?'

(Fukuyama 2004 *Foreignpolicy.com*). This dystopian view becomes more recurrent in contemporary science fiction which is now more concerned with clones than with robots, reflecting the interest in genetic engineering and stem cell science. The intention of Atwood in *Oryx and Crake* is to restore a sense of harmony with our human knowledge by predicting a future where genetic enhancement might be performed on people like us; young people who might be our children and the adults of the future world. By making these characters closer to the current human image, the idea of the posthuman becomes easier to accept without jeopardising the authenticity of our 'pure consciousness' in the sense that 'just as the posthuman is increasingly necessary to understand what counts as human, so understanding the posthuman requires taking the human into account.' (Hayles 137). This suggests that Hayles' attitude regarding the posthuman contrasts with Fukuyama's. While Fukuyama sees the posthuman as the enemy, Hayles considers the possibility that the posthuman might as well become a part of human life and that both forms of being could coexist successfully. Literary representations of posthumanism usually adopt either of these two views. However, as we advance in time, the world as represented in literature is becoming more liberal and accepting of life changes. This makes new technologies and non-human forms of intelligence more welcome than they were in the past. Eventually, this attitude towards artificial intelligence became the concern of literature more so now than ever.

Cloning in Twenty-First-Century Poetry

In the context of exploring the representation of the topic of cloning in literature, I will explore some poems that have been published on *Strange*

Horizons (Strange Horizons.com), an online magazine founded in 2000 by Mary Anne Mohanraj, which publishes science fiction and speculative fiction and poetry texts and reviews. Ann K. Schwader, one of the published poets and a member of the *Science Fiction Poetry Association (SFPA)*, expresses awareness of human transformation in the new world in her poem 'Past Human' (2011) in which she juxtaposes the state of human development with that of changing humanity to function solely within the field of genetic engineering. 'Past human' carries a similar spirit to that used by Schwader's in her award winning dark science fiction poetry collection *Wild Hunt of the Stars* (2010). This grim vision of the future in Schwader's science fiction poetry, in general, and in 'Past Human', in particular, might be the result of a growing awareness that what is considered a deterioration of our natural creation is actually a way of coping and a necessity for human continuity,

All men are created equal but we

can fix that now,

elixir genes

for our rewired /reloaded minds,

the pristine ping of clockwork hearts

with crystal chips & atom beats,

a nudge to certain balky glands.

All men are defeated equal yet we

fixate on more,
some fivescore years
at least before our dread of dark,
a labyrinth of diagrams
denying merely mutant change,
the weight of tech against Thoth's scale. (Schwader, 'Past Human')

The poem contemplates the possibility of creating custom-made humans inspired by twenty-first-century advances in genetic engineering. Thoth, the ancient Egyptian god of wisdom, is used here to represent human knowledge which is now in conflict with the fruition of technology. There is a scale on which there lies the 'past human' on one side and the posthuman on the other in an attempt to find a sort of equation between human consciousness as a natural creation and the contemporary values of change and transformation. Interfering with the process of creation is the work of today's science, and, thus, any opposition to its course is an opposition to the course of 'fixing' natural defects in humans. Existing and dying as 'equal' human beings is a characteristic that is not appreciated any more; on the contrary, it is sarcastically referred to here as a flaw to be fixed by scientists. Fukuyama believes that '[t]he first victim of transhumanism might be equality' (Fukuyama) referring to the U.S. Declaration of Independence (1776) which states equality between people. He thinks that a state of enhanced humanity will jeopardise equality as a human value. The future world seems to be characterised by 'rewired /reloaded minds' and 'clockwork hearts with crystal chips & atom beats'. The 'chip' mentioned in this

poem recalls the theme in T. M. Anderson's novel, *Feed* (2002), which refers to the method of labelling human beings, an idea that will be elaborated on in the next chapter.

Schwader's imagination in 'Past Human' presents the posthuman as either a modified body or a cloned one suggesting that this attempt to perfect the human would only create a sense of alienation from nature. Alienation occurs when humans experience this sort of ultimate detachment from the concept of natural variation,

All men are repeated equal till we

stand fixed as this,

a tribe of one

beneath its polished mirror moon,

bereft of stars & flesh & all

unshaped unbidden miracles,

these aliens we made ourselves. (Schwader, 'Past Human')

The question here is whether humans are actually fully aware of this gradual transformation, whether they are completely able to understand and control the process through which humanity will adapt to its new posthuman shape. From Fukuyama's perspective, the subject of the poem could imply the future prediction about science where, according to Gordijn Chadwick in *Medical Enhancement and Posthumanity* (2007), 'the ethical distinction between therapy

and enhancement has been eroded.' (4). The recent advancements in genetic engineering and medical science could be so tempting that humans may fail to know when such procedures are no longer enhancing but rather replacing the original and natural human form. Fiction and poetry about science in the twenty-first century are theme oriented while investigating cause, motive, and effect. The texts discussed in this chapter, including Schwader's poem, suggest that there is always a reason for carrying out a particular scientific procedure or experiment. However, none of these texts appears to celebrate the greatness of science. With no exception, these works in literature show how science eventually fails to recognise the importance of preserving the natural human image, both psychologically and physically, by investigating the failures of scientific attempts to either clone or enhance the human. The general assumption of literature here is that science will most likely go too far in genetic experimentation in the future. That being said, if humans were ever to face this situation, they would better be prepared or equipped with the knowledge and ability to deal with any prospective posthuman form of life. I see that contemporary literature is trying to create some possible future scenarios in which humans are meant to accept their posthuman image. Ishiguro's *Never Let Me Go* is one example and so are other poems to be discussed later on in this chapter. To maintain human integrity and with reference to reconciliation between man and nature in posthuman terms suggests that 'the recognition that none of us are actually distinct from each other, or the world, will profoundly affect the way we treat each other, different species and the environment. To harm anything is to harm oneself.' (Pepperell 172). Hence, past human and posthuman should coexist in peace. But will humanity be capable of maintaining

its unified representation throughout its history after incorporating technology within its system without leaving any unanswerable gap in its consciousness?

In *Cyberculture, Cyborgs and Science Fiction, Consciousness and the Posthuman* (2006), William S. Haney believes that either people lose control to technology or they gain control over it. It is rather impossible for humans to become posthumans fully conscious of their natural human consciousness,

We consider the strong evidence for the capacity of human consciousness to be aware of itself as a void of conceptions, certain invasive technological features of the posthuman, though as yet unrealised beyond the realm of science fiction, may lose some of their appeal. People will have to balance the probable disadvantages of biotechnology against the potential advantages of consciousness in its pure form. (Haney 2)

Haney expresses his critique of the 'potential advantages' of being human and the 'probable disadvantages' of being posthuman with caution. At this point of history where the ultimate modification of the human genome is still a work of fiction, it is almost impossible to be certain whether or not this potential state will be a better replacement for our 'pure' human consciousness. However, Schwader's poem, for example, suggests that human consciousness will disappear beyond its potential posthuman remake while Haney's assumption proposes a utopian vision of the future of humanity where its pure form will triumph over the technology-incorporated one. However, this might also mean that a dystopian future is still a possibility. If the posthuman is ever to exist, it will be dissociated from his original nature and operates in accordance with a

different set of social and ethical values. Contemporary literature about the future suggests that people should be able to maintain a well-sustained perspective regarding the fast-paced advancement of science and at the same time be qualified to balance this out with the status of humanity to guarantee a harmonious movement to a fruitful future. In accordance with this idea, humans should genuinely understand that '[s]ince we are a part of cosmic consciousness, our duty is to contribute to its diffusion in the universe', according to Riccardo Campa in 'Pure Science and the Posthuman Future' (2008, 31).

In her poem 'It Wears You' (2002), Ann K. Schwader also refers to the 'thrills' of a cyborg's life expressing a sense of schizophrenia where it becomes impossible to tell the man from the machine; life is acquiring a complex form the riddles of which may challenge our human consciousness,

...I must confess,

.....

contemplating your connectedness,
which part is host, & which the parasite?

By now, I fear, the two are so enmeshed
that neither exorcism nor the knife
could liberate such long-neglected flesh. (Schwader, 'It Wears You')

The word 'parasite' in the above poem suggests that there is some kind of confusion between natural creation and technological development when existing together in one creature. When associating the word 'alien' with

creatures that are developed technologically and mechanically, it could be assumed that, although the machine is a human invention, it is still considered as parasitic when incorporated within the organic system. By developing the mechanical within the organic, the result would be an alien-haunted form of being that would need some sort of 'exorcism' to liberate. This could mean that the organic form (flesh) would be taken over by the mechanical one (parasite) considering that the latter is more powerful and should only be used to serve the former and not to control it. In an interview published on *Innsmouth Free Press* website, Schwader expresses her passion for writing speculative poetry that tells a story, 'My mind enjoys wandering off on weird little tangents ...I'd rather tell a story, or speculate about science'. The poetry of Schwader belongs to what is referred to as science fiction poetry or speculative poetry which flourished after the establishment of the *Science Fiction Poetry Association* (SFPA) in 1978 by American science fiction author Suzette Haden Elgin who wanted to found 'somewhere on this earth where the handful of people interested in the subject could get in touch with one another and share their thoughts — and their poems.' (Elgin *SFWA.org*). Based on both science and imagination, this poetic formula might recall aspects of Romantic poetry which contemplates nature looking for clues to redeem the self from the constraints of the outer world as opposed to the natural one. In *Metamorphosis of Science Fiction* (1979), Darko Suvin refers to the relationship between science fiction and Romanticism suggesting that '[b]iology, the Romantics' central science ...can in its "objective" version disjoin ethical ideas, such as compassion for the Creature, from living reality, such as that of his crucial ugliness' (Suvin 135). Schwader adopts a similar approach by addressing the subject of alienation and

aliens in 'It Wears You' in a way that helps the reader feel more objectively empathetic with than repelled by the alien. However, her other poem, 'Past Human', appears like a message sent from the future relating the story of human transformation and applying the basic forms of technology to new creatures striving for survival. In other words, the comparative style in which the poem was presented serves as a way to connect the past with the future and raise our understanding of the approaching dystopia. However, the posthuman might become a mirror of the past human; young versus old, and, thus, humans will not be able to dismiss their own future image and may, eventually, lose their objectivity.

The Clone and the Posthuman in Twenty-First-Century Fiction

This tendency to explore science as a theme related to people's future and the interpretation of technology in terms of estrangement and alienation is characteristic of the science fiction novel. Two twenty-first-century major works that support the 'techno-teen' theme are Ishiguro's *Never Let me go* (2005) and Atwood's *Oryx and Crake* (2003). While Atwood's novel is clearly dystopian in nature, both hers and Ishiguro's carry aspects of an 'autobiographical memoir' (McDonald 75) where readers are asked 'to bear witness to the dystopian world and the treatment of its victims', according to Keith McDonald in 'Days of the Past Futures, Kazuo Ishiguro's *Never Let Me Go* as a "Speculative Memoir".' (2007, 80). Although these two novels are not particularly directed to the young-adult audience, the theme in both Ishiguro's and Atwood's texts could be read in the light of the future generation in the sense that they offer new scope for looking at the social status of the young

adult in the future. In her exploration of posthumanism in young-adult fiction (2004), Elaine Ostry stresses the importance of literature focusing on the young adult stating that,

Writers use the literary tropes of young adult literature (and adolescence itself) to show the complexities of the coming age, the search for identity and sense of the self, the discovery of the lie, the separation between parent and child, the formation of new peer groups, resistance to adult control, decision making, growth and adaptation, and the challenges of hierarchies. (Ostry 223)

Both Atwood's and Ishiguro's novels here focus on the sense of identity and employ characterization based on the concept of alienation represented in both ordinary human being and young-adult clones. Both Ishiguro and Atwood use the first-person narrator in order to draw attention to the importance of the voice of youth in themes related to technology and future society in fiction. While Ishiguro's first-person narrator is a clone, Atwood's is a young man witnessing the post apocalypse of a world that has been destroyed for the purpose of introducing the new human-like creature with superior senses and modified genes. Therefore, through introducing the young-adult as a leading character in contemporary science fiction, it could be argued that this 'representation ...indicates their special innocence or insight, both of which are alien to adults and make the perspectives of youth valuable', according to Timothy Shary in 'Course File for "Film Genres and the Image of Youth".' (2003, 48). This assessment of the young-adult voice is characteristic of both Atwood's and Ishiguro's employment of their first-person narrators. Kathy, the clone, and

Jimmy, the sole survivor after the apocalypse in Ishiguro's and Atwood's novels, respectively, are a representation of innocence in a cruel world. Before he became Snowman, Jimmy, the main character in Atwood's novel, was an ordinary young man until 'he has renamed himself for this new and horrible world' (Hollinger 456). The change in the way he now perceives the world around him after the apocalyptic event that destroyed human life leaving him a lonely survivor (or so he thought) is neither a development nor a transformation. This experience has left him psychologically and mentally traumatized. He is left in oscillation between past and present with no choice but to try to amend the lost aspects of his childhood and teenage years through preserving memory. He thinks that 'It is the strict adherence to daily routine that tends towards the maintenance of good morale and the preservation of sanity.' (Atwood 1). Atwood's story tries to show, through the character of Snowman, the distorted image of the self by taking into consideration the inconsistent movement from the past to the present. Between adolescence and adulthood Jimmy is a representation of victimised youth. His time is that of revolutionizing nature and the human. It is an era heading towards the creation of the posthuman with modified genes and the termination of what may be regarded as the natural human state.

In 'Stories about the Future, From Patterns of Expectation to Pattern Recognition' (2006), Veronica Hollinger suggests that Atwood presents this sense of interrupted time through 'the narrative structure [that] moves constantly between the novel's post-apocalyptic present and its forever out-of-reach past; this structure very clearly highlights the broken connections between past and present and between present and future' (Hollinger 456). Jimmy is unable to

see the present as a natural successor of the past because it was created artificially rather than naturally. In other words, the disaster that ultimately destroyed the world as Jimmy knows it caused time to acquire a futuristic aspect rather than a present one. Jimmy's present after the disaster could be more compatible with his vision of the future. Suddenly losing every aspect of normal life forced him to develop a self-defence mechanism in order to be able to cope with time in its current state; his apocalyptic present seems more comprehensible as a vision from an imaginative future where he is no longer Jimmy, but Snowman. In this sense, Snowman could be as distorted a character as Frankenstein's creature in his 'decline from great expectations and naïve optimism to self-devouring [...] and community-destroying loneliness', as Suvin puts it in his account of the sense of alienation in *Frankenstein in Metamorphoses of Science Fiction* (1979, 135). Except the fact that Frankenstein's creature has no past memory beyond being physically as he has ever been, both the creature and Snowman possess a feeling of hatred towards those who manipulate natural creation; Frankenstein and Crake, respectively. They both witnessed a state of metamorphosis that rendered them miserable. Jimmy sees himself as Snowman in this distorted world which he resembles. Similarly, the creature in *Frankenstein* could only see himself as the devil because he was even rejected by his creator,

'I ought to be thy Adam, but I am rather the fallen angel, whom thou drivest from joy for no misdeed. Everywhere I see bliss, from which I alone am irrevocably excluded. I was benevolent and good; misery made me a fiend.' (Shelley 114)

From a Romantic perspective, Mary Shelley's *The Last Man* (1826), which is set in a post-apocalyptic dystopian world at the end of the twenty-first century, could exemplify this degeneration from great expectations to mere loss and agonizing memory. Although the latter work may reflect the author's personal loss and disappointment over the failed values of the Romantic age as represented by Lionel, the sole survivor of the world plague, both Frankenstein's creature and Snowman could be seen as an extension to the story of Lionel after the crisis. Their story starts where Lionel's ends; Lionel's story ends as he swims to shore while Frankenstein's creature and Snowman are left to face the ugliness of the horrifying world. Ironically enough, the creature in *Frankenstein* involuntarily finds himself as the representation of evil in this world because of the unnatural process of his creation while Jimmy in *Oryx and Crake* willingly chooses to become Snowman because he now represents the second-class human being after the creation of the Crakers, the super human creatures. However, for both, the present does not seem to fulfil their dream of a better life considering the abuse that Frankenstein's creature has to endure at the hands of his creator and the alienation that Snowman is forced to live after the world around him is destroyed. They once had optimistic values, and now they have to suffer the burdens of the society that failed them.

In Ishiguro's novel, this dream of a better life seems to be involuntarily limited. Many critics, such as Martin Puchner, and Richard F. Storrow, agree one point which is that *Never Let Me Go* demonstrates Ishiguro's attempt to define reproductive cloning in terms of a 'totalitarian state' (McDonald 76) which is trying to control its population by means of dehumanization. In 'When We Were Clones' (2008), Martin Puchner contrasts Kathy in Ishiguro's novel to

Michael Ray's film, *The Island* (2005), in which the protagonist tries to escape from the apparently Utopian facility after he finds out that he is kept as an organ donor. On the other hand, Ishiguro deliberately worked on 'eras[ing] almost all signs of rebellion' (Puchner 38) in the character of Kathy making her a 'manufactured creature' (Puchner 36) on the verge of being human. The 'casual baldness in Kathy H's voice' (Puchner 36) as she talks about organ donation and the death of her friends testifies to this character's lack of rebellion against human injustice. By comparing Ishiguro's novel with Jodi Picoult's *My Sister's Keeper* (2004) in 'Therapeutic Reproduction and Human Dignity' (2009), Storrow also suggests that under the influence of totalitarian authorities, individuals are left with no choice but to surrender to injustice (258). Anna, the thirteen-year-old girl in Picoult's book, finally decides to seek medical emancipation from her parents who have been using her as an organ donor to help her sister's illness. By contrast, Kathy is not facing a single family but 'an entire society that, in the name of public health, requires one class of people to surrender their lives for the benefit of others.' (Storrow 258). Through raising anxiety in the reader regarding Kathy's passive attitude towards her dehumanized life, Ishiguro succeeds in drawing the line that defines humans from clones; cloning is not only a matter of conducting genetic research in laboratories but, more importantly, a matter of social education and upbringing of the cloned object. The clones in Ishiguro's narrative are of a docile nature not because they are merely clones, but because the way they were introduced to the world was so limiting for their individual sense of freedom to develop in a natural manner.

Characterization is a central theme in contemporary science fiction whereby the content is not only entertaining but also reflective of modern societies and characters. While some characters are narrators like Jimmy and Kathy in *Oryx and Crake* and *Never Let Me Go*, respectively, other characters could be strongly present without necessarily being the narrator. An example is Crake, in Atwood's novel, whose mysteriousness, for example, is an authentic representation of the modern scientist aspects of whose character may not be all revealed to the readers. Considering the uncertain aspects of life, and, especially from a posthuman perspective, 'it [...] [becomes] much harder to impose a false sense of certainty, and we [...] [become] more aware that certainty, like belief, only arises in the absence of full information.' (Pepperell 169). Pepperell's argument suggests that advanced technology in the modern world only reveals more mysteries that the human is yet to solve. Humans are no longer superior in their knowledge of the world, and the posthuman that they may create may contribute to the unravelling of life's greatest mysteries. The scientist, in the context of Atwood's narrative, stands for the mystery of the human brain which many humans may fail to completely understand. In her article 'Using Adolescent Fiction as a Guide to Inquiry' (1981), Linda S. Levstik proposes that '[t]he more compelling the narrative, the more influential the author's vision of reality. Such powerful novels demonstrate the need for alternatives.' (174). Levstik argues that fiction that focuses on young adults reveals itself through introducing challenging life scenarios with mysteries to solve and hardships to overcome, especially in science fictional or dystopian settings.

One goal of science fiction is to provide alternative realities that provoke wonder in the reader and, at the same time, help them imagine how it would be to live differently. Readers do not expect to encounter real-life events in science fiction, dystopian, and post-apocalyptic novels; however, their desire to experience new worlds and read about different characters is an attempt to raise readers' empathy regardless of how deviant the world in the novel might seem from what they live in reality,

If a reader's belief in the persons -and events of a novel is sustained throughout, the connection between this work of fiction and the reader's total experience is made. Readers seem to move without hesitation from the novel to the world outside it. (Loewenberg 343)

Studies of non-reality based fiction in the twentieth century suggest that metaphor in fiction evokes readers' curiosity and awakens a desire to better understand the real world in light of such imagined situations. In 'Creativity and Correspondence in Fiction and in Metaphors' (1978), Ina Loewenberg assumes that characterization helps science fiction acquire a new form of reality that is not necessarily telling of the future, but most importantly correspondent and informative of a social and political reality the world is currently witnessing. Atwood's and Ishiguro's narratives are contemporary examples of this type of fiction that employs a controversial scientific phenomenon such as cloning in order to help readers be equipped with the necessary knowledge of dealing with this phenomenon if ever it became a reality in the future. By humanising the clone in fiction, novelists give readers a better chance of understanding and accepting such probable posthuman life forms in the future. In his defence of

human cloning, Gregory E. Pence, a philosophy professor at the University of Alabama at Birmingham, stresses that a future human clone would be an independent individual; he suggests that '[a] clone is not a drone. Cloned humans would be people [...] [who] should be treated equally as moral agents' (45). Therefore, creating human clones functioning within a social context in science fiction proves that 'the metaphorical tendency in contemporary SF far outweighs its predictive intent', according to Veronica Hollinger in 'Deconstructing the Time Machine' (1987, 202) referring to characterization as an evidence. If, for example, if we compare the cyberpunk of the nineteen eighties to today's science fiction, we could detect this movement from the cyborg character to the clone and from the robot to the chip-implanted brain, a characteristic that equips characters with more developed human dimensions than those of the cyborg. Another aspect of change is the age factor in twenty-first-century science fiction. The adolescent or the young-adult clone is now a recurrent figure in science fiction, the employment of which opens possibilities for a new generation of thoughts and human values to exist based on technology and genetic science.

A relevant example would be the clones in *Never Let Me Go* and the genetically enhanced creatures in *Oryx and Crake*. The former traces the life of a group of people in an institution similar to a boarding school from childhood to the early years of adulthood when their life comes to an end. They are prepared to become organ donors and accept their destiny of dying young. Although the reader is left unsure about the future of the Crakers in Atwood's novel, reference to other human survivors discovered by Snowman may not bear utopian predictions. The virtue and serenity of the Crakers is presented as

detestable and repulsive in the eyes of Snowman, the first-person narrator, while in Ishiguro's novel the story is 'told from the perspective of human clones' (Wallace 699) which makes it hard for us as readers to view them as outsiders. Regardless of the reasons for this attitude, Snowman might resemble the guardians in Hailsham who look at the students as distant strangers or even aliens. The innocence of Kathy and her friends, even as they grow up to be adults, might stand as a symbol of the exploited generation along with the Crakers in the other novel. Snowman took upon himself the task of educating the Crakers which in itself is based on fallacies because he finds himself unable to tell the truth which would expose a history of violence and shame at the hands of his now-extinct human generation. Before he became Snowman, Jimmy was a child whose parents tried to shield him from the world outside by manipulating the truth, and now, in turn, he is trying to protect the innocence of the Crakers. Jimmy 'is literally the shepherd of the Crakers' (Bergthaller 734) who are not yet ready to face a world they do not belong to, a history full of violence and destruction, and a material existence which they are unable to recognize in any way. Crake's irresponsible actions towards the Crakers could be compared to Hailsham's policy which educates the children about their future while gradually informing them that they are created to become organ donors as far as ethics are concerned. The moral choice here passed the moment the decision to run the cloning experiment has been taken; every decision that comes after that will not fix the damage already inflicted. Both Atwood's and Ishiguro's texts 'remind [...] us that the greatest danger from biotechnology today is not from cloning ... but from engineered disease. And from what we already are', according to George Gessert in his review of Atwood's novel

(2004, 417). While the world collapses in *Oryx and Crake* after the release of the plague leaving Snowman trapped between the past and the future and the Crakers unaware of their time, the same cruel destiny awaits the children of Hailsham because of a merciless adult world based on totalitarianism.

The reader's task here is to find out who to identify with in *Oryx and Crake* and *Never Let Me Go*. Is it Jimmy in the former and Kathy in the latter? In order to establish solid grounds for empathy with the characters, readers should first understand where they stand in the world in comparison to Jimmy or Kathy. Human understanding of modern societies necessitates admitting the possibility of human failure; humans are not perfect, and, in this sense, cannot claim superiority any more. In his defence, Crake, the scientist in Atwood's novel, was only trying to find a way to fix the flaws in humanity by introducing a revolutionary human form that surpasses the previous human model in virtue and benevolence. He does not see the Crakers as robots, and if, in any sense, they were, this would only strengthen his belief that 'we're [also] [...] robots anyway, only we're faulty ones' (Atwood 166). Humanity fails when it endangers the existence of the other; be it an animal, a plant, or any other form of life, which suggests that the posthuman state could only be achieved when peace is restored to all parties, the human and the natural. In *Oryx and Crake*, the Crakers are saved while humanity is ultimately destroyed, and the characters' 'rebellion ends in futility or death ...Absence of choice fuels fantasies of world-destruction and post-human worlds.'(Gessert 417). Neither Jimmy nor Crake seemed to have the freedom to choose their own destiny; they are controlled by humanity's misconception of the posthuman that is based on human destruction. The opposite happens in *Never Let Me Go*; Kathy and her friends,

the clones, are sacrificed for the sake of maintaining the superior state that humanity claims for itself. Crake and the guardians fail as a representation of modern society which, according to Atwood's narrative, 'is collapsing because it has failed to produce workable strategies for taming the human animal', as put by Hannes Bergthaller in 'Housebreaking the Human Animal, Humanism and the Problem of Sustainability in Margaret Atwood's *Oryx and Crake* and *The Year of the Flood*.' (2010, 732). Human empathy would be spontaneously directed towards Kathy and Jimmy whose 'own failure is presented as symptomatic for the larger failure of his culture to tame the destructive appetites of its members.' (Bergthaller 733).

From a different perspective, the character of young Jimmy as a representation of the past human could be contrasted with the Crakers and the children of Hailsham as a representation of the posthuman. Jimmy's childhood could be similar to that in real life; ordinary children whose talents may not always be recognised by their parents or who might naturally be of limited capabilities. On the contrary, the Crakers are created as perfect human beings with genetically enhanced features physically and biologically so that they replace the existing generation of humanity on earth. Since Atwood's novel offers 'a story about evolution' (Hollinger 457), *Oryx* could be seen as an example of a human state that should be replaced since her past 'embodies sexual and racial oppression' (Squier 1154). In other words, the modified sexual characteristics of the Crakers may be Crake's way to compensate for *Oryx*'s lost innocence by making sexuality of marginal importance to the Crakers. Although Crake's intentions behind modifying the human might be of a better nature than the guardians', the whole process could be seen as based on

exploiting the innate human nature. The children of Hailsham are paid special attention with their talents encouraged in exhibitions featuring their artwork and their health well-maintained only for the purpose of psychologically controlling them; 'art [could be viewed] as a form of extraction that resembles forced organ donation', according to Shameem Black in 'Ishiguro's Inhuman Aesthetics' (2009, 785). It is the question of whether it would be better for the future generation of children to be raised and taken care of the way Jimmy was. If not, did the above novels intend to show the future of the younger generation as based on exploitation and one-sided interest? For the reader, who will gradually be able to see the clone as a human being in *Never Let Me Go*, it would be difficult to feel that these clones are being denied 'the desire for emancipation, the clones do not rebel and thus "become human." Rather, they learn to make sense of their lives as clones.' (Jerng 382). Mark Jerng, in 'Giving Form to Life, Cloning and Narrative Expectations of the Human' (2008), discusses the submissive nature of the human clones in *Never Let Me Go* which ends with Kathy turning thirty and getting ready for her first donation after she finished her job as a carer for her friends whom she witnessed dying gradually after multiple operations. On the other hand, the Crakers in Atwood's novel are left on shore waiting for the appearance of the other survivors to discover their existence. Jimmy, Snowman, is the only witness to the past and an eye contemplating the future. The fact that Hailsham's students were nurtured as children for the purpose of preparing them to die young predicts a dystopian future where the younger generation is sacrificed on the altar of science, or is it on the altar of human pride? The consequences of advanced science applied to human beings cannot actually be guaranteed both ethically and socially, and people do not

know for a fact whether enhancing the younger generation will carry a virtual essence or an evil one. However, it is evident that Atwood's and Ishiguro's dystopian vision 'invites us to abandon the veil of authenticity and bear witness to a memoir from another reality [...] where Science Fiction again calls on our imaginations to act as a lens by which to scrutinize contemporary social dilemmas.' (McDonald 82)

A Comparative Study of Cloning in Contemporary Poetry and Fiction

The issue of cloning in literature as a debatable scientific subject may not necessarily occupy a position where the reader is functionally judging its acceptability in future or present realities. It may not always be a process of evaluating right and wrong in light of the possible outcomes of a certain story; rather, it offers a space for contemplating the possibilities of such experience in an attempt to foster our current knowledge of existence, or, in this case, the duplication of existence. Following the first successful attempt to clone a human embryo in 2004 in the UK, there has been controversy regarding the validity of conducting this experiment for therapeutic purposes. Claims have been made by the scientists involved in this experiment that human cloning 'will pave the way to cure some of the most intractable medical conditions, including Parkinson's, Alzheimer's disease and even paralysis' (Sample *Guardian.com*) as far as science is concerned. One way of understanding the idea of human enhancement in contemporary science fiction could be through relating it to the current status of human societies. Social reality is best cultivated by enhancing and developing its communication methods, be it day-to-day interaction with others in society or the way each individual encounters new knowledge, be it

intentional or accidental. It is useful, therefore, according to Brian Attebery, 'to read science fiction seriously' because 'it serves, from time to time, as a sort of cultural town meeting, in which important ideas are debated and new forms of conceptual consensus hammered out.' (517). This 'cultural town meeting' is not exclusive to fiction but also seen in poetry. Although her main interest is short story writing, Scottish writer, Sophie Cooke, participated in a poetry contest for the *ESRC Genomics Forum* offering a chance for poets to express the idea of genetic engineering and human enhancement in poetry. Her winning poem, 'Forward Deck' (2010), takes readers through a journey to the future of humanity reflecting on the issue of cloning. Although Cooke does not refer in her poem to the purpose of creating the clones, her description of the group of clones in 'Forward Deck' as a 'crew' (Cooke) would suggest that they are on a ship in the middle of the ocean which might symbolize power, limitlessness, and infinity. Cooke might be referring to continuity of existence that the clones signify, and, somehow, this image brings to mind Ira Levin's *The Boys from Brazil* (1976), another political science-fiction dystopia in which 'conspirators nostalgic for the Nazi regime clone hundreds of Hitlers', as Bertrand Pulman suggests in 'The Issues Involved in Cloning, Sociology and Bioethics.' (2007, 134). Cloning for the purpose of maintaining continuity, in this sense, is a dangerous process.

However, unlike Ira Levin, both Sophie Cooke in 'Forward Deck' and Deryn Rees-Jones in *Quiver* (2004), seem to express a different attitude towards the imaginative experience of human cloning describing it as 'wondrous' (Cooke). They employ suspense in order to give the idea of human cloning as a future possibility its full dimensions. Although the general

atmosphere in the poem contemplates the magic of cloning as an experience, the whole imagery of a 'crew' with 'superfine' clothing might reveal a hidden suspicion that these people might be as dangerous as a gang or a group of pirates. Investigating the truth through the scientific motif in such literary works makes literature a way to redeem humanity from ignorance and pave the way towards an elevated state of knowledge and self-realization. Thus the literary text presents itself through characters that are involved in the discovery of truth that lies beyond this creation of a posthuman form represented by those narrating the story. In the case of Cooke, it is the poet herself who stands in charge of analysing and investigating this experience; she is both an author and a narrator communicating with her readers through telling a story of magic and wonder,

It is growing harder to tell you apart,

genetically wondrous crew

in your superfine cruising clothes.

Your perfections are various, yet

shrink away from death

against one sunlit rail ...(*Cooke ESRC Genomics Forum*)

Cooke wrote 'Forward Deck' for a poetry contest in which the aim, according to Professor Steve Sturdy, Deputy Director of the ESRC Genomics Forum, is to 'highlight this sense of uncertainty surrounding genetic technologies and the role they might play in 'improving the human' (*ESRC Genomics Forum*). The

idea of human enhancement takes different forms in today's world from cosmetic surgery to reproductive technology while this process of reflecting on genetics through offering a portrait of cloning in poetry might be the best way to raise attention that it is not always a matter of like or dislike, encourage or discourage; rather, it is a realization of mystery. Cloning is 'wondrous' in all that it offers of possibilities and shadows of the unknown. This is, of course, the attitude of the observer who does not embody this scientific phenomenon, but who could, at least, be a mediator bridging together the magical story in fiction and the reader in reality.

In every story there should be a 'character- narrator who functions as an intermediary between the non-real world of the fable and the real world of the reader.' (Pagetti & Hubert 125). In "'The First Men in the Moon,'" H.G. Wells' and the Fictional Strategy of His "Scientific Romances" (1980), Carlo Pagetti and Marie-Christine Hubert discuss, with reference to Wells' fiction, the role of science fiction in introducing the reader to the possibilities of the future. In the context of Rees-Jones' poem, Fay, the narrator, is more of a character involved in the story. However, on different occasions she comments and reflects on the story of mysterious Mara using an objective critical lens just as Cooke does in 'Forward Deck'. Fay is overwhelmed by the mystery of creation represented by Mara's clone whose appearance leaves Fay confused about what would happen if the process of childbearing and childbirth has been replaced by a crowd of cloned humans. Fay understands that human cloning would spare the female self the suffering she goes through in the process of carrying, having, and raising a child of her own, but she is still not sure that femininity is ready to undergo this altering change and whether it will be a sacrifice. Although Fay is

more of a character in the story, both she and Cooke are narrators who are trying to show the reader how the fantastic could interfere with the real by means of science. In the same way, having characters that are subjectively involved in the posthuman topic (the clones) as story-tellers in other fictional examples – such as *Never Let Me Go* and *Double Identity* by Margaret Peterson Haddix – helps the reader identify with the character and the society that surrounds it. Indeed, the integration of scientific subjects in poetry and fiction testifies to the interstitial nature of twenty-first-century literature. This interstitial quality contributes to an increased awareness of reality in juxtaposition with the probabilities of science. The narrator becomes ‘able to transmit to the reader, in an adequately simplified form, the complex interaction between myth and reality, between the narrative level and the level of everyday experience’ (Pagetti & Hubert 126) in both fiction and poetry.

However, identifying the characters that hold the status of power in the above texts is important in identifying the scientific moral used to accommodate the issue of cloning in a social context. In literature, there is the character-as-story and the others involved in the story. In other words, readers have to be able to differentiate between the characters who are at the centre of the fictional or poetic inquiry and the others who might be observers, narrators, and witnesses. For example, the ‘crew’ of posthuman clones in ‘Forward Deck’ is to be identified with the mysterious character of Mara in *Quiver* in the sense that both are considered inspirational to the vision of the narrator. Cooke endows their image with emancipatory qualities in a way that brings them close to ‘perfection’ the same way Fay, the narrator in *Quiver*, gives Mara a quality of eternity when she compares her to Artemis and Diana, the Greek and Roman

goddesses respectively. From this perspective, the scientific evidence might lose its objective credibility when accounted for in terms of 'perfection' and greatness from the view point of the observer.

You make yourselves new, in your own image,

catch it in brass and brilliant sunglasses.

Your sea has been resilvered.

Cell supplants cell

losing nothing

in the copy, an end

to age, to degradation. (Cooke *ESRC Genomics Forum*)

Here, the clones are described as immortals, and this is another poetic stretch on reality. However, although cloning is associated with genetic enhancement, it does not necessarily mean that clones should not age. The first cloned mammal, Dolly the Sheep, died which means that cloning might not be an 'end to age' as Cooke suggests. Comparing the image of the clone in both Cooke's and Ishiguro's texts, one will notice some differences in the presentation of the life of the clone. The atmosphere in 'Forward Deck' puts readers in an imaginative mood and takes them on a unique journey into a future of eternity and a death-resilient posthuman. They are 'wondrous' people whose 'perfection' lies in their ability to 'shrink away from death' (Cooke *ESRC Genomics Forum*).

This representation of clones who are able to 'reapply' their 'perfection' does not support our image of clones gradually decaying as organ donors in *Never Let Me Go*. It could not be conclusive which version of the story of the life of a clone does seem more predictable. This query identifies one of the basic principles of posthumanism which suggests that people cannot account for certainty any more and that 'ambiguity and relativity remain as integral to the cosmic process as their opposites; none of them can be eliminated from our attempts at analysis or ignored when theorizing about the operation of natural events.' (Pepperell 167). In the twenty-first century, it is almost impossible for human beings to claim full knowledge of the world; people are no longer able to keep pace with every new movement or gain full insight into what is being developed in science on a daily basis. On a daily basis, new interpretations arise to find answers to the questions humanity constantly unfolds. It might, therefore, be possible to suggest that judging human cloning as destructive based on no tangible evidence and without further research means 'reflexively dismissing one of the biggest philosophical questions ever to emerge from biology.' (Pence 2). The generation of the future, which is the centre of attention in contemporary science fiction, is an authentic possibility which society curiously explores the same way Fay, the observer in *Quiver*, does. Ishiguro's narrative gradually reveals that the generation of youth is, in fact, a generation of posthumans. *Never Let Me Go* 'subtly suggests yet withholds from the reader the easy conclusions, either that Kathy is human like us, or that she is ineradicably other' (Wallace 699). This contemporary approach to the topic of cloning in twenty-first-century literature as a representation of social anxiety and alienation is what makes such narratives more than mere cyberpunk stories.

They issue somehow realistic portrayals of the values of modern societies through introducing the human clone as a possibility that one should be prepared to witness in the future.

Therefore, regardless of the ethical and scientific arguments about cloning, literature continues to tackle this subject from its own perspective through raising concerns about the posthuman future of contemporary societies and the psychological trauma that may affect the individual. However, Gregory E. Pence whose work is focused on the relationship between philosophy and superintelligence and genetics, in opposition to Fukuyama, holds a strong belief that cloning may become an answer to many difficult questions about humanity and the nature of creation. He believes that '[h]uman cloning raises some important questions about our ability to choose wisely, about our view of human nature, about our capabilities, about our faith in ourselves, and about the directions we choose for future humanity.'(Pence 2). In Cooke's poem, readers are presented with an image of a functionally modified human through offering a portrait of a crew sailing in a tranquil journey undisturbed and harmoniously surrounded by all the peaceful aspects of nature. This image may recall Percy B. Shelley's Romantic philosophy aspiring to establish 'sympathy between men, cosmic nature, and time' (Suvin 126) by means of viewing the mysteriousness of natural science as emancipating from the constraints of limited thought. In doing, so, Cooke has succeeded in introducing the wonder of science by using 'a compelling and disturbing visual metaphor to address the issue of cloning in "Forward Deck"' (*ESRC Genomics Forum*).

As far as contemporary Romanticism is concerned, and by maintaining an approach that celebrates science as a life enhancer, Cooke is accessing the scope of imagination from a cosmic rather than a social perspective. This makes her representation of the idea of cloning more objective but, at the same time, socially lacking in comparison to Deryn Rees-Jones' *Quiver* and Margaret Peterson Haddix's *Double Identity* (2005), for example. Margaret Peterson Haddix, an American author of science fiction and fantasy for young-adults and best known for her *Shadow Children* sequence (1998 - 2006), received inspiration for her novel, *Double Identity*, from an article 'about Congress planning to ban cloning, and it quoted a bioethicist who said that cloning would give false hope and exploit the grief of parents who had lost children.' (Haddix in *haddixbooks.com*). In fact, this proposition gives the discussion of the topic of genetic modification in contemporary literature further dimensions in the sense that it takes cloning beyond its scientific and natural sphere to incorporate it within the human vortex of emotions and personality makeup. Haddix refers to the social aspect of cloning when applied within the family as a way to compensate for the loss of a child when she thought of 'how hard it would be for grieving parents to resist the urge to try cloning' (Haddix in *haddixbooks.com*). Bethany, the protagonist and the narrator in *Double Identity*, is, in fact, a clone of her deceased sister, but she reached her teenage years without knowing about this secret that her parents kept for years. When one day her parents drive across another city to leave her with her aunt without explaining why, she starts to get suspicious, especially that her mother's psychological state seemed on the flux with no obvious reason. She accidentally hears the name of a girl called Elizabeth that her parents do not want her to

know about and later meets a mysterious man who seems to know who she is. Her aunt's friends in town think that she is Elizabeth when they see her on one occasion, but her aunt refuses to explain anything to her in accordance with her parents' wish.

This lack of knowledge in Bethany's character is the same component employed by Ishiguro in his formation of Kathy's character; both characters represent the young-adult's quest for truth which is a major step on the road of self-definition and awareness. For adolescent readers who feel the 'need to encounter alternative realities' (Levstik 174), both novels seem compelling in their introduction of a not-yet-conducted human state that challenges aspects of the world we know. The young-adult clones are complete humans, manipulated by the world of adults; they could, thus, stand as a metaphor for today's young-adults' quest for self-definition. Through science fiction, the author is addressing social problems by shedding light on the topic of cloning. In addition, the status of the young-adult individual enters a new realm that raises questions about the nature of future creation and 'what would it be like to ...[be] the clone of a dead sibling?' (Haddix *Haddix Books*). This recent preoccupation with the topic of genetic engineering in relation to children and young adults in literature is what distinguishes such works in fiction and poetry published in the twenty-first century than what has been published in the previous century. Fay Weldon's *The Cloning of Joanna May* (1989) is one example of late twentieth-century narratives that directly address the topic of human cloning. However, Joanna May is an adult woman cloned by her husband after their divorce in an attempt to replace her with a new loyal wife who is basically genetically identical to Joanna. However, although the theme here is not directly related to youth, it is

suggested in the novel that Joanna's husband was abused by his foster parents as a child and locked in a cage with the rest of the animals in the house. Apparently, this emotional trauma has affected his personality as an adult making him unable to see Joanna or her clones as human beings, but as mere objects without rights.

It seems that *Never Let Me Go* tackles the same topic from a different perspective. The clones are treated as farm animals since childhood. They are taken care of only to be used as organ donors when they grow up. However, Ishiguro's characters offer a more revolutionary representation of the future generation operating within the structure of a society with reversed values in the way it deals with the young-adult. In other words, Ishiguro is challenging the therapeutic conduct of organ donation today by offering a dystopian nightmare based on the creation of human clones to be sacrificed for the benefit of a larger totalitarian system. *Double Identity* is another representation of cloning in literature telling the story of some parents who decide to clone their recently dead daughter to compensate for the loss. The plot of *Double Identity* recalls that of Steven Spielberg's *A. I. Artificial Intelligence* which tells the story of a humanoid child (David) who has been programmed to live within a human family as a substitution for their ill child. Both Bethany in *Double Identity* and David in *A. I. Artificial Intelligence* are a compensation for the absence of a child in each family; while Bethany is an identical clone of her dead sister, David is a humanoid that the family brought as a replacement for their ill child who has been kept away. Spielberg's film offers a dark vision of the future because, according to him, '[a] substitute love child ...is almost a crime, and the human race pays for that crime.' (Spielberg 4).

In Haddix's novel also Bethany appears to be Elizabeth's cloned sister. Bethany, herself, learns the truth about being a 'duplicate body' but insists that her individuality is unquestionable regardless of this fact. What makes the vision in *Double Identity* different from that in *A. I. Artificial Intelligence* is that the former offers a more optimistic prospect of the future while Spielberg thinks that David's story is 'a very tragic' one (Spielberg 4). Bethany finds reconciliation with society and with her own self while David's story ends while he is still searching for a sense of belonging and self-definition. On the other hand, the ending of Ishiguro's story is frustrating. The dystopia of self-destructive humanity is represented by children who are raised as sacrificial replicas and mean nothing to the outside world. Having been raised outside of the family frame, Kathy and Tommy know that they are the only ones who care about their existence and so have nothing to fight for but to surrender to the world who wants them eventually consumed. *Double Identity* ends with Bethany turning thirteen and gaining insight about herself as an independent 'techno-teen' while *Never Let Me Go* closes with Kathy leaving behind her young-adult years fully prepared for the end. I particularly find Mark Jerng's account of Ishiguro's depiction of the life of the clone in 'Giving Form to Life, Cloning and Narrative Expectations of the Human' (2008) relevant. In Kathy's case, it is mostly true that 'the clone's knowledge of itself as a clone would close off the possibilities of life being lived according to human nature, because it puts the clone face to face with his nature as a completely instrumentalized being.' (Jerng 380). Ishiguro's narrative suggests that even when they reach full maturity, the human clones in *Never Let Me Go* still need protection from the

cruelty of the outside world. However, they have been completely denied the right to have a family.

Cloning and Motherhood in Rees-Jones and Haddix

The topic of the family is an important part of any discussion about cloning in literature. The different narratives represent the subjectivity of experience in characters developing according to their functional social structure. It seems that there is a good space for juxtaposing the characters in the texts I am dealing with in the sense that they all share a common past of mystery shielded by the burden of choice-making. In *Double Identity* (2005), Dalton Van Dyne, the mysterious character that tracks Bethany's family, is a representation of a character's quest for intimacy; a theme that is common in literature with people trying to overcome their loneliness and restore harmony to life in its social manifestation. However, the way this theme is codified in Haddix's book seems to employ cloning as a therapeutic scheme aiming at characters finding love and harmony with those who represent them the most, their own clone. Van Dyne was an indirect reason why Bethany was born in the first place; he gave money to Walter Krull, her father, so that the latter could clone him, but, instead, Walter Krull chooses to use the money to clone his recently deceased daughter, Elizabeth, then run away and disappear.

The concepts of betrayal and disappointment also appears in *Frankenstein* in the sense that in both novels there is the character betrayed by those who were trusted and denied love and intimacy that might have been found in their own replica. Although Frankenstein's creature wanted a female version of his own kind, the difference between his story and Van Dyne's only

lies in the availability of choice where the former was denied all. While Van Dyne's social recognition as an ordinary human being (at least physically and biologically) and his possession of money help him to make this decision about cloning himself, Frankenstein's creature had none; he was literally forced in to a state of self-hatred resulting from his physical appearance. From another angle, Victor Frankenstein's , and by extension, Van Dyne's attempt to create a human being could be, according to Baldick *In Frankenstein's Shadow, Myth, Monstrosity, and Nineteenth-century Writing* (1987), 'a symptom of a profound narcissism, displayed in his solitary and guilty attempt to achieve reproduction without a sexual partner.' (Baldick 50). Based on this analysis, *Frankenstein* could reflect the ideas in Rees-Jones' *Quiver* in being 'concerned with the anxieties of maternity' (Baldick 31) and the question of whether humanity will come to accept replacing natural birth with artificial reproduction.

Accepting one's own self versus rejecting it presents itself as a crucial subject in the literature about cloning. Whether triumphant or fatal, all the characters have to go through this journey of suffering and reconciliation. In fact, the subjects of cloning represented by Kathy and Bethany, for example, could parallel those who are witnessing the incidents from outside the circle. In Rees-Jones' *Quiver*, the narrator, Fay, goes through police investigations after seeing the murdered body of her husband's ex-mistress, Mara, and later encounters Mara's clone. In *Double Identity* (2005), Hillary, Bethany's mother, goes through the ordeal of keeping the secret of her cloned daughter. In *Never Let Me Go* (2005), the idea of parenting and the family seems missing from the plot except from references to Kathy's dreams of getting married and having a family of her own. Therefore, the theme of motherhood and maternity cannot

pass unnoticed in the above works with reference to the characters standing in the outside circle of the life of the clone.

In *Quiver*, it is not clear why Rees-Jones sketches her protagonist in a maternal sense and what this has to do with her involvement in the murder of her husband's ex-mistress, but it could be relevant, according to Zoe Brigley, that the narrative in *Quiver* is 'preoccupied with subverting lineages, maternity and reproduction' (Brigley 17). In 'Ghosts':

The dead are with us still

However we love or lose them.

Where do they live, the ghosts we try to kill?

The dead are with us. Still

They wear us as they will, (Rees-Jones 24)

The 'ghosts' in the above poem could refer to one's own past memory. The years or days that pass could still appear in the present as 'ghosts' in the form of past memories or experiences. The past is not 'dead'; it could be the clone of the present, a good memory to 'love' or a bad one that people try to escape from or 'lose' any connection with. Rees-Jones' style throughout the majority of the narration seems to possess a lyrical quality. In the different poems, the narrator is often found reflecting on past or present life events through imagination. The way Rees-Jones constructs her narrator's voice, which possesses qualities of lyrical Romanticism to produce this murder-mystery narrative-style verse with science fiction aspects, proves that *Quiver* is an

excellent example of contemporary interstitial literature. Perhaps, the cloning of Dolly the Sheep was part of the inspiration behind *Quiver* although it has only been referred to directly in 'Clone', 'As the Comedy of Errors becomes Twelfth Night/ [...] and Dolly Parton becomes Dolly the Sheep/ so this becomes you.' (Rees-Jones 65). However, this preoccupation with the idea of present and past and life and death remains present throughout Rees-Jones' narration.

As far as fiction is concerned, the same preoccupation with the concept of time in relation to life and death could be traced in Haddix's *Double Identity* in the character of Hillary, the mother, who seems unable to reconcile past with present, and the dead with the living. In fact, the poem 'Ghosts' in *Quiver* could be read in light of Hillary's suffering highlighted by her attempt to cope with the death and rebirth of her daughter. Hillary accepted the death of Elizabeth in hope that Bethany, the clone daughter, will compensate for the loss. However, her expectations of a harmonious future were interrupted by the change time brings; Bethany is a different person born in a different time and is constantly being exposed to different surroundings. She is not her dead sister in the eyes of her mother and her time testifies to this; she was born in a different time and grew up to meet different people and develop different experiences.

In *Quiver*, time as a variant overcomes duplicity and, hence, leaves an emotional gap that needs to be figured out and amended by the mother. 'The dead are with us' means that forgetting the past equals sacrificing memory and losing a part of one's self. Fay in *Quiver*, on the other hand, is overwhelmed by the recurrent past, one that she is only aware of in an incident of murder that she partly witnessed and 'from snapshots, old albums/ carrying histories, other

lives, other selves.' (Rees-Jones 10). In a way, her encounter with the ghost of Mara, or what she thought it was, leaves her on the verge of losing belief in the shallow definition of life from the view point of the living. In 'Liverpool Blues' she says that, 'We're living in borderland, somewhere between life and death,/ losing ourselves in the search for a self.' (Rees-Jones 27) which means that it is no longer a choice to turn back on the past. Life for Fay, the narrator, is a mystery that she tries to understand by finding Mara's murderer. Only then could she find her lost self.

The contemporary fiction and poetry discussed in this chapter focuses on the idea of time which is ever connected and cannot be dissociated from its own clone. In this sense, history could be seen as repeatedly projecting its own image through the lives of people who create it; the present is the clone of the past. Unaware of this possibility, the human society would dismiss Mara's clone in *Quiver*, for example, and consider her an outsider as far as the traditional social perspective of natural birth is concerned. *Quiver* challenges the idea of females becoming mothers and presents the character of Mara's duplicate as an example of a clone whose time is undefined in terms of family, maternity, and paternity. According to Brigley:

[*Quiver*] addresses what it is to be human and female and asks whether woman can exist without maternity. The clone is the trope used to explore these debates and the book addresses issues of birth, reproduction and being through the themes of doubling, assimilation and cloning. (22)

However, it is tempting to challenge Brigley's argument that the relationship between Fay and Mara is only based on Fay's knowledge of Mara's clone which impacts on her perception of maternal roles. Maternity could exist outside the scope of childbirth in the sense that intimacy, as an aspect of maternity, could be established through people's tendency to pass and share their knowledge and experiences even outside traditional maternal roles. From this perspective, Fay's speculations about the life of a clone could be of a more natural essence; time is responsible for the creation of the past, and is, hence, able to handle the past memory. Mara was supposed to become a memory in the past after her death; however, the appearance of her *doppelganger* turned Fay's perception of time upside down.

Fay only saw Mara as dead in the cemetery, so when she later glanced at her in the dark, she rationally supposed that it is only her paranoid hallucinations after the trauma. The eventual face-to-face encounter between the two women has caused the appearance of a flashback for Fay; she first knows Mara as dead, and then she meets her alive; she witnesses Mara's death in the past and her life in the present.

Who's written this strange yet familiar script?

Who's following who?

Then she's off, and I'm left with her whisper,

A mark on my arm where her grip was too tight,

Handwritten lines on an unlined page. (Rees-Jones 42)

This backward experience of the living past delivering evidence from the dead present is symbolic of cloning as an incomprehensible experience. Rees-Jones' story could be metaphorical of the current debate about the possibility of human cloning in the future and the mystery that surrounds such possibility. People are supposed to live then die and not the other way around, not even live and never die. From this stance, cloning as a literary motif in Rees-Jones text could be doing the job of a time machine moving us from the present to the past and 'warning of the decline of the human race' (Hollinger 202). Cloning in *Quiver* is, however, used as a positive motif in the sense that the clone helps uncover the truth about Mara's murder and helps Fay understand her maternal and marital bonds. The concept of generation in this work is illustrated through presenting a story where natural birth and reproductive cloning meet together in a way that questions the essence of family and maternal roles.

Fay, in *Quiver*, seems to be suspicious about what it means to be a mother or to be part of a family, and she keeps trying to figure out the value of her relationship with her husband while collecting evidence about the murder of Mara. Her belief seems connected to the secrets behind the existence of the mysterious woman and is only strengthened when all the parts of the puzzle are put together. When she says, 'I'm not sure exactly what I want,/ searching for signs of life.' (47), she might be referring to the hidden bond that ties her marriage to the story of the clone. As Brigley suggests, this book 'uses the clone to explore the potential of an identity without maternity, yet ultimately the clone is rejected.' (28). Fay is only tranquil when she knows that the ghost she was encountering is, in fact, Mara's clone who comes to inflict punishment on the murderer and direct life to its natural course; however, her attempts are

mere self-sacrificial with barely anyone to care except Fay. She now understands that Mara's clone has no connection to life except through the original version; she has no one to care for except Mara, and she is not cared for by anyone whatsoever. Indeed, the way to come to terms with maternity looks comprehensible only through seeing how life would be without the possibility of it. Mara, the clone in *Quiver*, indirectly helps Fay learn that '[m]aternity is not necessarily emancipatory; it involves sacrifice and stasis and it can be complex' (Brigley 28). Although her family history remains a mystery, the clone carried a maternal role defending her original which was only fulfilled through sacrifice.

Conclusion

Although, in reality, a 'cloning factory for human beings is pure fantasy' (Pence 44) this chapter was intended to investigate the role of cloning as a literary motif in contemporary fiction and poetry through highlighting the debate about the validity of conducting this experiment in the near human future when 'we can be sure that it will not be simple.' (Hayles 316). The validity of argument was supported by reference to the concept of posthumanism and what it means to be posthuman in contemporary literary terms. Reference to Mary Shelley's *Frankenstein* served as an important tool for connecting the theme of science fiction to posthumanism and cloning in contemporary science fiction and speculative poetry in the sense that laying the foundation for a posthuman future would necessitate making reference to cloning as a sort of alienation and Otherness. My argument was based on examples from literature in the twenty-first century highlighting Fukuyama's view of cloning as a negative

possibility suggesting that moving to a posthuman future will terminate our natural existence as humans and pave the way for the machine to gain control over life. However, other views may see that posthumanism is vital to the formation of a new human perspective based on admitting that man does not know everything and that there is no use assuming that we have full control. These predominantly recurrent views in contemporary literature undermine anthropocentric or humanocentric beliefs which argue that humans are the source of knowledge and the centre of the universe. Regaining our powerful status as humans is, in fact, deeply rooted in our acknowledgment of the limited human knowledge; continuity becomes only guaranteed through integrating other forms of life within the human social structure.

While Margaret Atwood's *Oryx and Crake* served as an example of a posthuman dystopia where the human race is erased because one scientist believed it is no longer valid, Kazuo Ishiguro's *Never Let Me Go* presented an image of humanism exploiting the new generation of posthumanism. The Crakers and the children of Hailsham are both the result of a genetic experiment; the former were meant to populate the planet and replace humans while the latter were only created to be sacrificed for the service of humans. Both images are dystopian in nature and support Fukuyama's argument against reproductive cloning but divert from the technophobic side of it. In fact, what cloning embodies as a scientific motif is that advancement proved able to alter our perception of life in a sense that makes us stand impressed by the wonders of science and nature. This concept of celebrating the magic of creation was present in the works of Sophie Cooke, Deryn Rees-Jones, and Ann Schwader whose poetry was able to divert the dystopian pathway in Atwood and Ishiguro

to a more imaginative one, celebrating the capabilities of science through reviving the traditions of our former Romanticists. According to our poets, humanity with the help of science has always been able to endow the present with a more profound knowledge and a richer human experience that is not to be judged in terms of a mere right or wrong.

In all the above literary works, knowledge poses itself as a key literary element, be it that of the self or of the other. As a result of the collaboration between science and human wisdom, uncertainty is nothing to fear; it is the first step towards acceptance and reconciliation with one's own time from past to present and into the future. Although 'told and untold' (Ishiguro 14), the clones of Hailsham will soon become able to confront their present; their knowledge of a harsh reality will not interfere with their ability to stand sustained. The same is true in *Double Identity* with Bethany welcoming a future in which her knowledge of being a clone will never compromise her self-recognition as an independent individual. What actually remains in question is other people's perception of the clone, those who stand outside the circle. It is limited self-knowledge that alerts people rather than mere duplicity or multiplicity. To let ethics and science aside and go deeper into this experience, there is a possibility that living with a clone may awaken in people the horror of recognizing that they are all cloned within themselves; humanity is never one-dimensional. N. Katherine Hayles believes that 'the more one insists on absolute boundary lines between the human and nonhuman, the more the two become entwined in their evolutionary present and future.' (135-136). Robert Pepperell's 'difficult' (172) question concerning the development of posthuman machines was 'Why do we want to develop such machines and to what ends will they be put?' (172). I believe that the issue is

not why or why not there might be human clones in the future, but it is that their representation in poetry and fiction could tell of a possibility soon realised.

Although the consequences are not guaranteed, science is always moving forward, and the science fiction of today might well turn into a reality in the near future.

Chapter Two

The Computerised Body of the Future:

Information Technology and the Techno-Teen in Twenty-First-Century Poetry and Young-Adult Dystopian Fiction

The new bodies and mentalities of the future are depicted in twenty-first-century young adult dystopian science fiction and poetry. These literary works present a 'posthuman future' predominantly controlled by technology, which is described in N. Katherine Hayles' *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics* (1999) and Francis Fukuyama's *Our Posthuman Future: Consequences of the Biotechnology Revolution* (2003). Both Hayles and Fukuyama suggest that the world is witnessing a gradual transition towards a posthuman future dominated by technology which requires attention to both cause and effect and summons new definitions of what it means to be human. The preoccupation of contemporary young-adult fiction with the topic of science and technology is often represented in dystopian settings in which advanced science and technology empower the existence of consumer capitalism and form a threat to the continuation of humanity represented by the generation of young adults. The portrayal of grim future worlds and dehumanized generations in contemporary young-adult science fiction warns against a devolving posthuman state that could become a reality in the sense that '[t]he future young adults face is that of a science fiction novel come to life.', according to Elaine Ostry in "'Is He Still Human? Are You?": Young Adult Science Fiction in the Posthuman Age' (2004: 222).

In the twenty-first century, technological inventions have become easily accessible by the public and are no longer confined to laboratories. Therefore, the topic of the relationship between technology and the human attracts a readership from different age groups considering that the majority of people nowadays use technology on a daily basis. Indeed, young-adult novels, with a variety of themes ranging from fantasy to adventure to science fiction and dystopia, are very popular with adult readership. This amalgamation of readership from different age groups testifies to the interstitial and hybrid quality of contemporary literature as discussed earlier in the Introduction chapter. Studies show that '55% of buyers of works that publishers designate for kids aged 12 to 17 -- known as YA books -- are 18 or older, with the largest segment aged 30 to 44' (2012 'New Study: 55% of YA Books Bought by Adults', *Publishersweekly.com*). This indicates a rising awareness about the importance of young adults in shaping the future of humanity. Ostry argues that the goal of 'science fiction for young adults' is 'to mediate the posthuman age to a young audience' (223) in an attempt to familiarize the new generation with the relationship between advanced technology and the concept of posthumanism.

The aim of this chapter is to argue for the connection between twenty-first-century young-adult science fiction and poetry and Hayles and Fukuyama's views on the topic of posthumanism set against the background of two twentieth-century novels, George Orwell's *Nineteen Eighty-Four* (1949) and Aldous Huxley's *Brave New World* (1932) in which, according to Fukuyama, 'the future and its terrifying possibilities were defined.' (2002 *Theguardian.com*). Donna Haraway's argument in 'A Cyborg Manifesto' (1991) is also relevant to

the discussion of posthuman bodies in twenty-first-century fiction considering that:

Late twentieth-century machines have made thoroughly ambiguous the difference between natural and artificial, mind and body, self-developing and externally designed, and many other distinctions that used to apply to organisms and machines. Our machines are disturbingly lively, and we ourselves frighteningly inert. (Haraway 152)

In the context Haraway's redefinition of the 'cyborg' as imbedded within the human, contemporary young-adult fiction features this concept in the representation of posthuman youth. Twenty-first-century young-adult fiction replaces Orwell's and Huxley's adult protagonists with teenagers, and it introduces interdisciplinary aspects of science fiction and dystopia or both. I will establish the representation of the techno-teen body which is exemplified in works such as T. M. Anderson's *Feed* (2002), Suzanne Weyn's *The Bar Code Tattoo* (2004), Stephenie Meyer's *The Host* and Suzanne Collins' *The Hunger Games* both published in 2008. All of these novels, with the exception of *Feed*, are the first part of a trilogy introducing the crisis of identity of the young-adult generation. While all of these novels are set in dystopian futures, some of them present these dehumanized worlds as the product of advanced technology; hence, justifying the sense of alienation imposed on the new generation in these novels and supporting the portrayal of the future generation as the new alien.

This feeling of alienation appears in contemporary poetry as well in a number of poems by British poet, Lavinia Greenlaw, from her poetry collection,

Minsk (2003). Poems in this collection replace the science aspect present in Greenlaw's previous poems such as 'The Innocence of radium' (from *Night Photograph* 1993), in which she talks about a factory-worker's death from radium poisoning, with an exploration of childhood. Some of the poems in *Minsk* focus on childhood memories and the sense of estrangement and alienation from the self and the world around. Greenlaw's engagement with the theme of childhood and adolescence in *Minsk* meets other poets' representations of contemporary life as reshaped and redefined by technology and the role of capitalist systems in leading the way towards the creation of the posthuman. Dorothea Smartt's 'Shake My Future' (from *Connecting Medium* 2001) challenges the control of capitalism over the human in a similar way that the computer scientist in Adam O'Riordan's 'Gooooogle' (from *In the Flesh* 2010) feels that her/his creative mental abilities are entrapped within the digital screen. This refers to totalitarian systems within which technology is used to dominate societies as suggested by Orwell's *Nineteen Eighty-Four*. However different from each other in theme and approach, these poems by Greenlaw, Smartt, O'Riordan, and other poems that will be mentioned in this chapter provoke a sense of melancholy and loneliness as well as some nostalgia for a time where things were or could have been better. The only poem that expresses hope for change is Smartt's 'Shake My Future' which, in this respect, establishes some common ground on which contemporary poetry and young-adult fiction meet, despite the terrifying worlds that both genres portray. Smartt believes that people in the future will have clear insight about how to redeem themselves from the control of capitalism by containing the potential damage of technology, the most effective capitalist weapon. The primary texts in fiction and

poetry that will be introduced in this chapter deal with the contemporary dilemma of man versus technology. I will analyse these texts while comparing them to some earlier literary works by Mary Shelley, George Orwell, and Aldous Huxley on the topic of posthuman youth, alienation, and the future of humanity dominated by technology.

Posthuman Bodies in Literature and Culture

This part of the chapter will elaborate on the concept of posthumanism in literature and examine contemporary young-adult fiction in posthuman and science fiction terms. It will also refer to some relevant arguments on posthumanism from Kim Toffoletti's *Cyborgs and Barbie Dolls* (2007), Judith Halberstam and Ira Livingston's *Posthuman Bodies* (1995), and other critical material.

The fear that technology will eventually replace humans with machines has a long history. In the beginning of the nineteenth century William Blake established the term, 'Dark Satanic Mills', referring to the Industrial Revolution in his epic, *Milton a Poem* (1804-1810). In illustrating Jesus' journey to find the new Jerusalem in England, Blake mentions how Jerusalem, a metaphor for Heaven, is 'builded here,/Among these dark Satanic Mills' (1804-1810). Blake argues that these 'Satanic Mills' came to replace the natural aspects of living. During the same period of time, between 1811 and 1817, a group of English textile artisans, the Luddites, reacted against the use of machinery in factories to reduce the workforce, and the British Army interfered to suppress their attacks. This indicates that the struggle against man-made technology has been going on since people felt that the machine is threatening their living. Twenty-

first-century poetry has continued to echo world changes in relation to technology exploring contemporary issues of posthumanism, the limitations of human freedom under totalitarian capitalist systems, and the necessity to challenge the image of the modified human in this new posthuman age. Therefore, while contemporary poetry works on examining the relationship between technology and human societies, contemporary young-adult science fiction is preoccupied with imagining a dystopian future in which technology is responsible for reshaping the human.

As illustrated in Mike Leigh's film, *Naked* (1993), there is very little hope that humanity will survive in the future under consumer capitalist systems and technologies. Johnny, the main character in *Naked*, relates technology to the birth of the new human, or the posthuman. He speculates about a dystopian future characterised by technology altering humans:

I don't have a future. Nobody has a future. [...] Are you not familiar with the book of Revelations of St. John, the final book of the Bible prophesying the apocalypse?... He forced everyone to receive a mark on his right hand or on his forehead so that no one shall be able to buy or sell unless he has the mark ... Well the mark, Brian, is the barcode ... They're going to replace plastic with flesh. Fact! (From *Naked* by Mike Leigh, 1993).

This apocalyptic portrayal of the degradation of humanity where people are treated like consumer products has been a recurring topic in twenty-first-century science fiction and poetry. This is a main theme in Suzanne Weyn's *The Barcode Tattoo*, one of the novels that will be discussed in this chapter along with other novels that highlight the relationship between information technology

and the advancement of human society, in general, and the generation of young-adults, in particular. Through the introduction of intricate issues about the status of generation and the portrayal of characters who are the fruit of the marriage between technology and the power of politics, writers of contemporary young-adult science fiction believe that their novels are equally entertaining and informative. Fukuyama argues that 'a technology powerful enough to reshape what we are will have possibly malign consequences for liberal democracy' (2002 *Theguardian.com*) and the continuation of humanity as we know it. Writers have in mind the task of entertaining as well as educating the generation of young adults about contemporary social changes which inspire the books and novels they are reading since '[w]hat their parents and grandparents had always thought of as science fiction—cloning, genetic engineering, prolongation of life, neuropharmacology—are now realities, or possible realities.' (Ostry 222). The prediction of a smart *telescreen*, a communication device in Orwell's *Nineteen Eighty-Four*, for example, has now come to life. The prophecy was fulfilled, and the breakthrough of computer technology even exceeded Orwell's scientific imagination represented by a 'telescreen' which 'could be dimmed, but there was no way of shutting it off completely' (Orwell: from *Nineteen Eighty-Four* 4). The controversy, however, lies in deciding whether Orwell's political vision is as possible a reality as his speculations regarding the manipulation of science by political power to gain control over society. Although, to some extent, the social system he presents in his novel is dependent on technological innovations, contemporary society has not yet reached the stage where people become terrorized by technology despite having widespread CCTV surveillance systems. These systems are still

primarily used for security purposes, not as technological weapons. The argument, however, could be different if governments, for example, allowed the application of human cloning as a breakthrough in biotechnology.

As discussed in Chapter One, cloned bodies in twenty-first-century science fiction and speculative poetry are represented in light of new social changes and the experimentation of genetic engineering on organic subjects. The texts in this chapter, as well as in Chapter One, define the concept of posthumanism according to the new techno-social changes in twenty-first-century society. In 'Traces of the Future: Biotechnology, Science Fiction, and the Media' which appeared in the *Science Fiction Studies* journal in 2003, Sheryl N. Hamilton argues that:

Sf texts in a variety of popular media have been active in exploring and constructing the boundaries of the biotechnological imagination. Scholars concerned with the public understanding of science have argued that too little attention has been paid to sf as a medium of communication of scientific information to the public. [...] Little attention is paid to science fiction as a symbolic resource in understanding science, regardless of its accuracy. (269)

This quotation establishes science fiction as a very important 'medium' (Hamilton 269) through which science could be communicated to the public. Hamilton argues that science fiction is not getting the 'attention' (269) it deserves in terms of its contribution to readers' knowledge about science. This chapter argues otherwise. Hamilton's article was published in 2003, and since then much has changed in terms of the public awareness regarding the latest

advancements in science to which fiction has become a major contributor in addition to the internet which made information easily accessible by the everyday individual. The focus will be on the literary representation of how new technologies form what I will establish as the 'techno-teen', the posthuman body of the future. The two major young-adult texts in which this representation of the techno-teen will be analysed are M. T. Anderson's *Feed* (2004) and Suzanne Weyn's *The Barcode Tattoo* (2004).

In 'Are We Postmodern Yet? Reading "Monster" With 21st-century Ninth Graders' (2011), Susan Lee Groenke and Michelle Youngquist describe twenty-first-century young-adults as 'shape-shifting adolescents' (505). They argue that today's youth possesses a multi-faceted identity that is shaped by various upbringing interferences including the family, the school, their peers, and, most importantly, the Internet. Groenke and Youngquist's article explores the way the term 'monster' is communicated to ninth graders in an educational setting. The article focuses on the teenage reception of Walter Dean Myers' mystery young-adult novel, *Monster* (1999), which won the *Michael L. Printz Award* in 2000. The novel is introduced through different narrative styles such as first-person and third-person narrations and flashbacks, and the story follows the trial of Steven, a teenage boy, who has been involved in a robbery that resulted in some human casualties. Steven is, according to Groenke and Youngquist, a representation of the conflicted identity of youth in twenty-first-century literature:

Such postmodern literary characteristics as the theme of identity, genre eclecticism, ambiguity, and non-linearity are becoming increasingly

common in children's and young adult literature. [...] These elements often include signs from and responses to popular culture and media, as well as responses to discursive interests of power that are circumscribed by gender, race, and class subject positions. (Groenke and Youngquist 506)

In the context of Groenke and Youngquist's argument, the hybridity of culture in contemporary societies which has been discussed in the Introduction chapter has forced young-adult fiction to evolve in the process. The ideas of alienation and foreignness often reoccur in contemporary young-adult novels. For the techno-teen body, which is the focus of this chapter, and the cloned body as represented in Chapter One as Ostry suggests, 'the feeling of being different from others and estranged from oneself is particularly strong. Their sense of identity is confused as they must judge whether they even have a separate self.' (Ostry 226). Chapter One has discussed twenty-first-century fiction that represents the topic of cloning and genetic modification in narratives that are written for adults yet focusing on the dilemma of the young-adult figure (Margaret Atwood's *Oryx and Crake* (2003) and Kazuo Ishiguro's *Never Let Me Go* (2005)). However, this chapter engages with some contemporary young-adult narratives dealing with crucial issues in today's world such as the generation of technology, double identity, and the techno-teen.

The earlier quotation from *Naked* redefines the concept of apocalypse as the product of human mechanization or the treatment of organic bodies as mere artifacts processed and managed according to posthuman standards. This vision could reflect future possibilities as portrayed in literature in the sense that, according to N. Katherine Hayles' views on the difference between 'body' and

'embodiment' in her article 'Flesh and Metal: Reconfiguring the Mindbody in Virtual Environments' (2002):

Living in a technologically engineered and information-rich environment brings with it associated shifts in habits, postures, enactments, perceptions—in short, changes in the experiences that constitute the dynamic lifeworld we inhabit as embodied creatures. (Hayles 299).

In defining the posthuman, Hayles suggests that the idea of the human body in its abstract form as seen from outside and defined in general terms remains unchanged throughout history. The way humans perceive their being as a part of the world is what matters in the subjective involvement of the mind in deciding how individuals relate to themselves and others. However, in Anderson's *Feed*, it seems that the human body is being reconfigured by incorporating 'metal' into 'flesh' through implanting the 'feed' in the human brain. The 'feed' is a microchip implant connected to the internet and is responsible for directing the thinking of individuals who carry it in their brains towards making online purchases, building a consumer profile, and promoting and reviewing products. Using the 'feed' to control brain function prevents the mind from becoming actively involved in recognising its new form of embodiment as it becomes controlled by this technology. Independent thinking cannot coexist with the 'feed' which facilitates the creation of a posthuman mind that continues to view itself as human. This is the opposite of what Hayles believes as 'body' and 'embodiment' by which she suggests that the mind could create various definitions of a body in a fixed state. The body in *Feed* is changing while the ability to recognise this change is paralysed.

In their account of posthuman narratives in *Posthuman Bodies* (1995), Judith Halberstam and Ira Livingston argue that

Posthuman bodies are the causes and effects of postmodern relations of power and pleasure, virtuality and reality, sex and its consequences. The posthuman body is a technology, a screen, a projected image; it is a body under the sign of AIDS, a contaminated body, a deadly body, a techno-body; it is, as we shall see, a queer body. (3)

The posthuman body in contemporary narratives could manifest in a multitude of representations. Anderson's *Feed* and Weyn's *The Barcode Tattoo* introduce the techno-teen model as a posthuman body manipulated by technology. Both Anderson and Weyn emphasise in their narratives the dangers of the over exposure of contemporary youth to technology. The main theme in both *Feed* and *The Barcode Tattoo* highlights Fukuyama's concerns that humanity will end once technology becomes a part of the human body. In *Cyborgs and Barbie Dolls* (2007), Kim Toffoletti argues that '[d]espite the productive changes technology can bring to our thinking about the self and the world, social anxieties about technology will still have considerable cultural purchase, as Fukuyama's vision of the posthuman future suggests.' (12). The process through which the human body acquires a posthuman form in the technological age is both exciting and dangerous. Some would argue that the change technology could bring to humanity will be a positive development. This has been discussed earlier in the Introduction chapter with reference to Gregory Stock (2002-2003) who believes that the latest advancements in medical science could remarkably extend humanity's lifespan. However, Anderson's and

Weyn's novels consider Fukuyama's technophobic perspective when it comes to technology controlling youth. The generation born in the twenty-first-century is described as a 'digital native' one, according to Marc Prensky in 'Digital Natives, Digital Immigrants, Part II: Do They Really Think Differently?' (2001). This generation will have no recollection or memory of how life used to be without cell phones, computers, Internet, and social media. These technological commodities are essential parts of their lives. Toffoletti explains that technology itself is not the enemy as long as it does not threaten the 'human essence' (13) which has long preceded the existence of technology. Toffoletti argues that:

The posthuman condition cannot simply be explained by the transcendence, extension or penetration of the human body via technologies. Rather, it is the bodily transformations and augmentations that come about through out engagements with technology that complicated the idea of a 'human essence'. (13)

This 'human essence' (Toffoletti 13) is represented in the context of Anderson's and Weyn's narratives by young-adult characters who are able to instinctively perceive the threat technology poses to the human body. In these narratives, technology is represented as an alien invader that aims at changing and controlling the human body; it is like an organ transplant that the body rejects. Violet Durn, the main character in *The Barcode Tattoo* physically suffers as her body rejects the 'feed' implanted in her brain.

According to Elaine Ostry in her exploration of posthumanism and young-adult science fiction:

[U]nderstanding the posthuman age is essential for young adults, as it is their future. They are the focus of biotechnology, but not just because they are future citizens: children are also the subjects of biotechnological advance and debate. (222)

The threats of technology to the future of youth as argued by Ostry are represented in the narratives discussed in Chapters One and Two. Through focusing on genetic modification (cloning) and information technology (chip implants and barcoding) respectively, Chapter One and Two reflect the on-going debate on posthumanism and the way it is portrayed in literature since the nineteenth century. According to Hayles, 'textbooks written across the centuries will confirm that ideas of the body change as the culture changes' (299); however, the perception of this change will typically summon questions of power and control that coexist with every changing culture. Hence, the way change is acknowledged with relation to posthumanism creates a spectrum in which one side only is pulling the strings when it comes to defining new bodies. Characters have been manipulated and victimized by superior powers, involving scientific experiments, since the earliest science fiction novel, Mary Shelley's *Frankenstein* (1818). The idea of cloning or genetic alteration as discussed in Chapter One in works like *Oryx and Crake* by Margaret Atwood and *Never Let Me Go* by Kazuo Ishiguro are two examples in literature of controlling character's freedom of choice through manufacturing obedient posthuman models. In this chapter, the theme of power and control will be addressed from a different angle focusing on contemporary young-adult science fiction and poetry that relate more to a twentieth-century Orwellian vision of totalitarianism

in technology-oriented societies while focusing on the teen generation in twenty-first-century fiction and poetry.

The Techno-teen in Twenty-First-Century Fiction: *Feed* (2002) and *The Barcode Tattoo* (2004)

T. M. Anderson's *Feed* (2002) and Suzanne Weyn's *The Bar Code Tattoo* (2004) address the dilemma of alienated future teen generations in societies that give little value to individuality, privacy, and independent thinking. The same concept is represented in other twenty-first-century young-adult novels like Stephenie Meyer's *The Host* and Suzanne Collins' *The Hunger Games* both published in 2008 and recently produced as films for the cinema. These novels approach George Orwell's *Nineteen Eighty-Four* (1949) in their direct or indirect reference to totalitarianism, but the diversion occurs in replacing adult main characters with teenagers or young adults. This interest in teenagers highlights twenty-first-century totalitarianism which targets young people and uses technology, to which they are attracted, to control them. In an ideal world, technology should serve not control the human; the 'posthuman does not supersede the human subject or offer a "better" or more advanced model of the human. It does not necessarily want to leave the body behind' (13), according to Toffoletti. However, the representation of social control in literature establishes technology, widely accessible by the new generation, as a new totalitarian weapon targeting the young. Therefore, according to Albert I. Berger in his article 'Towards a Science of the Nuclear Mind: Science-Fiction Origins of Dianetics' (1989), 'the scientific and technological products of the rational human intelligence were viewed as the prime movers of history, yet

historical progress would always be thwarted through the operations of human irrationality.' (136). Berger, in his critique of the relationship between Scientology and science fiction, argues for science and against 'human irrationality' in mapping out the future of humanity. In a similar way to that of Orwell when he blames totalitarianism for the destruction of human societies, Berger believes that science could be manipulated to serve evil intentions.

In 'Reading on the Internet: The Link between Literacy and Technology' which has been published in the *Journal of Adolescent & Adult Literacy* in 2003, Elizabeth Schmar-Dobler suggests that the technological model of information processing could serve its recipient by the layout of helpful graphics:

The potential for gathering information is virtually unlimited. Through links, or Internet connections, a reader can access innumerable sites related to the original idea or topic of a search. [...] much Internet content has blinking graphics, vivid color, and lots of eye-catching phrases that can guide or distract from the reading. A reader must be able to evaluate all the features of a webpage and quickly decide which one will likely be the most helpful in accessing information. (Schmar-Dobler 81)

In *Feed*, M. T. Anderson suggests otherwise. The 'feed' could control the recipient of such information through such allusive visual tools. Internet surfers could access information that is not useful or even dangerous because of gimmicky banners displayed on their search engine. Violet, in *Feed*, realises that such a remotely-controlled method of information delivery is a modernised version of social control. It is even more dangerous than electronic surveillance

and CCTV in the sense that it implants the monitoring device within the human body creating a posthuman with no freewill.

Thus, posthumanism in contemporary literature is closely related to totalitarianism in the sense that, according to Hayles, 'the posthuman view thinks of the body as the original prosthesis we all learn to manipulate' (1999, 3). Hayles suggests that this manipulation is aimed at the body in order to create an understanding of what one perceives as her/his own reality in posthuman terms. This establishes a link between posthumanism and totalitarianism. While the former concerns the creation of new evolutionary human forms, the latter benefits from the changes in the mental and physical make-up of humans in order to guarantee an easy transition towards a future characterised by a docile generation, a 'body' incapable of 'embodiment'. Regardless of its motives, posthumanism blurs the boundaries between the human and the machine in the sense that, according to Hayles (1999), it 'configures human being so that it can be seamlessly articulated with intelligent machines. In the posthuman, there are no essential differences or absolute demarcations between bodily existence and computer simulation' (Hayles 2-3). This may be one of the reasons why contemporary science fiction and arguments on posthumanism are becoming increasingly focused on the relationship between technology and the new generation considering that the future might witness the disruption of a long-held definition of the image of humanity and the creation of a new human body with machine parts. This new prosthetic human body implies a loss of autonomy because the parts could be disassembled, removed, or replaced. The body becomes vulnerable and unreliable since it could constantly change. This new human state presents the

potential to be controlled by external forces, including those which are part of a totalitarian society, for example. A sense of loss surrounds the scene in *Feed* and *The Barcode Tattoo*. Technology is presented as evil in the way it is used in filling the gap between the body as a shackle-free object and the mind as the controlled subject. Violet and all the people her age have the 'feed' implant in their brains so that although they retain control over the body, they lose it over the mind which is the primary mover of their physical and psychological existence. In this sense, freedom is lost on both the mental and physical levels.

The 'feed' in Anderson's novel (2002), a microchip device implanted in the human brain connecting it to the internet and interfering with its ability to make decisions and conduct clear thinking, is still more of a fictional nature than a scientific reality. However, the 'barcode' in Suzanne Weyn's *The Barcode Tattoo* (2004) could soon become a reality. What is referred to today as Universal Product Code (UPC) or the barcode was initially patented in 1952 and first commercially used on a pack of Wrigley's gum in 1974 to be 'the first retail product sold with the help of a scanner', as mentioned in 'Barcode History' (Tony Seideman, *Barcoding.com*). Since then, the use of the barcode has gradually expanded to include indexing of documents, labelling and tracking airline luggage, stamping theatre and cinema tickets, postal mail, and many other uses. Interestingly, and by comparison, the chip implant in *Feed* used to control the mind has a similar sister in the real world which is the microchip used on pets for identification purposes. While barcodes will possibly move from IDs to the organic body, the microchip might soon find its way from under the skin to inside the brain. The barcode, in Weyn's novel, tattooed on the human skin produces a full profile of the person upon scanning, and that, in a way,

resembles barcodes found on patient identification wristbands and medical charts currently used in hospitals. More radically, the Nazi regime used identification number tattoos in the concentration camps during the Second World War. Barcoding or branding of cattle is also a common practice in animal farms.

In this sense, the dystopian vision in Weyn's novel using the barcodes as a means to control population and compromise people's privacy could pose as a serious future threat. People in this novel do not have the right to be in control of their memories and experiences; the barcode knows everything about them, and they are denied the right to remember or the right to forget. The barcode is their new artificial memory made public. Both Weyn's and Anderson's novels portray humans as totally controlled subjects with very little room for free thinking and equal opportunities.

From the same perspective, Fukuyama argues against the application of biotechnology to humans in the sense that it is like

a devil's bargain: longer life, but with reduced mental capacity; freedom from depression, together with freedom from creativity or spirit; therapies that blur the line between what we achieve on our own and what we achieve because of the levels of various chemicals in our brains. (2002 *Theguardian.com*)

Fukuyama warns against biotechnology and medical technology in particular suggesting that information 'technology will in the end prove much less powerful than it seems today, or that people will be moderate and careful in their application of it.' (2002 *Theguardian.com*). However, in 'Predicting a Better

Situation? Three Young Adult Speculative Fiction Texts and the Possibilities for Social Change' in *Children's Literature Association Quarterly* (2011), Abbie Ventura discusses Anderson's *Feed* and argues that information technology has become an integral part of modern societies and that '[t]he brain has simply become an extension of the technology, with the technology as the primary site of intelligence.' (Ventura 92). The question here is whether there could be a meeting point between Fukuyama who dismisses the idea that information technology is playing a role in dehumanizing people and Anderson's views in *Feed* as discussed by Ventura blaming information technology for destroying the mind. Another question is whether there would be a way for the human body to be a potential host for artificially-intelligent technological devices without the risk of altering the way in which the human brain operates naturally before this kind of interference. In 'Technohumanism: Requiem for the Cyborg' in Jessica Riskin's (ed.) *Genesis Redux: Essays in the History and Philosophy of Artificial Life* (2007), Timothy Lenoir suggests that '[w]e need not simply acquiesce in a view of the posthuman as an apocalyptic erasure of human subjectivity, for the posthuman can be made to stand for a positive partnership between nature, humans, and intelligent machines.' (211). This could be true if technology has not been used by humans as a weapon against other humans as Anderson and Weyn demonstrate in their narratives.

Alienation is frequently associated with posthuman bodies in contemporary literature. In 'Self and Other in SF: Alien Encounters' (1993), Carl D. Malmgren emphasises the journey of self-discovery in science fiction readers by arguing that '[t]he encounter with the alien inevitably broaches the question of the Self and the Other. In general, the reader recuperates this type of fiction

by comparing human and alien entities, trying to understand what it means to be human.' (15). The representation of posthuman bodies in twenty-first-century fiction demonstrates that the contemporary alien is not exclusively a creature from outer space or a monster of some kind; an alien could either be 'nonhuman or subhuman or superhuman' (Malmgren 15). The micro-chipped and barcoded young-adults in *Feed* and *The Barcode Tattoo* are what Malmgren established as 'subhuman'. They cannot be 'superhuman', according to Malmgren, because the technology within their bodies controls rather than empowers them. Readers of such narratives would empathise with these 'subhuman' characters because they speak to the human part that we as humans are able to recognise, and 'making that connection forces us to explore what it means to be human.' (Malmgren 17). In the context of cultural hybridity that has been established in the Introduction, contemporary social values promote difference as a part of the multicultural identity of human societies that are opposed to all types of discrimination. Through introducing posthuman bodies that speak to the reader, particularly in young-adult fiction, literature participates in promoting this cultural hybridity. This was not the case in nineteenth-century and even in twentieth-century literature with a few notable exceptions mentioned earlier in the discussion including Philip K. Dick's *Do Androids Dream of Electric Sheep* (1968), Barry B. Longyear's *Enemy Mine* (1979), and Mary Shelley's *Frankenstein* (1818).

The feeling of alienation and the quest for self-definition in young-adult characters in twenty-first century science fiction and poetry discussed in Chapter One with reference to Mary Shelley's *Frankenstein* (1818) could set the background for the idea of alienation as a characteristic of the posthuman. The

posthuman body has changed since Frankenstein's monster which used to provoke horror and repulsion in the reader. He is portrayed as physically deformed, taller and stronger than the average human. Hypothetically, if this creature existed in the nineteenth century, he would have been equally hated in reality as he has been in the novel because the idea of accepting difference and embracing the Other was so alien to nineteenth-century society. However, the public perception of the Other in the nineteenth century is not the same as it is in science. Frankenstein's monster could also be seen as a manifestation of scientific aspirations at that time that developed an obsession with discovering and experimenting with the unknown. In 'On the Grotesque in Science Fiction' which appeared in the *Science Fiction Studies* journal in 2002, Professor in comparative literary studies, Istvan Csicsery-Ronay, Jr., establishes the relationship between fiction in the Romantic era and experimental science arguing that:

Scientific thought was an important instrument in expanding the nineteenth century's sense of the richness of nature, which gradually came to include the freakish anomaly as a legitimate part of the natural order. Scientific discovery was often inspired by the need to accommodate anomalous experiences and phenomena that had not been provided a place in the taxonomies of established knowledge. Anomalies and monstrosities were central to the development of empirical materialism. [...] For experimental science and discovery, the monster is an opportunity to test received knowledge, and to expand the area of scientific understanding. (72)

According to Csicsery-Ronay, Jr.'s argument, *Frankenstein* represents the curiosity of science to unravel the mysteries of creation, on the one hand, and the public fear of the 'freakish' alien, on the other hand. However, *Feed* and *The Barcode Tattoo* prove that twenty-first-century fiction treats posthuman bodies otherwise. The public in the modern age is more willing to accept a body made of parts; installations of prosthetics and organ transplants are performed every day, and the idea of encountering a body that is made of parts is not so alien any more:

In such a world, the grotesque has little of its previous significance, for the de-definition of forms is an accepted aspect of social reality. The aesthetic perception of the integrity of discrete forms and individual beings required for the formal confusions of the grotesque and the metamorphic flux of the sacred is weak in the Information Age. (Csicsery-Ronay, Jr. 74)

This juxtaposition of nineteenth-century and twenty-first-century perceptions of posthuman bodies suggests that the further we move towards the future, the differentiation between human and posthuman bodies becomes less 'significant', as Csicsery-Ronay, Jr. suggests. That being said, contemporary fiction adopts two conflicting attitudes. The first one accepts the posthuman body represented by the techno-teen in the above narratives while the second argues against the mechanization of the human body. In other words, the incorporation of technology within the organic system is rejected while the 'techno-body', as Toffoletti has established, is welcome.

The following lines from *Frankenstein* establish grounds for exploration and a connection between genetic alteration in young-adult science fiction

characters and another kind of technological influence targeting the mind and imposing a sense of estrangement on the teen generation:

My vices are the children of a forced solitude that I abhor; and my virtues will necessarily arise when I live in communion with an equal. I shall feel the affections of a sensitive being, and become linked to the chain of existence and events, from which I am now excluded (Shelley 143).

Frankenstein's creature feels frustrated because he was deprived of the love and compassion of others. Having someone with whom he could identify physically and psychologically could be the support that he needs to continue living. Assuming that the reader is not aware that the speaker in the above quotation is Frankenstein's creature, and given the context of M. T. Anderson's *Feed* (2004) in which characters' brains are implanted with an electronic microchip device, the reader could think that it might be Violet, Anderson's main character, who feels disconnected and isolated from her social surroundings because of a persistent need to express her individuality and a refusal to conform to totalitarian social standards welcoming the microchip implant like the rest of her generation. However, what she wants is not to join the crowd; she wants the others to believe that fighting for one's own freedom of thought is worth the effort. Characters in this novel are being controlled by a totalitarian capitalist system via the implantation of the 'feed', a microchip designed to be implanted in the human brain that helps the system control the population through creating a consumer profile for each individual depending on their choice of products and shopping activities. The 'feed' is connected to the World Wide Web, and is responsible for broadcasting ongoing advertisements and

images that take over the brain manipulating people's choices of a lifestyle and limiting their mental abilities to make shopping decisions and conducting superficial social communication. The 'feed', in this sense, could be more invasive than the tattoo in Weyn's novel because while the latter exposes one's history and violates their privacy, the former invades the mind and controls thinking.

Violet in Anderson's novel is obsessed with thoughts about the decline of humanity; she believes that '[t]he only thing worse than the thought it may all come tumbling down is the thought that we may go on like this forever.' (from *Feed*, Anderson 2002). She rejects the reality in which the 'feed' is responsible for individuals' body functions, and that any attempt to disturb the 'feed' system will cause body organs to shut down. This disturbance occurs as one tries to think outside the 'feed'; as one tries to act in a spontaneous human manner. The theme of human degradation has been a recurring one in literature, in general, and science fiction, in particular, and one could notice when reading Anderson's novel that it bears a similarity to Aldous Huxley's *Brave New World* (1932). Although there is no evidence of a direct influence of Huxley's novel on Anderson's, both novels are set in a dystopian world with manufactured embryos, controlled population, passivity, and lack of human sympathy. Drugs are welcome as a religious ritual and a mental pacifier in both Huxley's and Anderson's novels, respectively. In a posthuman context, the use of drugs in these novels corresponds with Fukuyama's view on the role of biotechnology in changing the human. 'Neuropharmacology', which Fukuyama classifies as a branch of biotechnology, is responsible for 'the modification of brain chemistry, and therefore behaviour, through drugs' (Ostry 223). While Fukuyama is

concerned with the scientific context, Huxley focused on using the power of religion to promote drugs giving the latter a more persuasive status so that people remain unaware that they are being psychologically manipulated. Drugs become the new religion and, hence, will not be questioned.

Huxley introduces 'soma' as a hallucinatory drug consumed during a 'soma' religious practice in *Brave New World*, while Anderson's characters resort to websites causing 'malfunction' in their 'feed' giving them a sense of euphoria and putting them in a mental trance. Both techniques, of course, are supported and promoted by the controlling organizations. 'Soma' and 'malfunction' are introduced as psychological tranquilizers in order to ensure that people have no unwanted feelings or thoughts and would never act in an unexpected manner:

The world's stable now. People are happy; they get what they want, and they never want what they can't get. They're well off; they're safe; they're never ill; they're not afraid of death; they're blissfully ignorant of passion and old age; they're plagued with no mothers or fathers; they've got no wives, or children, or lovers to feel strongly about; they're so conditioned that they practically can't help behaving as they ought to behave. And if anything should go wrong, there's soma. (from *Brave New World*, Huxley 1932)

Huxley's novel engages with the issue of posthumanism from a biomedical perspective. Humans are grown in artificial wombs; therefore, they do not learn to appreciate the value of family life. They care for no one but themselves because they lack the essence of human compassion which people acquire as

they grow up among family and friends. Both Violet in *Feed* and John the Savage in *Brave New World* perceive this state of humanity as suffocating; the lifestyle being promoted is eradicating any trace of whatever it means to be human. In support of this idea, and comparing Huxley's novel with Orwell's, Fukuyama argues that *Brave New World* offers a more frightening look at the future. *Nineteen Eighty-Four*, he believes, represents 'the world of classical tyranny, technologically empowered but not so different from what we have tragically seen and known in human history' (2002 *Theguardian.com*) while in *Brave New World* 'the evil is not so obvious because no one is hurt; indeed, this is a world in which everyone gets what they want' (2002 *Theguardian.com*) because they are made to believe that what is offered to them is what they want.

Similarly, Violet in *Feed* finds herself different from her peers. She wants to experience the world according to what horizons her mind extends in front of her without being controlled by the 'feed' which is supported by mass-market corporations that 'divide everyone up into a few personality types' (from *Feed* Anderson 80) in order to guarantee that people 'conform to one of their types for easy marketing' (from *Feed* Anderson 81). Similarly, John, who was originally cast away with his mother to live with the Savages once she became pregnant with him going against the rules of the new advanced society that forbids natural birth, feels that this new world he was dreaming about for so long is a lie. Both characters face a tragic end inadvertently; their choice of freedom over manufactured comfort and 'claiming the right to be unhappy' (from *Brave New World* Huxley 212) proves destructive in a standardized culture that believes in assigned roles and punishes creativity. Violet and John could

undoubtedly represent the new human alien in a posthuman world. Published seventy years after Huxley's novel, *Feed* could be seen as a modernized version of Huxley's classic novel introducing a topic that approaches reality, in a sense, and is directed towards the younger generation with young characters in question.

According to Kay Mitchell in 'Bodies That Matter: Science Fiction, Technoculture, and the Gendered Body' (2006), modern technology, through 'global electronic communication', works on 'extend[ing] the boundaries [...] of the body' (Mitchell 112). Mitchell suggests that 'the data body' is not necessarily associated with the technological age in the sense that 'self-presentation' (112) depends on the presence of data that help individuals present themselves to others. Gender is one example of data that is communicated through the body and that the acquisition of which does not involve technology. Such data is natural rather than artificial whereas the data produced by the 'feed', in Anderson's novel, interferes with the natural process of collecting and communicating 'natural' data because people communicate virtually through the 'feed', and their communication is directed and monitored accordingly. In this context, and according to an interview with researchers of technology and culture, Arthur and Marilouise Kroker, young-adult science fiction narratives such as *Feed* demonstrate that '[i]n the age of technology, the so-called autonomous body [...] shatters into a thousand digital mirrors. The data body. The android body. The mutant body. The designer body. The cloner body.' (Armitage and Kroker 1999, 69). *Feed* intends to show how artificial brain stimulation created by incorporating a foreign inorganic device within the organism of the human brain stands as a potential threat to the mental and

psychological health of the younger generation in the future because '[t]he bodies of sf are not without constraints; rather they operate within constraints' (Mitchell 116). These 'constraints', as represented by Weyn and Anderson, emerge as artificial data interrupts the natural one. The 'feed' replaces natural thinking while the 'barcode tattoo' acts as the new artificial memory in Anderson's and Weyn's novels, respectively. Therefore, the concern echoed by contemporary young-adult science fiction does not involve the representation of the body as data; rather, it involves the future possibility of the organic body becoming host for artificial data.

In 'Traces of the Future: Biotechnology, Science Fiction, and the Media' (2003) Sheryl N. Hamilton defines 'risk society' in terms of the overreliance on technical information:

The origin of risk society is found in a fundamental process of modernity – the replacement of local knowledge by technical expert-knowledge systems. These knowledge systems render social relations abstract and invert the causal linkage of past, present, and future: the present becomes an outcome, not of the receding past, but of the emerging risks of the future. (Hamilton 267)

These 'technical expert-knowledge systems' according to Hamilton, predict an inevitable technological future which will rewrite the organic system. In the context of dystopian young-adult fiction, invading the body by technology is a major theme in Anderson's novel in which the 'feed' is responsible for 'streamlining' (Anderson, 2002) people's thoughts and activities so that they become 'easier to sell to' (Anderson, 2002). A relevant comparison could be

made between *Feed* and Stephenie Meyer's *The Host* (2008), another twenty-first-century young-adult novel. While Violet's attempts to overcome the 'feed' tragically fail, Melanie, the main character in Meyer's novel, eventually manages to find a way in which she could coexist in harmony with the Soul that invaded her body. Although Meyer's novel does not deal with the theme of artificial intelligence and computer technology being in the hands of an evil power, it presents the character's journey towards self-reconciliation and recognition of one's own ability to choose one's own future. Melanie is twenty one years old while Violet is a teenager. Therefore, the tragic end of Anderson's main character could be attributed to the vulnerability of young people and their inability to understand the threats of invasive technology in a world where people are 'becoming cyborgs and techno-bodies, while [...] machines are becoming "smart" and more human-like.' (Best and Kellner 2001, 151). The 'feed' is meant to act and think on behalf of the human brain. Although Violet maintains her image as a character in control of her destiny throughout the novel, it would not be likely that she will survive on her own without further assistance from the world around.

One of the main questions here, according to Mary Catherine Harper in 'Incurably Alien Other: A Case for Feminist Cyborg Writers' (1995), is whether it would be 'possible to turn the body into pure information code' (Harper 404) without compromising the essence of humanity, and whether this interference with the human body would mean that 'the body is no longer viewed as merely the departure point, the launching pad, of identity, of individuality.' (Harper 404). Both M. T. Anderson's *Feed* and Suzanne Weyn's *The Barcode Tattoo* consider the possibility of manipulating the future of the teen generation by using

technologically-advanced body control devices while Stephenie Meyer's *The Host* deals with the conflict between the human body as a unified entity and the external power represented by an alien Soul trying to take over. The same theme has been represented in twentieth-century cinema in *Invasion of the Body Snatchers* (1956) and more recently in *The Invasion* (2007) by Oliver Hirschbiegel. However, *The Host* offers a more evolutionary version of alien invasion with aliens invading the body instead of appearing in a duplicate form of the humans they intend to replace as is the case in *Invasion of the Body Snatchers*. The novel also focuses on the transformation phase and how characters struggle to maintain their true identities before being erased by the alien, as distinct from *The Invasion*. *The Host* revolutionizes the bildungsroman narrative to reflect the human/alien theme by focusing on how both human and alien come to understand their own self by getting to know the other. Although this novel traces the psychological development of characters (human and alien) through encountering the other, emphasis remains on characters' defiance of outsiders whose aim is to erase the identity of human targets. Therefore, Meyer's novel could serve as a metaphor for rebellion, alienation, and self-knowledge in both Anderson's and Weyn's novels. *The Host* abandons the totalitarian theme in *Feed* and *The Barcode Tattoo* and focuses on characters' attempts to reconcile body and soul. By following the journey of psychological evolution of both Melanie, the human, and Wanda, the alien, the novel attracts more attention to the importance of characters' transformation and growth to psychological maturity represented by the human and the alien coming to terms with each other. Anderson's and Weyn's novels lack this direct

interest in analysing characters because the main theme considers the overall effects of technology on the future generation as a whole.

While Anderson's and Weyn's texts possess some technophobic aspects in depicting an image of technology being used to disorientate its users and distract their thinking, the story in Stephenie Meyer's *The Host* (2008) argues that human beings are powerful, and are instinctively trained to be in control of their own life relying on the power of the mind. However, all of these texts address the dilemma of the young-adult and teen generation trying to acquire status in life, according to Nuzum, K. A. in 'The Monster's Sacrifice – Historic Time: The Uses of Mythic and Liminal Time in Monster Literature' (2004), who argues that 'the adolescent is not quite child, not quite adult' having 'neither the full privileges of childhood nor of adulthood. They are, in a sense, beings without status, without a rightful place in society—just like a monster' (Nuzum 210) or aliens. In posthuman terms, and according to these novels, characters are 'without status' (Nuzum 210) not because they are fluctuating between childhood and adulthood; rather, their alienation is represented by the struggle between the human and the posthuman. Both *Feed* and *The Barcode Tattoo* present the posthuman as the norm while challenging this norm is often questioned. Violet and Kayla in Anderson's and Weyn's novels, respectively, feel alienated because they refuse becoming a techno-body.

The Host is not as well-known a novel as Meyer's 'hugely bestselling *Twilight* series', according to Keith Brooke in his review of *The Host* on *Theguardian.com* in 2009. However, *The Host* surprises the reader by offering a new depiction of the alien as empathetic and humanized. I am focusing on *The*

Host since it is relevant to the discussion of the new alien character regardless of its sales rate or popularity among readership. Meyer's novels are classified as popular young-adult fiction, and whether the *Twilight* series attracted a larger audience does not necessarily suggest that it offers better literary value than *The Host* does. This novel and all the other novels in this chapter depict an image of the new generation in a posthuman future where life is controlled by technology or aliens or corrupt systems.

Aliens in *The Host* are depicted as 'contradictory critters: on the one hand, gentle pacifists who don't bother with money because they just take what they need from shops, on the other, ruthless invaders of not only other sentient species' planets but their bodies, too.' (Brooke, 2009 *Theguardian.com*). The relationship between the invader and the invaded body in *The Host* gives the typical alien/human story a contemporary aspect. The main character, Melanie, is a young adult whose encounter with the alien soul, Wanda (Wanderer), and the way she tries to remain in control of her body despite Wanda's attempts to take over symbolise the young-adult's first steps towards maturity and understanding of the 'self' and the 'Other'. Probably, the most important aspect in this novel could be that the struggle 'for control, and then for understanding' (Brooke, 2009 *Theguardian.com*) is mutual; both Melanie and Wanda find themselves compelled and, at the same time, curious to get to know each other and try to find some kind of harmonious coexistence.

The dystopian atmosphere in this novel '[s]et in a world where aliens – Souls – have taken control of Earth and now live inside the bodies of humans' (Rae, 2012 *Theguardian.com*) is accompanied by some romantic air since it

follows the adventures of Melanie trying to save the man she loves with the help of Wanda, her invading Soul. Throughout the novel, Wanda gradually develops an empathetic bond with Melanie, the host body, and falls in love with the same man that Melanie loves. They unite to save him from being hunted down by The Seeker, 'unintentionally finding themselves and hidden truths along the way.' (Rae, 2012 *Theguardian.com*). The 'alien' character gradually gains the empathy and compassion of the reader, an aspect that is not common in other typical science fiction stories of human-alien-encounters. It is possible that the alien in contemporary fiction is made more likeable since authors are capturing glimpses of a posthuman future in which humans become aliens among themselves. The reader in *Feed*, for example, may find it hard to identify with Titus, the narrator, although the technological world he is living in (with the 'feed' in his brain facilitating communication, shopping and entertainment) might attract many young-adult readers who are fascinated by modern technology. In *Feed*, the attitude of the reader could be confused between being attracted to revolutionary technology and finding it hard to decide whether or not technology is responsible for destroying people like Violet and leaving others like Titus totally passive. Readers are presented with the question of whether it was Titus' choice to continue living with the 'feed' in order to avoid being destroyed or it was technology controlling his decisions. Hence, empathy with characters develops while exploring these possibilities. However, and on the other hand, the following review suggests that *The Host*, by following the relationship between human and alien, helps readers understand characters and empathize with them:

It appears on the surface to be a simple idea but the complexity is hidden in the compelling dialogue, breath-taking scenes and beautiful sorrow that runs throughout. Despite the gut reaction to support and favour the human, it is impossible for any reader not to fall in love with the gentle nature of Wanderer, so fantastically portrayed. (Rae, 2012 *Theguardian.com*)

There is no confusion here as to who is right and who is wrong; readers understand that the story is about love and compassion and the possibility to find friendship where least expected, human in alien and alien in human.

The novel was soon made into a movie which was released in 2013 carrying the same title, just like Suzanne Collins' book, *The Hunger Games* (2008), which was also released as a film in 2012. It seems that there is some recent interest in adapting young-adult science fiction, dystopian, and fantasy texts for the cinema which may be because these texts widely appeal to the large young-adult audience. Both Meyer's and Collins' books are set in a dystopian future world with teenage and young-adult characters trying to survive the odds. This is also the case in Anderson's *Feed* which starts when 'Titus, an average kid on a weekend trip to the moon, meets Violet, a brainy girl who has decided to try to fight the feed.' (*Mt-anderson.com*). In these three novels the main characters are fighting against evil powers in order to protect themselves and those whom they love; however, *Feed* is the only text that actually deals with information technology and brain control which could be because, according to Hayles' views on the role of technology in shaping up the human in 'Commentary: The Search for the Human' (2005), '[t]he new technologies,

especially the convergence of biological engineering with the cybernetics of intelligent machines, are confronting us with challenges unique in human history.' (332). Although different, the evil variable in each novel works on the personal as well as the collective level, and the main characters are teenagers or young-adults trying to redeem themselves from this evil control and save the world to which they belong. Society in *Feed* is controlled by some sort of political government and so is society in *The Hunger Games* while *The Host* presents readers with a non-human type of control, that of aliens over humans. The politics of challenge seem different in *The Host* because it relies on negotiation tactics by both parties, human and alien, in order to reach an agreement and form an understanding of each other's motives. In this respect, *The Host* abandons the theme of rebellion in both *Feed* and *The Hunger Games* where readers only see the story from the rebellious character's point of view.

Among the three novels, *The Hunger Games* could be the one that involves the most direct form of active resistance in the sense that it 'is set in a dystopian North America (called Panem) in which 12 districts must each send a boy and girl between the ages of 12 and 18 to compete in televised mortal combat--reality TV at its deadliest.' (Sellers, 2008). The word 'panem' means 'bread' in Latin and is mostly associated with the term, 'panem et circenses' (bread and games), a strategy used by the Roman Empire to gain approval of the public by offering food and cheap public entertainment in order to distract the public from the bad practices by the Empire. However, the wealthy Capitol in Panem in *The Hunger Games* which controls the 12 surrounding districts uses these annual games in order to terrorize rather than distract the public in

order to maintain power and control. In this sense, the novel portrays 'a world of circuses but no bread' (Peter Bradshaw, 2012 *Theguardian.com*). Although the games could be a contemporary dystopia reviving the tradition of offering sacrifice to the gods in ancient mythology, this could hardly be the main theme in Collins' book. The novel concerns the encounter with the Other and the way to survive being a victim in a terrifying world. Katniss, the main character in *The Hunger Games*, volunteers to replace her younger sister in the games and is now supposed to compete against Peeta, the boy who once helped her get some food when her family was starving. In an article on *The Guardian* website, Peter Bradshaw draws attention to the similarity between the games and reality TV shows presenting to the public 'sacrificial lambs who think they're rock stars' where 'the thought of lovers who must fight each other to the death begins to electrify the TV public.' (2012 *Theguardian.com*). Katniss, like any reality TV celebrity, has a tough choice to make. She has to decide whether to continue fighting against Peeta to remain on top of the games or to direct her attention to the real enemy, the merciless Capitol. Katniss and Peeta go through a series of violent incidents during the games trying to win the battle, not against one another, but against the Capitol leaders who organize these deadly games.

The same may be said about *The Host* in terms of knowing the enemy; both Melanie and Wanda decide to unite against The Seeker in order to protect those whom Melanie and, eventually, Wanda love. The Seeker in *The Host* is the Soul that hunts people who manage to escape the implant of a Soul within their bodies. This is similar to the government organization in *Feed* which monitors those who are trying to reject or disturb the 'feed' implanted in their brains. All three novels feature a love story and stress the idea that people

could do anything for the sake of love, be it for the self or for the Other. Violet, the main character in *Feed*, is desperately fighting for the liberation of her thinking since '[i]n a future world where internet connections feed directly into the consumer's brain, thought is supplemented by advertising banners, and language has gone into a steep decline.' (*Mt-anderson.com*). However, 'a little love story unfolds' (*Mt-anderson.com*) between Titus, the narrator in *Feed*, and Violet whom he finds very special from the rest of his friends. Violet's journey of survival will not be as easy since the love between her and Titus may not prove enough to put an end to her suffering. Among the three heroines in these novels, Violet could be the loneliest of all; she is not at any point able to fully guarantee the support of Titus since the control of the 'feed' is much stronger than her individual attempts to fight it. Her fight is the most passive among the three main characters in the above novels.

Attempts to utilize the human body in contemporary societies as represented in science fiction and dystopias could be interpreted as the work of totalitarian Big Brothers, or that is what authors have contemplated since George Orwell's *Nineteen Eighty-Four* (1949). In collaboration with social studies and criminology, Orwell's literary representation of technology as a means of social surveillance corresponds with the vision of twentieth-century French philosopher and literary critic, Michel Foucault. In his *Discipline and Punishment: The Birth of the Prison* (1975 [1977]), Foucault argues that contemporary societies, with the help of technology, would gradually evolve to resemble large penal systems in which individuals' actions are being constantly watched. In this respect, one could argue that TV screens used to monitor people's behaviour in Orwell's *Nineteen Eighty-Four* would be a prototype of

today's widespread closed-circuit TV (CCTV) systems operating in both private and open-street locations around the world. Although CCTV systems are considered to be a risk management method in twenty-first-century societies, both Foucault and Orwell suggest that using advanced technology in monitoring the behaviour of people would be a representation of electronic panopticism and the control of totalitarian governments or organizations over individuals despite the fact that '[s]cience and technology [...] can increase our knowledge and improve our living conditions', according to David N. Samuelson in "Childhood's End": A Median Stage of Adolescence?' (1973, 6).

Feed has much in common with *The Barcode Tattoo* because both novels draw upon Orwellian perspectives related to social control. In his critique of Foucault's panopticism proposing that modern punishment techniques depend on creating constant fear of authority in punished subjects without inflicting any physical pain in 'Introduction: An Eye on Surveillance and Governance' (2008), Mathieu Derflem explains that acts of control and punishment in contemporary societies are mainly about 'a meticulous surveillance of the soul' (Derflem 3) which seems to be the case in *Nineteen Eighty-Four*. Since both Anderson's and Weyn's stories follow Orwell's vision of a dystopian society with technology in the hands of conspiring organizations, the aspect of control seems dominant. Therefore, although the dystopian atmosphere in *Feed* and *The Barcode Tattoo* might not be particularly original, they are likely to create a new social concern that the freedom of the new generation is being threatened by modern restrictions represented by digital spaces and virtual technologies that would place limitations on real-life experiences and eventually replace natural human thinking with artificial

intelligence. While Orwell's work has established the relationship between dystopian future and modern technology by introducing TV surveillance, Weyn and Anderson take the same theme a step forward in making technology itself the new alien, the modern invader of the human body and 'a form of power that displays itself automatically and continuously' developed and supported by world capitalism, according to Gary Gumpert and Susan J. Drucker in 'The Demise of Privacy in a Private World: From Front Porches to Chat Rooms.' (413, 1998).

Today's use of GPS (Global Positioning System) and RFID (Radio Frequency Identification) technologies reflects Orwell's idea of electronic surveillance compromising individual privacy. However, RFID or the microchip is similar to Anderson's 'feed' and Weyn's 'barcode tattoo' in the sense that it operates through a device implanted in the body. While RFID technology is quite popular nowadays in pets and farm animals for identification purposes, there might soon be debate about the possibility of microchip implantation in humans. Anderson and Weyn present this argument through teenage characters who act as rebels, questioning the use of technology in the human body in a society where this practice has become normal and justifiable. These characters represent the transitional stage towards the posthuman in which human consciousness stops to consider the consequences of this transformation before it acquires a final form and reaches the point of no return. From this perspective, both *Feed* and *The Barcode Tattoo* deal with 'the effects of technology on both natural and socially-constructed bodies' through introducing the dichotomy of 'body-based existence and technology-sponsored transcendence.' (Harper 401). Characters in *Feed* are all rendered mere

consumer projects whose only social responsibility is to promote commercial products and build a reliable consumer profile to sustain the economy of controlling organizations. As Ventura suggests, although '[t]he feed was initially created with the idea of benefiting education and the intellectual abilities of its participants' (Ventura, 2011), it soon became exploited by totalitarian bodies to control society. Anderson has in mind contemporary advances in information technology and social networks on the internet which, according to Humphreys, 'allow people to create, develop, and strengthen social ties.' (Humphreys 575, 2011). However, electronic communication as presented by Anderson would put face-to-face interactions in jeopardy because the characters in the novel are able to create some kind of telepathy with each other and may find this way of communication easier and more convenient than physical interaction because it could happen anywhere at any time. This proved to create gaps in the structure of society and promote certain social habits that might not be particularly constructive. An example is the way Titus fails to understand Violet and develop proper human empathy with her. He does not understand why she wants to destroy the 'feed' because, like other teenagers, he thinks of it as an integral part of his body.

Feed and *The Barcode Tattoo* are examples in contemporary literature of social surveillance powered by advanced technology. In this respect, science fiction that shares some common grounds with everyday life would help communicate the 'extrapolations' of science to 'the reader by means of characters, events, situations described in words which offer at least analogies to his own experience' (Samuelson 8). *The Barcode Tattoo* offers a portrayal of a future society in which science has developed a way to store all personal

information of individuals on a tattoo that citizens could get on their arms so that they could carry out their everyday activities effortlessly. They can apply for jobs without CVs; they could get identified on checkpoints without showing IDs; they could also shop without their credit cards. This seemed effective at first until the government decided that the barcode should become mandatory and that all citizens must get it once the individual turns seventeen. Set not in the very far future in 2025, *The Barcode Tattoo* depicts a dystopian world in which, according to Weyn, 'everyone over 17 had to wear a bar code tattooed to their wrists as an identity tag, but there were things in that information that the people didn't realize was there.' (Weyn, *Ekristinanderson.com*, 2010). The theme of conspiring governments carrying on plans to control citizens is key to Weyn's vision of future dystopias. She believes that it is very important to educate and inform the generation of teenagers and young adults about the current affairs in society and help them consider new possibilities and prepare them so that they become ready to lead the future.

In this sense, *The Barcode Tattoo* examines the relationship between technology and control and how new world policies would affect the mentality of the younger generation in the way individuals are controlled and privacy is compromised, as Weyn claims in an interview on *Teenink.com* (2013):

I don't believe that the regular person always gets the straight story on what goes on behind the scenes when it comes to the things governments, big business, and other powerful groups are doing. I believe it's important for people to be well-read and well-informed. As well as reading and watching TV, people should talk to each other. If something

doesn't seem to make sense based on a person's own experience and observations, that person should look further. If that makes me a conspiracy theorist, I suppose I am. (Weyn, *Teenink.com*)

Suzanne Weyn sees the future as characterised by the new culture of technology corresponding with the view that, as Clayton suggests, '[s]cience fiction is overwhelmingly positive about the possibility of transforming the human.' (Clayton. 2013). When writing *The Barcode Tattoo*, she had in mind that the characters of the novel could represent the status of the future generation whose responsibility is to protect society in the sense that, as Weyn suggests in an interview on *Reachout.com* (2010), 'the leaders of tomorrow are the young people of today.' (Weyn, *Reachout.com*). Both Weyn's and Anderson's novels reflect the importance of uniting power to affect change in the way their main characters, Kayla and Violet, respectively, seek the help of other people to fight for what they believe is for the best of their community.

In an interview with Anderson in the *Journal of Adolescent & Adult Literacy* (2003), he suggests that '[t]here's a real urgency in the need to change' society (Anderson and Blasingame 2003, 98) while Weyn insists on maintaining a stable relationship between individuals and the community in which they exist in order to be able to affect this change since, according to her, 'none of us can operate effectively in isolation or be unaffected by what goes on around us, as much as we might like to be.' (Weyn, *Reachout.com*). The closing sentence in *Feed*, 'everything must go' (Anderson 64), could suggest 'willingly or unwillingly, we're going to have to change radically the way we live.' (Anderson and Blasingame 98) hoping that this change would head into the right direction.

Characters in *Feed*, with their minds controlled by the chip implant, reflect Anderson's fear that today's obsession with information technology and the increasing dependence on it on a daily basis could be

[P]roducing a nation and a generation that is inarticulate and clumsy in their thought; self-absorbed; incapable of subtlety; constructed by products; unable to learn from the past, because the past is forgotten; blind to global variation; violently greedy and yet unaware of how much we ask for already. (Anderson in Blasingame 99)

The same occurs in Weyn's novel in which privacy is at stake with the tattoo carrying all the personal information of the person who has it. No secrets are secrets any more in Weyn's and Anderson's dystopian worlds in which communications are conducted artificially and people are dealt with as products in the former and consumers in the latter. Violet's friends, in *Feed*, have 'so little sense' (Anderson and Blasingame 99) of the past, they lack the necessary education that would equip them with real knowledge of the world so that they become able to assess the negative aspects of their culture and try to change it. The novel mentions that the 'feed' was first invented to be used with school children as an educational tool. It was then developed, and the use of it was extended beyond the educational institution so that the 'feed' has become a permanent implant.

The current teenage generation in *Feed* has not been informed about the history of the 'feed' and how it gradually became a part of their brains. This is because the organization standing behind this decision is the totalitarian government which, in collaboration with the product market, decided that the

new society should focus on creating individuals who work solely for the benefit of the economic system. Violet is among the very few of her age who had to get the 'feed' in an older age. Therefore, she has what others in her generation lack when it comes to thinking about ways to liberate herself after realizing that, according to Abbie Ventura's views on the importance of social change in *Feed*, government policies and 'corporations desire one mass demographic' (94). Nevertheless, she receives no help from her community because all are under the control of the 'feed' which resulted in making 'citizens of this future [...] a type of indifferent mass through their inability to manufacture their own needs or desires and their inability to imagine a better future.' (Ventura 93). Kayla in *The Barcode Tattoo*, on the other hand, gets the support she needs from others who are against the tattoo like the Decode group and, later, White Face. The 'barcode tattoo' controls the privacy of people who carry it without controlling the mind while the 'feed' targets the mind which makes it more difficult to rebel when people cannot make sense of concepts like rebellion and freedom. While Kayla in Weyn's novel refuses to be treated like a product contemplating '[h]ow bizarre to be branded like a box of cereal 'and how '[t]here had to be more to a person than that' (from *The Barcode Tattoo* Weyn, 2004), Violet in *Feed* despises the fact that they are made into mere consumers. In an interview with M. T. Anderson in the *Journal of Adolescent & Adult Literacy* (2003), he suggests that:

[A] whole cultural context is being constructed for them to promote certain kinds of sales. It's the context that soothes the consumer, produces desire, and conceals the marketing drive behind the glitter of the cool and the self-actuating. (Anderson and Blasingame 99).

In these two works, the idea of natural communication is being disturbed by programmed images of individuals and artificially promoted communications. Indeed, one of the reasons Weyn has chosen this topic to address is thinking that '[i]f we limit ourselves exclusively to electronic media we are only using a small piece of our communications apparatus' (Weyn, *Reachout.com*) and that the duty of the older generation towards the young is 'to clarify in their minds what needs to be done' (Weyn, *Reachout.com*) helping them to learn how to make their own decisions. Since Weyn's and Anderson's views on the topic and the way these views are represented in their fiction stem from their social concern, readers of *Feed* and *The Barcode Tattoo* will be able to recognize the realistic extensions of these narratives. The increasing commitment to technology in everyday life could gradually lead to the creation of posthuman models like the ones presented by Anderson and Weyn. This commitment could be characterised by a future social consensus to carry computers or cell phones in the body, for examples.

However, the present could be read otherwise considering that the world has not yet reached the stage of total submission to technology. As Leo Zanderer suggests in 'Popular Culture, Childhood, and the New American Forest of Postmodernism' (1987), 'we are not yet at the postmodernist position, in which technology takes over and so totally absorbs us that it determines how we perceive reality, our world. We are not yet eager participants in the pure play of technology, allowing it to shape the future.' (14). For this purpose, I have chosen to identify Dorothea Smartt's poem 'Shake My Future' from her poetry collection *Connecting Medium* (2001) as an expression of social awareness and insistence on maintaining hope that people could stay in control of their lives

and choices. This movement from the dystopian and tragic atmosphere in contemporary science fiction to the rebellious, yet hopeful, tone in poetry testifies to the diversity of interpretations when approaching the topic of control in contemporary society.

Technology versus Freedom in Twenty-First-Century Poetry

The representation of troubled identities is also found in twenty-first-century poetry when dealing with the topic of technology with relation to human freedom. However, twenty-first-century poetry as introduced in this chapter, with the exception of Greenlaw's poems, does not seem to be interested in the young-adult generation the way fiction does; rather, the general defining characteristic of the future of humanity and contemporary life revolves around technology being inspirational and dystopian at the same time without focusing on a certain age group. This is one of the main differences between twenty-first-century fiction and poetry that this chapter is discussing. The topic of posthumanism is elaborated on in fiction having in mind the young-adult generation, and although the novels here are all written for young adults, many other novels aimed at the more mature audience—like those by Atwood and Ishiguro in discussed in Chapter One—discuss posthumanism while focusing on the younger generation. Considering the representation of the future generation in contemporary poetry, Dorothea Smartt's poem, 'Shake My Future', from *Connecting Medium* (2001) acts as a bridge between the poetry and fiction in this chapter because it establishes a connection between the future of humanity and the necessity to rebel against consumerism and change the way individuals are treated as controlled subjects. Although more socially

than technologically oriented, this poem still echoes a call against totalitarian practices represented by consumerism, capitalism, and the unjustifiable prevalence of technology over human societies. Smartt's poem shares this theme with both Anderson's and Weyn's novels highlighting the role of technology in controlling the human.

In this section, I will also explore 'This Is the Server', a poem by Felix Dennis, British poet and publisher of *The Week* magazine in the UK and Australia which was published in 2004 in his poetry collection entitled *Lone Wolf*. I will also discuss some poems from David Morley's *Scientific Papers* (2002). These are examples of twenty-first-century poetry that deal with issues of technology and science and the way people perceive changes in society due to the implementation of technology in everyday life. While Morley's interest in *Scientific Papers* lies in sketching images of real life with relation to nature and science, his poem, 'The Nature of Memory', could be read as a reminder of loss; memory is celebrated as the essence of human embodiment, and the natural process of losing it is what makes it valuable. This idea of memory could be compared to that in *The Barcode Tattoo* in which the right to lose memory or make new memories is controlled by the 'tattoo' which becomes the new artificial memory permanently stamped on the body and is impossible to lose. Losing technology, in this sense, is a relief. On the other hand, Felix Dennis wrote his first poetry collection in the beginning of the twenty-first century and has found that the internet has helped him spread his work. The dependence of poets and writers on the internet suggests that loss, in the twenty-first-century, happens when people lose connection with technology which became essential in fulfilling everyday duties. In this sense, the fear of loss is present in both

contemporary fiction and poetry when speaking of technology and human future. While in poems such as Dennis' 'This Is The server' (2012) the fear of loss is seen as a double-ended one, that of humanity on one side and technology on the other, 'Dystopian Dusk' (2008), a speculative poem by Bruce Boston (a poem published online), and 'Goooogle' (2010) by Adam O'Riordan from his recent collection *In the Flesh* present loss as happening on the human level only.

David Morley's poem 'Nature of Memory' from his poetry collection *Scientific Papers* (2002) supports this argument not by introducing rebellious characters in corrupt societies as Anderson and Weyn do; rather, the poem celebrates human freedom by offering a unique portrayal of memory. The human brain is the most complicated memory storage device of an organic nature. Being a naturalist and a poet who believes that possibilities could 'spring [...] from the common ground between art and science', Morley's *Scientific Papers* poems 'benefit greatly from being seen in sequence, forming the image of a life and history stretching out behind it, simultaneously defying and inviting accurate investigation.' (Michael Caines, 2005 *Carcenet.co.uk*). 'Nature of Memory' suggests that the brain is a host for an infinite world of experiences, images, and thoughts, and that human imagination is able to stretch finite memories to limitless horizons:

Your brain is a sea. A memory

Buoys, a private prodigality:

...

Difficult, a memory is clearly sorrow.

It lies to you like your cornered boy

Holding out his colourful plan

For an imaginary land built by him and for him. (from 'Nature of Memory'
Morley 33)

Memory 'lies' but 'it flatters you' as well in its limitlessness (Morley 33). Morley believes that the power of the brain lies in its ability to use memory to foster imagination. Imagination may be an illusion, but it definitely is what gives human life its value and the human brain its uniqueness. Morley suggests that imagination is, thus, as 'colourful' as nature itself in its harmony and contradiction. Therefore, scientific opinions supporting the incorporation of man-made technology to assist natural brain function in humans is still under controversy. Nevertheless, advances in science accessible on a daily basis makes it evident that people, as Ostry argues, 'are entering a "posthuman" age, in which liberal humanist definitions of the human are challenged through scientific advances. What it means to be human has never been more flexible, manipulated, or in question.' (Ostry 222). Through introducing the chip implant as a characteristic of the future, *Feed* shows that information technology marks the threshold towards spreading effortless remote-mind-control techniques that could be of great benefit to many corporate organizations and product manufacturing and advertising parties. Similarly, Weyn shows that the tendency to create universal identification systems has become a priority in today's world. The 'barcode tattoo' represents a unified economic, cultural, and social system connecting people to the same network. This network stores and compares

information about people treating them like branded products in deciding who is of 'a better value' than others. Individuals whose families have a medical history of some illness, for example, will not be allowed to apply for certain jobs.

This idea of exclusion and discrimination is highlighted in Weyn's novel because twenty-first century media and advertisements are all about creating stereotypes, promoting ready-made categorized images of what is meant to be a twenty-first-century individual, and 'mark[ing]' 'adolescents [...] by a passive citizenship in their inability to enact a model of social change under the conditions of global capitalism.' (Ventura 90). Groenke and Youngquist suggest that the sense of belonging that today's teen generation develops with the world of information technology could undermine family ties and cause them to become gradually dissociated from the actual world:

[G]lobalization and the inundation of media and new Internet technologies in teens' daily lives have thrown adolescent identities in flux. No longer the modernist individuals striving toward stable, self-shaped futures, today's postmodern teens are disconnected from family and social institutions, live amid constant change and ambiguity, and hang out in such nonplaces as cyberspace. (Groenke and Youngquist 505).

If this is the case of twenty-first century or future teen generations, the alienation of today's individuals could be viewed as a product of self-imposed psychological and cultural change intended at standardizing a new set of social values for the future.

However, admitting that the cultural identities of the new generation have been hybridised might not necessarily imply that this generation stopped

aiming for stability in its social and cultural aspects. Poems by Lavinia Greenlaw from her poetry collection, *Minsk*, draw images from childhood and adolescence surrounded by a sense of insecurity and doubt. In 'The Spirit of the Staircase', the speaker, who is now an adult, is nostalgic for a world with no limits seen through the eyes of a child. Memories of children descending the staircase, playing in the garden, seeing the 'bees' flying freely, and telling each other stories at night evoke a feeling of loss that only the innocence of childhood could restore. While the atmosphere in the poem is tranquil and peaceful, the mood is not; the poem speaks of a time one would 'give much to return to' (Greenlaw 2003, 3). The sense of instability, here, lies in the gap time creates between childhood and adulthood. The happiness of childhood is associated with nature and simple pleasures that diminish through adulthood. The poem is not about the effects of technology on generations. Nevertheless, Greenlaw juxtaposes the natural with the artificial by associating natural beauty with childhood, something that adulthood lacks. The 'point of no return' (Greenlaw 2003, 3) comes as people become adults; they gradually abandon simplicity and become more dependent on artificial aspects of life until the child within them gets lost.

The poems in *Minsk* bring ideas about the relationship between childhood and adulthood and 'are bound by an enquiry into what it means to belong to a place, about the quest for the new and the pull of home', according to Lorna Bradbury in 'A writer's life: Lavinia Greenlaw' (2003 *Telegraph.co.uk*). In 'Zombies', Greenlaw returns back to a place haunted by 'years of boredom' (Greenlaw 2003, 19) as the teenager was waiting to become an adult. The title, 'Zombies', and the question of '[w]as it not ourselves who frightened us most?'

(Greenlaw 2003, 19) suggest that a sense of alienation exists between the adolescent and the adult. All the adolescent needs is to grow older while the adult refuses to acknowledge the past image of adolescence associated with boredom, drinking, and empty activities. The poem 'teases out the implications of its title to connect cocktails with adolescent wandering' (Wootten, 2004 *Theguardian.com*) creating a triple image, that of an adult, an adolescent, and a 'zombie'. The zombie metaphor stands for adults' refusal to recognize the fears of adolescence which, although gone, remain frightening, creating a sense of instability. The adolescent, in this respect is a 'zombie' and an alien seen through the eyes of the adult. In another poem, 'Sisu', Greenlaw reflects on the idea of instability through the metaphor of seasons:

To persevere in hope of summer.

To adapt to its broken promise.

To love winter.

To sleep.

To love winter.

To adapt to its broken promise.

To persevere in hope of summer. (From 'Sisu' by Greenlaw 2003, 62).

This simple image from nature represents life's disappointments; people start full of hope and eventually end up with 'broken promise[s]' (Greenlaw 2003, 62). This representation is consistent with the idea of people feeling alienated from themselves; summer represents youth and hope while adulthood is associated with winter and the loss of passion for life. Between summer and winter, '[t]he scene ... attempt[s] to convey teenage isolation and threat' (Wootten, 2004

Theguardian.com), a stage where individuals usually fail to 'adapt' to the natural process of change, and where their ability to find coherence between childhood and maturity becomes compromised.

However, the sense of instability in contemporary young-adult science fiction seems different from what is presented by Greenlaw. While Greenlaw finds that adulthood sacrifices the happiness of childhood, Anderson and Weyn present a future generation whose happiness is artificially produced. The implantation of the 'feed' in children's brains in Anderson's novel, for example, creates a generation that is programmed to experience the outside world through the 'feed'. This disturbs the natural process of acquiring and developing a stable perspective of the world based on independent personal experience. In this respect, the instability of the young characters in *Feed*, *The Barcode Tattoo*, *The Host*, and *The Hunger Games* is not the creation of the generation of young-adults itself; rather, it is that, while experiencing change of the new world, these characters are challenged by external forces introducing a modern version of 'disconnected' humanity. They do not come naturally 'disconnected'; they are being disconnected, and their stability depends on their ability to distinguish between external social and cultural pressures and individual needs.

Dorothea Smartt introduces the topic of social anxiety created by hierarchical authority differently. Rather than viewing technology as the threat, Smartt is attentive to totalitarian capitalism as the source of negative energy. This helps to form a comprehensive account of the way contemporary literature acknowledges change in the new world. Technology and capitalist systems could, in this respect, be the essence of posthuman thinking setting the

cornerstone of the new world. Smartt's poem, 'Shake My Future', challenges contemporary capitalist systems characterised by 'signs from and responses to popular culture and media, as well as responses to discursive interests of power that are circumscribed by gender, race, and class subject positions.' (Groenke and Youngquist 506). Smartt, urged by a desire to express her voice and assert the status of women from culturally diverse backgrounds, meant her poems in *Connecting Medium* as an 'explor[ation of] socio-political and personal issues in the intertwined themes of distant heritage, home and hair with a firm, often angry, hold on reality, as well as a sympathetic awareness of underlying recurrent hopes and dreams.' (*Poetryarchive.org*). Although the majority of Smartt's poems in this collection tend to take a Black/Feminist approach reflecting upon 'both the Barbadian heritage and the experience of growing up in London' (Phillips, 2001 *peepaltreepress.com*) when exploring the topic of individuality, uniqueness, and freedom of choice, 'Shake My Future' seems to correspond with the product/consumer theme. In this respect, Smartt's sense of social awareness may have inspired the writing of this poem sharing common concerns with both Weyn and Anderson about the status of individual freedom and what it means to be posthuman.

Shake my future let me source the unimagined

Be released from the sentence of the inevitable

Take control, empower myself

...

Shake my future challenge our 'first world's

Capitalist consumerist criminal zone

Of perpetual purchasing

...

And quench my thirst for something different (From 'Shake My Future' by Smartt, 2001)

In 'Harvesting Salt' which appeared in *Sucking Salt: Caribbean Women Writers, Migration, and Survival* (2006), Meredith M. Gadsby argues that '[t]he fusion of voice and the visual is central to Smartt's work, for it allows her to communicate with great flexibility. As a live artist, she is able to explore endless possibilities.' (Gadsby 119). Therefore, 'Shake My Future' is perceived as an attempt to awaken a human sense of rebellion against ready-made cultures that could erase creativity in individuals and confuse their perception of freedom. Smartt, influenced by the sense of freedom in performing live art, expresses hope that humanity will eventually succeed in expanding the boundaries of good and harmony in the future. The melody of repeating the sentence, 'shake my future', demonstrates the poet's determination that hope is not to be lost and that standardized images of individuals promoted by advertised politics and media have to be disturbed. She criticizes the role of capitalism in shaping human societies under consumerist social standards mainly focusing on the material value of things which, in itself, might be 'criminal' in its discrimination against those who may stand up to it. The theme of the poem, hence, approaches that of *Feed* in which 'society's appetite for communication technology, rampant consumerism and marketing [...] result in a future world in

which solicited and unsolicited information is delivered directly to the human brain in a wireless Internet feed.' (Blasingame 2003, 88).

The voice of Smartt in 'Shake My Future' is passionate, hopeful, and determined while the presence of Violet in *Feed* is rather tragic and weak, and, although rebellious, it has some sense of desperation that there is no help to be sought. Anderson might be trying to challenge the reader into seeing this fictional tragedy as a possible image of the future not very far from what is happening in reality since 'Violet's failure can be read as not only a critique of a wasted culture but also commentary on the failure of the lone youth revolutionary.' (Ventura 93). Both Anderson and Weyn seem to be concerned about the situation of the future generation, and, since their fiction is directed towards young-adult readers, '[g]iven the dehumanizing representations of the marketplace and the commodification of the individual in these texts, the authors articulate a revolution in a speculative future that is no better than present-day conditions.' (Ventura 90). Weyn's and Anderson's novels suggest that the new generation has the right to be informed about the upcoming changes in society through encouraging them to think about the history and the possible future of present technologies which they use on a daily basis and take for granted. Since the dystopian setting in *Feed* and *The Barcode Tattoo* is related to the excessive dependence on information technology, popular among the younger generation in today's world, 'these novels are more tangible and representational of contemporary systems' (Ventura 90) than what could initially be realised. Therefore, the teenage generation will find these topics on technology and the human body both appealing and informative.

Societies and cultures are changing; life is becoming more and more dependent on technology which, according to Joanna Russ, as long ago as 1978, before the Internet, in her definition of technology in 'SF and Technology as Mystification' (1978), 'is not only everywhere; it's autonomous. *It acts. It threatens our promises. It influences. It transforms.*' (Russ 256). From this perspective, in his poem 'Dystopian Dusk' (2008), published on Strange Horizons, an online magazine publishing science fiction and speculative poetry, Bruce Boston, an award winning American speculative fiction writer and poet and a member in the SFPA (*Science Fiction Poetry Association*), testifies to the above point suggesting that the effect of technology on the mind of contemporary individuals might be very difficult to reverse, and it happens gradually neutralizing one's perception of change:

If it had happened all at once

...

if they had slapped blinkers

on our eyes, narrowing our vision

to all they claimed was right,

we would have raised an alarm,

cried out in protest and

summoned the will to fight.

...

we barely noticed the loss

of our freedoms and the

limits on our sight. (From 'Dystopian Dusk' Boston, 2008)

As with Smartt's poem, Boston's poem uses repetition to make a statement. However, the repetition of the conditional form, 'if ... had', gives the impression that a situation went wrong which is now too late to reverse or fix as opposed to the hopefulness Smartt's 'Shake My Future' implies. The title suggests that hope is lost; change happened gradually and freedom was taken bit by bit so that people become unable to detect the transformation. Eventually, 'the will to fight' was lost. This poem could be making a reference to the age of modernity with, again, 'technology pos[ing] a serious threat to the continuation of civilization itself.' (Berger 134). This is an extreme way of looking at the coexistence between technology and contemporary society, but it is, at the end, the aim of dystopia to present darker-side possibilities. The metaphor of 'dusk' in Boston's poem referring to the decline of humanity in the modern world proves that romantic images of nature could still serve contemporary forms of poetry. In an interview with Boston, Andrew Joron argues that '[b]y the hard hammering of genre material—science fiction, fantasy, and horror—Boston refashions the familiar shapes of popular imagination into expressionistic pulses of rhythm and color.' (Boston and Joron, 2001 *Strangehorizons.com*). Boston's speculative poetry 'derives its images and tropes from science fiction, fantasy, and horror' (Boston and Vanderhooft, 2007 *Strangehorizons.com*) which means that 'Dystopian Dusk' could be a portrayal of a world he finds confining, and this depiction of a grim vision of the future emphasizes this vision. Boston's mention

of 'freedoms' could imply that the disastrous world he is speculating could be the make of political systems spreading invasive control techniques that would put people under control and strip them of their ability to make their own choices. Although this poem does not directly engage with technology in the informative world like some of his other poems, it could still represent ideals of individuality and people's rights to 'fight' for their human integrity.

Bruce Boston's 'Dystopian Dusk' could, indeed, summarise the tragedy of humanity losing the fight to totalitarian technologies portrayed by Anderson in *Feed*. Violet is considered as a misfit for resisting the 'feed'. Her peers do not even understand why she is taking this attitude towards the government's policy because of their inability to develop compassion towards others. Their minds are programmed to make sure that they remain indulged with personal activities thinking about nothing but how to improve their personal consumer image. According to Melissa Colleen Stevenson in 'Trying to Plug In: Posthuman Cyborgs and the Search for Connection' (87), these self-indulgent activities with '[a]ccess to a greater variety of personal possibilities [are] often represented as coexistent with the increasing absence of interpersonal interaction' (Stevenson 89); individuals stop caring about other individuals and lose the desire and the ability to form healthy human bonds. In the context of Ostry's argument, Violet's way of showing that she cares about her future and the future of others around her is by considering the question of 'what value is the human versus the new, "improved" human?' (Ostry 223). This is an example that, although sometimes irrational, passionate, and flawed, human beings are not better off when controlled by machines and that 'technology cannot replace the personal bonds that tie humans to humans' (Hayles 278, 1999). Indeed, the speculative

dystopian world of Boston in 'Dystopian Dusk' along with Anderson's and Weyn's texts suggest that in the near future 'whatever form the alien might take, it is never really alien.' (Malmgren 16). Humans will be the new aliens to themselves and to others.

Therefore, in contemporary young-adult science fiction, writers have a message to convey about the importance of asking questions about the status of humans in the technological age. Young adults have the responsibility of equipping themselves with the necessary information about the way society has developed since technology started to dominate until it reached the point in time in which they are living so that they become able to differentiate between what is right and what is wrong; what is good for the individuals and what could compromise their privacy and freedom. A quotation from *Feed* referring to contemporary American culture states: 'We Americans are interested only in the consumption of our products. We have no interest in how they are produced, or what happens to them once we discard them, once we throw them away.' (Anderson 139). This situation could be characteristic of contemporary urbanism in general in the sense that people became too worried about fulfilling their consumer needs that they no longer care about where and how products are resourced.

This sense of carelessness is, according to Karl Marx's theory of alienation and estrangement, the result of living in a stratified society in which individuals are separated and categorized into groups each directed towards seeking a certain market of products and advertisements on a daily basis. They become gradually engaged with the artificial rather than the natural and

unconsciously develop a sense of desperation that there is no way of knowing and no point in knowing where their choices come from. *Feed* portrays the new generation as self-consumed, blind to the fact that '[b]uilt into the concept of otherness is the idea of relationship' (Malmgren 17) and that healthy human beings are those who do not find building consumer profiles a fulfilling replacement for their need to maintain and nurture relationships with other human beings:

I don't know when they first had feeds. Like maybe, fifty or a hundred years ago. Before that, they had to use their hands and their eyes.

Computers were all outside the body. They carried them around outside of them, in their hands, like if you carried your lungs in a briefcase and opened it to breathe. (from *Feed* Anderson 37)

These lines from *Feed* encapsulate Anderson's vision of a future world where inorganic forms become a part of human organisms. It seems difficult for the generation of the 'feed' to imagine what life was when people used to have computers outside their bodies. For them, it is like carrying 'your lungs in a briefcase' (Anderson 37) because they deal with the new computer represented by the 'feed' as if it was a vital organ, an extension of their body. The younger generation in *Feed* has a computerized brain function; they cannot think of their brains as separate from the 'feed'; they are totally dependent on it. Titus, Violet's boyfriend, tells her that 'he is unable to read or write since the feed thinks for him and he does not need literacy in order to survive as consumer' (Ventura 92) since this is all that matters. In order for Anderson to portray an image of a dehumanized generation, 'Titus is presented as an unreliable—and

at times unlikeable—narrator, so that he does not readily invite reader identification’, according to Clare Bradford in “‘Everything must go!’ Consumerism and Reader Positioning in M. T. Anderson’s *Feed*” (131, 2010). In many instances, Titus seems to be unable to understand Violet’s feelings and her reasons behind resisting the ‘feed’, and even when she dies, his inability to cope with the intensity of human emotions of sadness makes him seek distraction provided by the ‘feed’ network restoring order to the way he used to live life.

The same theme of dependence on technology which argues that people ‘are potential subject/commodity cyborgs’ (Harper 418) is represented in some poems of British publisher and poet, Felix Dennis. The poems of his first poetry collection, *Lone Wolf* (2004), were written around the time when he was hospitalized. He spent the majority of his time alone in a hospital bed with his computer and the internet as the only means of communication with the outside world. Being a contemporary poet in a contemporary world, and a publisher who is actively involved with the media with the publication of *The Week* magazine, Dennis seems to enjoy using the internet for educational, entertainment, and advertisement purposes, a phenomenon of an increasing popularity among other novelists, poets, and celebrities nowadays. However, although Dennis’ personal website containing material from his published works as well as news about his business activities, interviews, and future projects would mean that he could be thankful for advanced technology which facilitates spreading his work all over the world, some of his *Lone Wolf* poems like ‘This Is the Server’ could be seen as skeptical when it comes to advanced information technology controlling people’s life and social behaviour:

I

This is the Server, waiting on station,

Silicone god of an e-mail nation,

Bearing you news of a baby boy,

Bringing you misery, bringing you joy — (From 'This is the Server' by
Dennis 75)

This poem speaks of the way people in contemporary society resort to the internet for knowledge and their gradual abandoning of human interactions. Technology could, thus, lead humanity to a future characterised by imprisonment of the mind where 'power will be generated, maintained, and expanded through control technologies that have the ability to penetrate any spaces.' (Hayles 2005, 330). Dennis continues with the posthuman argument suggesting that everything is becoming more virtual than real. One example is people replacing phone calls with emails that lack intimacy. Another one is people's inability to make decisions about what product to buy as they become confused by the inclusion of unrealistic images of online items. Indeed, the increasing number of daily users and new subscribers to social networks and shopping websites, and the obsession with the internet which is now being sought as a reliable source of information and a primary means of communication, is gradually eliminating the need for human agency and replacing objective reality with a virtual one.

Dennis' poem speculates about the present and documents the status quo of contemporary society while in *Feed* and *The Barcode Tattoo* 'a possible

future is enacted in the present in order to assess the changes to which society may be subjected.' (Hayles 2005, 332). People now rely on the internet to store mental, visual, and auditory data, and they started to develop strong bonds with their 'smart' technological devices to accompany them everywhere.

III

The Server has crashed!

The Server is down!

...

Default! Default!

Default! Default!

The Server is up!

The Server is back!

The techies have purged a hacker attack,

The natter and chatter is back on track,

The terminal drives have held their nerve,

The Server survives — and as you observe —

I serve! I serve!

I serve! I serve! (From 'This is the Server' by Dennis, 76)

The three poems by Smartt, Boston, and Dennis use repetitions in the lines each making a point. While Smartt's 'Shake My Future' expresses insistence on the idea of change, Dennis' repetition of the words 'the server', 'default', and 'I serve' may be referring to the state of panic created as a result of people being suddenly disconnected from information technology represented by the internet. This state of attachment to the internet does not seem very different from Anderson's characters finding the idea of having the 'feed' outside their body quite terrifying.

Similarly, the theme of the overdependence of contemporary society on technology is introduced in 'Goooogle', a poem by Adam O'Riordan, the youngest British Poet-in-Residence at *The Wordsworth Trust* and Lecturer in Poetry Writing at *Manchester Metropolitan University*. 'Goooogle' appears in O'Riordan's first poetry collection, *In the Flesh*, which was published in 2010. This poem presents an image of lost youth and past opportunities projected on the computer screen in the form of constantly repeated random computer images, ex-lovers' names, and web searches:

A prayer then
for the men who sit,
pale as geishas,
by the glow of obsolete
computers.

Whose nights are never-
ending searches:
the busy crickets

of their fingers
stoking engines

with maiden names
and zip codes
of ex-lovers.
God of false trails
and disappearing acts, (From 'Goooogle' by O'Riordan,6)

This poem is one of O'Riordan's favourites because, according to him in an interview in a blog at Wordpress.com, 'it's the one of the few poems about the internet ... as well as being quite contemporary.' (*Aggsink.wordpress.com*, 2012). The phrases 'false trails' and 'disappearing acts' emphasize the clash between the real and the virtual; computers could create a world which is a play of the mind and a distraction from physical reality. O'Riordan presents this state as a reality in today's world. According to an online review on *The Guardian*, this poem 'sets the tone: sympathetic, witty and sage in its attitude towards the romantic boffin and his diminished life, pursuing ex-lovers online.' (Kellaway, 2010 *Theguardian.com*). Contemporary life does not seem to promote personal communication which was considered essential in the past; therefore, O'Riordan finds that '[s]eeking for things that are lost is a preoccupation.' (Crown, 2010 *Theguardian.com/observer*). 'Goooogle' suggests that technology could blow things out of proportion if allowed to dominate an individual's life instead of being used as a facility. Despite the fact that the poem is speaking of contemporary life and is 'set in the present day there's a pervasive sense of absence – though here what's missing tends to be love.' (Crown, 2010

Theguardian.com/observer). It 'offers a prayer for "the men who sit, / pale as geishas", feeding their computers with "maiden names / and zip codes / of ex-lovers"' (Crown, 2010 *Theguardian.com/observer*). Although 'Goooogle' does not contain science fiction aspects as is the case with the other poems approached in this chapter, it bears some resemblance to *Feed* and *The Barcode Tattoo* in its speculation about the relationship between human societies and technology.

Conclusion

Twenty-first-century social media has inspired contemporary writers and poets who present a critique of the relationship between modern technology and human societies under the shadow of posthumanism. Anderson writes about the possibility of manufacturing a 'feed' that has the power to transform humans into automatic shoppers since the internet today is flooded with advertisements and shopping suggestions creating a profile for internet users based on their search entries. In this respect, Weyn's and Anderson's visions meet when presenting people as products/consumers in *The Barcode Tattoo* and *Feed*, respectively. A similar trend is also found in contemporary poetry portraying lost individuals as in Adam O'Riordan's 'Goooogle' and imprisoned minds as in Bruce Boston's 'Dystopian Dusk'. Smartt, on the other hand, realizes this change and decides to challenge it in 'Shake My Future'. This Chapter has discussed, in contemporary young-adult fiction and poetry, the relationship between life and technology, in general, and the destiny of adolescents with the presence of advanced technology in light of Orwellian concepts of totalitarianism and Huxley's portrayal of human alienation, in

particular. I have elaborated on the idea of uniting powers and seeking support as vital to making change in society. This was represented by Anderson through Violet's tragic end because she failed to get the support she needs while characters in Weyn's, Meyer's, and Collins' novels achieve what they want because they got help from others. Alienation, in contemporary terms, is no longer about space invaders; rather, human beings could be aliens in a society that favours machines over people as suggested by Hayles and Fukuyama and presented in contemporary young-adult fiction and poetry I have discussed. Freedom and privacy are two concepts that have long been discussed in literature; however, interest now lies in discussing the role of technology in replacing these concepts and promoting artificial intelligence. Love and compassion are portrayed as very hard to get in a society where technology has created a distance between people. Thus, twenty-first-century literature and poetry are now concerned with discussing the question: 'Will technology render us posthuman in its blurring of the boundaries of human and machine?' (Mitchell 109). Possible answers lie in authors' insights into the future with information technology and biotechnology either succeeding or failing in gaining control over human mentality, psychology, and body.

Chapter Three

Mortality, Legacy, and Familial Sacrifice in Twenty-First-Century Poetry and Dystopian and Post-Apocalyptic Fiction

Chapters One and Two explored the aspects of the young-adult character in twenty-first-century science fiction, dystopian fiction, and poetry drawing upon arguments about posthumanism in contemporary literature. This chapter will examine three very different contemporary texts, Malorie Blackman's *Noughts & Crosses* series (2001-2008) in young-adult popular fiction, Cormac McCarthy's *The Road* (2006) in post-apocalyptic fiction, and Jo Shapcott's poetry collection, *Of Mutability* (2010). I will explore the literary treatment of cellular changes in the body and how these changes define family relationships, foregrounding the contemporary cultural preoccupation with ideas about Foreignness as established by Julia Kristeva (1991), mortality, legacy, and sacrifice. These are all award-winning literary works although *The Road* has been the one to receive the most detailed literary criticism. However, my discussion of this novel will consider the main character's spiritual growth in proportion to his culminating physical suffering, and it will include a new area of comparison that has not yet been explored highlighting its proximity in themes and characters to its popular culture TV Series counterpart, *The Walking Dead* (2010-present).

McCarthy's novel approaches a similar area of interest to the works of Blackman and Shapcott in addressing the concept of Kristeva's Foreignness from a biological and environmental perspective; however, *Noughts & Crosses* and *Of Mutability* have been often reviewed from a rather mono-dimensional

point of view, only focusing on the theme of the dystopian society and the 'amalgam of 20th-century race relations' (2005 *Publishersweekly.com*) in the former and the scientific aspect in the latter. The existing critical reception of Blackman's young-adult novel and Shapcott's poetry collection fail to highlight the mutual approach of these works to the concept of Kristeva's Foreignness and difference resulting from bodily mutation from the perspective of society as a whole as well as individuals, adults and young-adults. In 'A Cyborg Manifesto' (1991), Donna Haraway suggests that the 'physical and non-physical' (153) aspects of human life manifested in body and mind make humans cyborgs themselves. She argues that 'a cyborg world might be about lived social and bodily realities in which people are not afraid of their joint kinship with animals and machines, not afraid of permanently partial identities and contradictory standpoints.' (Haraway 154). However, Haraway does not establish physical pain and illness as markers of posthuman or 'cyborg' bodies.

This chapter considers the idea of mutation and Foreignness in McCarthy's and Blackman's fictions as well as in Shapcott's poetry collection which offers 'a series of meditations imbued with mortality and mutability, coming from the body, or from the boundaries between the body and the world.' (Shapcott in Crown, 2010 *Theguardian.com*). As will be further discussed in this chapter, there has been reference to Helen Chadwick's art of photography when discussing Shapcott's *Of Mutability* (Crown, 2010 *Theguardian.com*). This is because Shapcott has been directly inspired by Chadwick's art exhibition, *Of Mutability* (1984-86), from which Shapcott borrowed some titles for her poems in *Of Mutability* (2010). However, there are no other critical materials comparing Shapcott's representation of bodily changes and emotional and physical pain to

works in other genres such as fiction. My analysis will focus on two scientific themes in fiction and poetry: the first one is the biological mutation of humans caused by illness, and the second one is the destruction of the natural environment and biosphere brought about by scientific experimentation in dystopian settings. These themes are so dominant in contemporary culture and twentieth-century literature that they are referred to by Joan Slonczewski and Michael Levy in 'Science Fiction and The Life Sciences' in *The Cambridge Companion to Science Fiction* (eds. Edward James and Farah Mendlesohn 2003). Slonczweski and Levy argue that '[m]utation and evolution' and the [e]nvironment and biosphere' are among the themes in science fiction that 'have shown remarkable endurance up to the present' (175). This view has been previously illustrated by August Derleth in 'Contemporary Science Fiction' (1952) suggesting that science fiction 'could be looked upon as the legendary of the atomic age' after World War II and that 'the familiar lost-continent and last-man-on-earth themes [are] so common to science-fiction in our time.' (Derleth 188). However these themes also extend to contemporary fiction, young-adult fiction and poetry as highlighted in this thesis, which examines the significance of these preoccupations and themes in different genres including poetry, not usually included in the study of science fiction. Why these preoccupations have taken hold and how these genres deal with them are the main concern of this chapter. Thus, the placement of Shapcott's reflective and science-oriented poetry, Blackman's social dystopia and McCarthy's post-apocalyptic novel in a science-fiction thematic frame suggests that contemporary literary genres are becoming increasingly interrelated in the twenty-first century.

Illness, Discrimination, and Haraway's 'Fractured Identities' in Contemporary Theory and Literature

Although McCarthy's and Blackman's novels are not classified as science fiction, they share with it, according to Elizabeth Ann Leonard in her chapter on race and ethnicity in *The Cambridge Companion to Science Fiction* (2003), 'its imaginative possibilities to hypothesize worlds' in the future 'where existing social problems have been [...] magnified or extended into a grim dystopia' (Leonard 253). While Blackman's dystopian series engages with the social dilemma of racism, McCarthy's novel introduces a new realm of social tension in a world where the natural environment is turned into a waste land leading to the rise of extreme human aggression, violence and cannibalism. According to Leonard, unlike 'the majority of sf [which] deals with racial [and social] tension by ignoring it' and making it 'irrelevant to the events of the story' (Leonard 254), dystopian and post-apocalyptic fictions are based on the escalation of world problems such as famines, epidemics, discrimination, violence, and terrorism. Here, exaggeration is an effective technique in imagining a world that is much worse than the actual one, warning against what might lead to the destruction of humanity. The focus in this chapter will be on how bodily changes caused by illness could develop individuals' social awareness in relation to the family and younger generations which symbolize the continuation of existence. Thus, Jo Shapcott's *Of Mutability* explores bodily changes and traces individuals' spiritual growth after a physical trauma. The relationship between science and poetry is controversial since many would argue, as Ruth Padel has said, that '[p]oetry is feeling' and 'science is about facts' which means they have 'nothing to do with each other' (2011

Theguardian.com). In her article in *The Guardian*, 'The Science of Poetry, the Poetry of Science', Ruth Padel highlighted the contemporary interest of poetry in scientific themes exemplified by Shapcott's *Of Mutability* which contributed to the increase of 'poetry's audiences in the medical community.' (Padel 2011 *Theguardian.com*). Padel argues that poetry and science have a close association with each other describing their relationship as 'parental' (2011) in the sense that poetry 'was the first written way we addressed such questions as what is the world made of, and how did it come to be?' (2011 *Theguardian.com*). I tend to agree with Padel's argument in establishing the fact that poetry is based on speculation and imagination. I will also establish this argument in fiction that addresses scientific issues which is also considered as a speculative form of literary writing since 'science fiction writers have long used "speculative fiction" as an umbrella term for a wide range of non-realistic stories' (2013 *Wired.com*) that take place in imaginative worlds. Both genres, fiction and poetry, share a common interest in using science to explore the possibilities of the human in the twenty-first century. One of these issues is what it means to be different, and how this affects individuals' status in the world and their life choices.

McCarthy's *The Road*, Blackman's *Noughts and Crosses*, and Shapcott's *Of Mutability* emphasise the idea of being different and represent the concepts of 'Otherness' and 'Kristeva's 'Foreignness' and their association with fear of change on physical and spiritual levels. This idea will be discussed with reference to Julia Kristeva's *Strangers to Ourselves* (1991) in which she highlights the co-dependent relationship between Foreignness and social phobias and questions the role of politics in encouraging social divisions. This is

a recurrent argument in socially-oriented contemporary literature and applies to the representation of racist societies in fiction. Donna Haraway establishes the term 'fractured identities' in 'A Cyborg Manifesto' (1991, 155) to refer to the status of women in contemporary societies. But she also extends this reference to include all types of social discrimination and communal conflicts that arise from labelling certain individuals:

It has become difficult to name one's feminism by a single adjective - or even to insist in every circumstance upon the noun. Consciousness of exclusion through naming is acute. Identities seem contradictory, partial, and strategic. With the hard-won recognition of their social and historical constitution, gender, race, and class cannot provide the basis for belief in 'essential' unity.(Haraway 155)

Haraway focuses on race, gender, and class as representations of social 'exclusions' (155). However, she does not consider illness as a marker of 'fractured identities' within a discriminative society. Therefore, this chapter considers physical illness as a major constituent of posthuman and alien bodies in contemporary fiction and poetry.

Haraway's human cyborgs as far as racial discrimination is concerned are still represented in contemporary literature. Blackman's novel is an example. In 'Children's Laureate Malorie Blackman: 'I'm looking forward to redressing the balance for teenagers' (2013), Susanne Rustin argues that the society in Malorie Blackman's *Noughts & Crosses* is 'governed by the black Crosses, who have all the power, status and money, while the miserable underclass of former slaves are the white Noughts, otherwise known as

“Blankers” (Rustin 2013 *Theguardian.com*). According to Ilene Cooper (2005 & 2007), the theme of racial discrimination in the novel ‘is not unfamiliar, but the way Blackman personalizes it makes for a thrilling, heart-breaking story.’ (Cooper 2005, 1796). Cooper provides a brief overview of *Noughts & Crosses* suggesting that by ‘looking at interpersonal rather than race relations’ (Cooper 2007, 49), Blackman takes the topic of difference further by considering the personal conflicts that stem from social and psychological issues, such as the unjustifiable hateful attitude of Jude, ‘Callum’s radical, bitter brother’ (Cooper 2007, 49) towards Sephy which goes beyond her being a black aristocrat. Kristeva’s idea of Foreignness is also discussed by Shapcott in *Of Mutability* by pointing out the social alienation between the ill and the healthy.

Cormac McCarthy’s *The Road*, however, situates the concept of Foreignness differently as it ‘leads readers to the very edges of human isolation, suffering and despair’ in an arid infertile world, according to Ashley Kunsu in ‘Mystery and Possibility in Cormac McCarthy’ in the *Journal of Modern Literature* (2012, 146). This post-apocalyptic novel introduces a new form of Foreignness by creating new divisions between humans defined by the willingness and ability to commit violence against other humans. According to Arielle Zibrak in ‘Intolerance, A Survival Guide: Heteronormative Culture Formation in Cormac McCarthy’s *The Road*’ in the *Arizona Quarterly* journal (2012), this aggressive scenery of humans turning against nature and their own kind in the novel contrasts with the level of intimacy between the Father and the Son in the sense that ‘the tenderness [...] that the man shows towards the boy somehow eclipses or undoes the scenes of brutal violence contained in the novel.’ (Zibrak 105). Although *The Road* ‘is a novel of human intimacy, the

search for hope and the simultaneous struggle against hopelessness' (Kunsa 2012, 149), it is also a demonstration of how 'human and natural evil are essentially intertwined within the universe' (Kunsa 2012, 149) considering that the plight on earth might have been brought about by a natural disaster and accelerated by humans' interference. However, humanity will have different concerns under the new situation. Social tension created by the existence of different ethnicities and social hierarchies is gradually diminishing because the world as people once knew it is no longer a reality after the destruction of the surrounding biosphere. *The Road* is most often read as a brilliant portrayal of the contemporary post-apocalypse captured through the personal suffering of survivors narrating 'the story of a man's bond with his young son as the two struggle for survival years after a cataclysm has erased society', according to John Jurgensen in 'Hollywood's Favorite Cowboy', an interview with McCarthy, on *The Wall Street Journal* website (2009 *Wsj.com*).

Articles by Kunsa (2012), McSweeney (2009), and Mangrum (2013) position *The Road* in the apocalyptic frame focusing on tragedy, hope, and survival without directly engaging with the aspect of Foreignness as a major theme. I tend to agree with Matthew Mullins' account of *The Road* as being 'McCarthy's rendering of modernity' (2011, 76). In 'Hunger and the Apocalypse of Modernity in Cormac McCarthy's *The Road*' (2011), Mullins considers the apocalypse in *The Road* 'as a revelation or disclosure first, and as a disaster or global cataclysm second' (76) hence my focus on humans' realization of their inner mutation and how they deal with their new identities as they try to figure out how to survive the environmental crisis. What makes *The Road* unique is its exploration of the new Other in human societies with individuals being

estranged from each other once the social rules that used to tie them together collapsed after the apocalypse. Both the Father and the Son feel that they are foreigners among other human survivors who have chosen to abandon their humanity after the environmental crisis. In 'Accounting for The Road: Tragedy, Courage, and Cavell's Acknowledgment' (2013), Benjamin Mangrum considers 'the father's commitment to the world as a version of courage' (268). However, I argue that this 'commitment' also highlights individuals' alienation from themselves as they try to adapt to the new human situation governed by the need to survive.

By contrast, the first book in Blackman's young-adult fictional series, is narrated interchangeably by the two main young-adult characters, Sephy, a black aristocrat, and Callum, a white working-class youth. The double-narrator technique 'reflects the binary social structure of the fictional world', according to Susanne Reichl in 'Doing Identity, Doing Culture: Transcultural Learning through Young Adult Fiction' in *Children's Literature in Second Language Education* (2013, 114). The double-narrator technique also demonstrates the political and social dilemmas of the family institution in a dystopian fantasy in which power lies in the hands of the African race while white people represent the suppressed and inferior race. Through depicting a human apocalypse and a dystopian alternative history, McCarthy and Blackman, respectively, present a literary commentary on humanity thriving on the oppression and destruction of the Other focusing on family bonds as innate motivations for survival. A common theme between these two works is that, as Aldous Huxley suggests in his 'Variations on a Philosopher' (1950), an account of the eighteenth-century philosopher, Maine de Biran, '[m]ost human beings have an almost infinite

capacity for taking things for granted. That men do not learn very much from the lessons of history is the most important of all the lessons of history.' (Huxley 69). The story in *Noughts & Crosses* reflects this view. As was pointed out by Krista Hutley, Blackman's 'book is a powerful and moving exploration of the complex facets and conflicted loyalties of racial injustice in worlds imagined or real.' (2005, 429). *Noughts & Crosses* also demonstrates how the reversal of power among races, generations, or societies does not necessarily guarantee a positive change in the course of human history. Natural balance may not be reached by the survival of the fittest if one takes into consideration the Darwinian Theory of natural selection.

Thus, the 'science fiction element' (Hutley 2005, 429) in Blackman's novel in which Pangaea, the supercontinent, is still unseparated in its entirety 'seems merely an afterthought to add a clever twist to a conventional story of interracial romance.' (Hutley 2005, 429). Indeed, this depiction of a unified natural habitat in *Noughts & Crosses* could be contrasted with its racist human society. In addition, Blackman's pessimistic approach to teenage love could stem from contemporary social melancholy where happy endings seem rather unrealistic. As suggested by Edward James in *The Cambridge Companion to Science Fiction*, 'twentieth-century pessimism and cynicism' (2003) could not quite adapt to medieval models of the perfect society first introduced by Sir Thomas More in his *Utopia* (1516). Questioning 'utopian visions' (James 2003) in the twentieth century, that later contributed to the establishment of dystopian fiction as a literary genre in the twenty-first century, was based on arguments that

[I]n reality many such utopias would turn out to be 'dystopias', that is, oppressive societies, either because of the tyranny of the 'perfect' system over the will of the individual, or because of the difficulty of stopping individuals or elites from imposing authority over the majority, or, indeed, over minorities. (James 220).

From a similar perspective, McCarthy's post-apocalyptic novel follows the journey of survival of a father and his son in a horrifying world that represents humanity falling victim of its own over ambition and reckless exploitation of its surroundings. This idea was highlighted in Terence McSweeney's critical analysis of the environmental apocalypse in *The Road* by arguing that '[i]f the disaster is in fact nuclear and therefore caused by humans, then humankind has finally brought about its own destruction' (2009, 44). In "Each Night Is Darker—Beyond Darkness": The Environmental and Spiritual Apocalypse of *The Road*' (2009), Terence McSweeney suggests that the novel illustrates this notion through the tormenting journey of the protagonist on the road to survival. Therefore, taking McSweeney's and Huxley's arguments into consideration as well as the pessimistic nature of thought in the twentieth and twenty-first centuries helps establish some common ground between Blackman's and McCarthy's novels which shed light on humans' role in bringing about social and cosmic destruction.

The world that Blackman portrays in *Noughts & Crosses* is one that takes things like food, shelter, schooling, and the right of acquiring political power 'for granted' (Huxley 69) while in McCarthy's novel the world has gone beyond the human notion of survival as related to power and control where, as

ironically as Stephen King puts it in his novel, *The Running Man* (1982), another pessimistic science fiction representation of falling economies and violent societies: 'the best men don't run for president, they run for their lives' (King, 1982). The world in *The Road* summarizes and complements the dystopian vision of Malorie Blackman in *Noughts & Crosses* which presents the economic and political structure of racist human societies contributing to the disintegration of the family and corrupting the life of the younger generation. According to Christine Wilkie-Stibbs in 'The "Other" Country: Memory, Voices, and Experiences of Colonized Childhoods' (2006):

Blackman goes right to the heart of terrorist motivation: we observe how the process of radicalization intensifies through successive generations as these characters struggle to find spaces in which to act to reassert their own voices and agency (Wilkie-Stibbs 245)

Perhaps the most prominent theme in *Noughts & Crosses*, according to Wilkie-Stibbs, is the dehumanizing environment in which the younger generation is growing up. However, one limitation to this analysis is that it ignores the topic of parental sacrifice and the role of parents in securing a better future for their children. Their physical illness will not prevent them from saving their children. Blackman's and McCarthy's novels highlight the significance of physical illness in radically changing the body and sense of self.

In *The Body in Pain: The Making and Unmaking of the World* (1985), Elaine Scarry suggests that 'intense pain is world-destroying' (29), and in a later interview she points out that '[e]motional pain can sometimes be so severe that it approaches the kinds of features that come about in physical pain.' (Smith

and Scarry 2006, 225). Here, Scarry argues that physical pain most often contributes to an increase in emotional suffering and, sometimes, vice versa. The concept of pain in humans is of a complex nature where the physical and emotional are closely interrelated. This account of pain by Scarry appears in the representation of physical suffering of individuals who attempt to figure out their significance in the world in Blackman's and McCarthy's novels. This argument is also relevant when considering the speakers' experience in Shapcott's *Of Mutability* as they try to remain conscious of their existence after their life has been 'disrupted by a physical imbalance' (Leviston 2010 *Theguardian.com*). In a similar way, adult characters in *The Road* and *Noughts & Crosses* undergo some physically and emotionally tormenting experiences. Although both novels address the issue of parents' suffering, McCarthy's language in *The Road* is more melancholic and, sometimes, even more desperate. However, despite the pessimistic language and scenery in McCarthy's narrative, hope is embedded in the overall theme of the journey towards survival. The Father's reflections and thoughts on life and death are conveyed either by the third person narrator or through dialogue, and whenever there is mention of hope, it is often disguised in metaphorical expressions. One example is when the Father tells his son that 'You have to carry the fire.' (McCarthy 2006, 298). It is most likely that 'the fire' here is one of the Father's hallucinations because the Son cannot see it: 'Is the fire real?' (McCarthy 2006, 298), but the Father tells his son that 'It's inside you. It was always there. I can see it.' (McCarthy 2006, 298). It has never been made clear whether the fire is real or not, but it is one of the main four elements in nature, and it is presented here as a metaphor for childhood the survival of which is necessary for the continuation of life on earth, according to the Father.

Associating his son with fire would also suggest that he sees both as a source for hope and pain. Fire provides warmth, but it could also bring about devastation. His son is his hope, but he is also the reason why he chose to continue with this painful journey to save this hope.

On the other hand, Blackman's language in *Noughts and Crosses* series is sentimental in a more direct way. Parents and children express their emotions more openly, probably because this series of books is written for young adults, and while there is some level of depth in Blackman's novels, too much melancholy would be less appealing to a young readership. In *Checkmate* (2006), Jasmine Hadley learns that her granddaughter, Callie-Rose, hates her mother, Sephy, for thinking that her mother thinks that she is the reason Callie-Rose's father was taken away and killed. Jasmine then decides to take extreme measures to help solve this misunderstanding between her daughter and granddaughter because she wants her sacrifice to be an expression of love to her family. Both Jasmine and the Father in *The Road* eventually realize that redemption lies in sacrifice, and that the end of their lives should be for the greater good of saving their children who represent the future of humanity.

Scarry associates physical pain with emotional suffering. With reference to these contemporary dystopian and post-apocalyptic narratives, Scarry's argument illuminates the way in which adult characters' pain manifests itself in some sort of awareness and commitment to securing the future of their descendants, children and grandchildren. While McSweeney's reading of *The Road* recognizes the metaphor of survival represented by 'an outward physical journey [...] [manifesting] a more important emotional and spiritual journey

within' (45), other critics, such as George Monbiot, focus on the ecological aspects of the novel considering it 'the most important environmental book ever written.' (Monbiot 2007 *The Guardian*). I intend to take the environmental factor of the novel a step further by connecting the suffering of the individual to the state of destruction of the world around. I am establishing a connection between the general dystopian post-apocalyptic theme and the personal suffering of the individual carrying the burden of being an uninformed conspirator against nature.

A part of my discussion also considers Benjamin Mangrum's article, 'Accounting for *The Road*: Tragedy, Courage, and Cavell's Acknowledgment' (2013), in which he reads McCarthy's novel in light of philosopher Cavell's definition of human tragedy as resulting from man's inability to recognize and understand his position in the world in *The Claim of Reason* (1979). Mangrum highlights Cavell's definition of tragedy which happens as 'humans become dissatisfied with themselves, their connections to others, and ultimately with their world. The tragic occurs when these unsettled selves not only avoid the truth about the world but also seek to destroy it.' (Mangrum 271). This account of tragedy evokes a sense of destruction of the self and others. While I tend to agree with Cavell's association of tragedy with feeling disconnected from one's own surroundings, the subsequent tendency to destroy the world around seems voluntary rather than mandatory as far as *The Road* is concerned. Here, Mangrum is using Cavell in his study of *The Road* to account for the concept of sacrifice that replaces hopelessness with the need to survive. McCarthy's narrative shows that humans experience both frustration and hope, and while the former is characterised by humans giving up on the present, the latter

evokes sacrifice to rectify the future. Thus, this argument could be applied to the existing relationship between tragedy and sacrifice in McCarthy's and Blackman's fictional portrayals of families in which parents struggle to define their status in the world through self-sacrifice when faced by life-threatening physical and environmental mutation.

Human beings' reactions to tragic events and their attempts to salvage what is left of humanity to save the future are recurring themes in contemporary fiction characterised by an increased passion towards investigating possible future scenarios for survival. These themes are represented by parents trying to protect their children in McCarthy's and Blackman's novels, and by a narrator whose perception of various real-life images appears unusually detailed and critical in Shapcott's poems in *Of Mutability*. Contemporary authors and poets are concerned with representing personal perceptions and reactions towards sudden changes in the body and of the surrounding environment. It is argued that Shapcott's personal experience of struggling against cancer and suddenly finding herself 'in an unknown landscape' (Cochrane 2011 *Theguardian.com*) inspired her poems in *Of Mutability*. Facing this life-threatening illness was the main inspiration behind *Of Mutability* in the sense that many poems in this collection deal with people's encounter with the true meaning of their existence when sudden changes take place. While the opening poem, 'Of Mutability', introduces the theme of change and its association with the rise of self-knowledge, later poems, such as 'Scorpion', stand as a metaphor of survival taking the argument beyond the common interpretation of the instinctive nature of this term. Change in the form of sudden traumatizing experiences forces humans to think about the meaning of their lives in the world and their value to

others, and when such realizations occur, survival is no longer perceived as instinctive and does not count as a value on its own; one's own reasons behind survival are what matters. Although there is no decisive scientific evidence to support that, one possible implication of this juxtaposition between a human and a scorpion in Shapcott's poem is that what distinguishes humans from the other creatures is their ability to think and reflect on their actions. Humans' actions are not only governed by instinct and, thus, always directed by an urge to survive. As was pointed out earlier with reference to Cavell's account of tragedy and Mangrum's analysis of hope in *The Road*, humans are always confronted with the choice of whether to survive or give up.

Similarly, Shapcott's 'Scorpion' also suggests that humans should always have the ability to choose to survive when faced by a threatening change. In this respect, Shapcott's *Of Mutability* is here juxtaposed with McCarthy's *The Road* and Blackman's *Noughts & Crosses* in terms of acknowledging change and reacting to it. While Shapcott's account of change in the different poems is reflective of events rather than predictive, representing self-awareness without directly engaging with the topic of the future, McCarthy's and Blackman's fictional narratives direct this sense of self-awareness towards preserving human legacy represented by parents trying to secure a better future for their children. However, both approaches to interpreting changes in the body address humans' ability to deal with these changes resourcefully and constructively in order to survive. Although the scientific aspect manifests itself the most in Shapcott's work (poems about illness and how it makes one different from her/his surroundings), it is still implied in Blackman's and McCarthy's fictions which show how characters' change of behaviour is

associated with biological mutation of them becoming ill or physically exhausted. The weaker they get, the greater insight they acquire.

The Metaphor of Illness and Familial Sacrifice in *The Road* (2002) and *Noughts and Crosses* (2001)

This section explores the representation of bodily changes and illness in fiction in relation to science. There is a predisposition in every literary study of the contemporary human to relate life in the twenty-first century to the revolution of science. The new scientific movement that has changed people's lives in the twenty-first century evolved from the industrial revolution which was the defining feature of the previous century; however, literature continues to project some sort of uncertainty regarding the ascendancy of science. This projection was the main concern of the previous chapters while this chapter goes beyond the direct reference to scientific topics to focus on the representation of biological changes in the body in fiction and poetry and how illness affects adults' willingness to take control of their choices.

The Man in *The Road* and Jasmine in *Noughts & Crosses* undergo changes in their bodies in the form of illness in the former and injuries in the latter. *Noughts & Crosses* was often reviewed as a novel about racial societies which 'will challenge children to think again and again about the clichés and stereotypes with which they are presented' (*The Observer*, 2001). The majority of critical responses to the *Noughts and Crosses* series focused on race issues highlighting Callum's escalation to anger and 'Sephy's transformation from giggly innocent to anguished questioner' of her society's values, according to Kristi Elle Jemtegaard in her review of *Noughts and Crosses* in *The Horn Book*

Magazine (2005, 742). However, the relationship between sacrifice and physical illness as highlighted by Jasmine Hadley's actions is an important theme that has been ignored by critics of Blackman's work. Jasmine Hadley, Sephy's mother, is presented in the first book as an alcoholic woman who neglects her children. Later in the series, she gets diagnosed with cancer, decides to become sober, and starts reflecting back on her previous life and how she has always made the wrong decisions when it comes to supporting her daughter, Sephy. Knowing that Jude is planning to kill Sephy and recruit her granddaughter, Callie-Rose, in the Liberation Militia to become a suicide bomber, she plans to meet with Jude and kill him along with herself in a suicide bombing. Although characters in Blackman's series are criticized as being 'archetypes rather than particular, individuated people' (Craig 2001, 53), the thematic relevance of this series to contemporary ideals of good parenting and children's rights is what makes it a significant twenty-first century literary work.

The theme of parental sacrifice in *Noughts & Crosses* reflects contemporary social concerns that 'less sensitive and less responsive parenting [...] has been associated with [...] increased child behavior problems' (Lewin 2013, 24). This idea is implied in the relationship between Sephy and her daughter, Callie-Rose. Sephy raised her child when she was rather young which suggests that 'the younger a mother is, the more she is at risk for maladaptive parenting', according to new social studies on age and parenting in Amy Lewin, Stephanie J. Mitchell and Cynthia R. Ronzio's 'Developmental Differences in Parenting Behavior: Comparing Adolescent, Emerging Adult, and Adult Mothers.' (2013, 24). Being so young to raise a child properly, Sephy could not provide her daughter with the adequate support to deal with the

latter's identity crisis being the offspring of a cross-racial marriage as she seeks recognition from the terrorist movement, the Liberation Militia, led by her uncle, Jude. Therefore, the sacrifice of her grandmother, Jasmine, suggests that protecting the family unit by preventing mother and daughter from drifting apart comes at a certain cost. The important twist of events after Jasmine's suicide in Blackman's narrative plot is the one to create the glimpse of hope in the series. Her final action will rectify the future path of the younger generation, and this rectification comes through sacrifice.

Thus, Blackman's series is a model in contemporary fiction that is interested in representing a journey of biological mutation starting from physical illness and resulting in self-awareness which is directed towards saving the younger generation as a compensation for the physical damage inflicted on one's own body. This sequence repeats itself in *The Road* in which the Man's persistence to continue with the journey to survival grows stronger as his physical injuries become more severe although he knows that he is not the one to survive this fragmented world characterised by 'a loss of continuity with the past, a sense of alienation from the future, and as partially blind men walking in the dark of an obscure present.' (Mangrum 274). Although introduced differently, endurance and suffering of adult characters in Blackman's and McCarthy's novels could be symbolic of them being partly responsible for the difficulties in their children's lives. Through pain they learn that physical destruction is their true chance to achieve spiritual transcendence. The experience of physical mutation made both Jasmine and the Man understand mortality and that the way they could protect their legacy is by sacrificing themselves in order to save their children. In this sense, the abused and

neglected childhood of Jimmy in Margaret Atwood's *Oryx and Crake* (2003) which left him stranded in a post-apocalyptic world as an adult, as discussed in Chapter One, could be juxtaposed by a parent whose only hope is to save his child in McCarthy's *The Road*. This is because McCarthy's novel presents a father who is committed to paying the price for human and parental misjudgement on behalf of all adults and all parents. Mangrum points out that some 'episodes in the novel evoke this process of self-discovery as the man finds himself to be complicit in the desolation that riddled the earth.' (278). One example is the scene in which the Man and the Boy pass by the southern state houses and the Man starts thinking how these estates used to hold slave prisoners in their basements in the past and how all people including himself are silent witnesses on this disgraceful human history. Such incidents make the Man gradually lose faith in his old self and start looking for a new definition for his existence.

Although *The Road* appears to be a novel about adventure in a post-apocalyptic world, it tackles issues related to belief and faith in human ability to find hope in the grimmest of situations. This hope is driven by the 'father-son relationship that the novel depicts' (Zibrak 104) which, according to Zibrak, 'is the engine that drives its popularity; it is the theme of the novel to which mainstream outlets return again and again.' (Zibrak 104). Paternal love is a recurring theme in both literature and popular culture. There is, indeed, a vivid similarity between the situation in *The Road* and that in AMC's zombie post-apocalyptic television series, *The Walking Dead* (2010-). There is even what it seems to be a premonitory reference to this TV series in *The Road* as the Man's wife says 'We're the walking dead in a horror film' (McCarthy, 2006)

although McCarthy's novel was published years before the first episodes of the series started to air on TV. *The Walking Dead* focuses on 'patrolman Rick Grimes as he oscillates between his duties as a father and husband and as the de facto leader of desperate, antagonistic yet fiercely loyal band of survivors', according to James Aston in 'The Post-apocalyptic Family in The Walking dead'. In his 'The Post-apocalyptic family in The *Walking Dead*', James Aston refers to the lack of popular interest in discussing the family situations in post-apocalyptic creations in literature and on the screen considering *The Walking Dead* 'a recent entry into the wide-ranging field of cultural representation of the apocalypse.' (Aston 133). While *The Road* is described as 'a novel of human intimacy, the search for hope and the simultaneous struggle against hopelessness' (Kunsa 2012 149), *The Walking Dead* shows 'how central intimate representations of the surviving humanity are and how this closeness and intense dynamic is mapped put through the family unit.' (Aston 134). Both Kunsa and Aston agree that the intensity of emotions in each of these post-apocalyptic works and their focus on the family being the only shelter in the time of crisis are what makes them 'so much more than ... horror' (Dewolf Smith 2010 *Wsj.com*) portrayals. Rick, in the series, is a town Sheriff who sets off in a long journey accompanied by a group of survivors trying to find shelter from the zombie attack. He is determined to survive in order to protect his son. The TV series follows Rick's character transformation from 'a civilized father trying to keep his son sane and innocent in this world of death and survival, to a man who would do anything to survive and does not seem to mind bringing his son down with him' (Lore 2014 *Guardianlv.com*) even if this happens unintentionally where the unpredictability of situations summons actions before thinking.

In both *The Walking Dead* and *The Road*, there is a controversial scene in which the fathers commit murder in self-defence and try to rationalize their action in front of their sons. The scene in the TV series is more shocking and disturbing than that in the novel; however, both incidents highlight the controversy regarding what parents are supposed to teach their children when it comes to morality and civilized behaviour in difficult times. The Father in *The Road* suffers because among all the violence and destruction surrounding them, his son 'comes to represent what little hope there is left for the future in his naive innocence and optimism' (McSweeney 52) while Rick's suffering in *The Walking Dead* grows deeper as he witnesses his son's gradual transformation to premature adulthood and his insistence on becoming a responsible, helpful member in the group. When Rick finds himself surrounded by a group of gang members with one of them holding a knife to Rick's throat and the other trying to rape his son, he, enraged and running out of options, commits 'the first "savage"' act (Lore 2014 *Guardianlv.com*) by biting a piece of the gangster's neck, spits it out with rage, kills him, and then repeatedly stabs the other man who was trying to rape his son.

Both Carl, Rick's son in *The Walking Dead*, and the Boy in *The Road* witness their fathers killing other men, and while, in both situations, killing is committed out of self-defence, the boys seem confused about what is right and what is wrong. Like Rick, The Father in McCarthy's novel sees his son as a representation of hope, and he 'knew only that the child was his warrant. He said: If he is not the word of God, then God never spoke.' (McCarthy 2006, 3). However, both characters believe that hope in humanity diminishes if their sons could not survive, and this forces a spiritual mutation in their character and

change in their human principles. As McSweeney argues, the human emotions of fatherly love 'develop ... in stark contrast to the father's increasing determination to protect his son at all costs, which leads him to become ever more ruthless and as a result further disconnected from humanity.' (McSweeney 52). This change does not only make both fathers commit murder under pressure but also justify it in the name of the greater good. Saving their children is their new morality where faith is tested by how far one could go to defend the new 'God'. Their crime could be their punishment because this rather involuntary change from civilization to violence and savagery could be the price adults pay for their role in the apocalypse. On the other hand, the boys are now facing a moral crisis. The Boy in *The Road* seems confused about the definition of survival and self-defence through murder expressing, as Mangrum suggests, his 'desire to distinguish between one kind of killing and another. He wants to know what separates his father, who kills another man to save his son's life, from the cannibals, who kill and eat human beings' (Mangrum 282). This ambivalence between being committed to saving the children and the fathers' inability to sustain an unnegotiable attitude against killing is a metaphor of a contemporary social dilemma that parents might face as they find themselves forced to sacrifice their image as idols for their children in order to protect them. Although Aston's article does not include any comparison between *The Walking Dead* and *The Road*, he comments on this representation of family crises in popular culture as an outlet for public concerns about parenting and what it means to be a good parent suggesting that 'the private sphere of the family acts as a battleground for public fears and anxieties culminating in contemporary societies.' (Aston 135). Rick in *The Walking Dead* and the Father in *The Road*

go through an excruciating journey of change from peaceful human beings to violent and merciless men. However, the father inside them understands that '[t]o continue on the road requires the man to recognize that he is lost to himself even as he bequeaths to his son a world that has lost a sense of what it means to be human.' (Mangrum 243). The new situation created a new priority in which their role is to save their children and revive hope that humanity may still survive.

In an interview with McCarthy in *The Wall Street Journal*, he refers to literary classics, such as Fyodor Dostoevsky's *The Brothers Karamazov*, as books that 'are just not going to be written anymore' (McCarthy in Jurgensen 2009 *Wsj.com*). However, contemporary literature still offers the 'indulgent' (McCarthy in Jurgensen 2009 *Wsj.com*) reader books with rich thematic content and original characters. Although Dostoevsky's *The Brothers Karamazov* and McCarthy's *The Road* are over a century apart and have nothing in common, they both question the nature of human morality and faith each according to the standards of its own time. In Dostoevsky's novel one of the characters says that 'the moment you make yourself sincerely responsible for everything and everyone, you will see at once that it is really so, that it is you who are guilty on behalf of all and for all.' (1880 in Richard Pevear and Larissa Volokhonsky translation 1992, 320). Here, Dostoevsky's account seems to be the epitome of the Man's view in *The Road*. In a world where names no longer define the individual, readers are introduced to the Man and the Boy, a father and his son, standing for the post-apocalyptic family and representing human survival in its physical and spiritual sense. Their experience on the road to survival represents self-redemption and sacrifice on the part of the Man who gradually comes to

accept responsibility for the infertile state of the world on behalf of all humanity; he grows physically weaker during his journey, and this weakness could be a reflection of the psychological burden that he accumulates as his human sense of guilt and responsibility becomes more lucid. The same is the case with Jasmine in Malorie Blackman's *Noughts and Crosses*. She is a Cross, in a society that refers to black people as Crosses and white people as Noughts, and wife of wealthy corrupt politician, Kamal Hadley. Towards the end of the third book, *Checkmate* (2005), she realizes that her inaction throughout the years plays a role in the suffering of her daughter, Sephy, which eventually extended to her granddaughter, Callie-Rose. Her physical illness might as well be a manifestation of her feeling of guilt for not taking responsibility for the misfortunes of her daughter's life, hence her later decision to take action into her own hands in order to bring her daughter and her granddaughter closer together to compensate for the alienation between her and Sephy throughout the years.

Physical vulnerability is, thus, an aspect that brings McCarthy's, Blackman's and Shapcott's works together. In her opening poem 'Of Mutability', Shapcott reflects on human mortality perceived through mutation of the body, feeling how '[t]oo many of the best cells in my body/ are itching, feeling jagged, turning raw' (Shapcott 3). In her review of Shapcott's collection in *The Guardian*, Frances Leviston suggests that this 'excellent title poem ... acts as something of a tissue sample for most of the book's concerns, from the mutations of cells to the disruption of the seasons, in a voice as mutable as the phenomena it describes' (2010). The poem also highlights the relationship between mutation and pain as she uses the metaphor of tears like 'chandeliers,

out of the corner of your eye' (Shapcott 2010, 3) to describe the painful journey of infinite change that would strip all previous experiences of their meaning. Concepts such as 'human sacrifice' and 'mortality' (Shapcott 2010, 3) become a part of a new consciousness that transcends tangible existence. The detailed imagery in this poem where perception is shattered through the countless number of body cells makes one 'feel small/ among the numbers' (Shapcott 2010, 3) which suggests that the less people are in control of themselves as a material entity, the deeper their sense of the self grows and the more comprehensive their understanding of what it means to be a human responsible for one's own choices becomes.

By establishing a connection between the power of the grand number of cells in the human body and humans' helplessness in stopping or reversing the changes inside one's own body, Shapcott suggests that physical vulnerability influences people's choices regarding the lives of others around. They become more capable of sacrifice for the sake of others since one cannot control biological mutation. In another poem, 'Religion for Girls', Shapcott moves from viewing life through the microscopic image of body cells to observing the stream of everyday life as 'the wandering mortals of London/ [...] chant our *Evening Standards* to ourselves/ in our stalled commuter trains' (Shapcott 2010, 14). The poem explores the topic of human mortality and vulnerability and people's need for a divine motherly figure to protect them by summoning images of Roman goddesses who no longer exist to guard 'children's breath.' (Shapcott 2010, 14). Humans are mortals. They cannot be considered as trusted guardians of their own future represented by children. Considering that Shapcott's interest in this poem 'is to document this kind of manmade instability'

(Leviston 2010 *Theguardian.com*) and unreliability in securing a stable position for the human species in the universe without the help of some divine intervention, there is an implied realization 'that both constancy and change are ... constructs of the human imagination' (Leviston 2010 *Theguardian.com*) which will navigate through time as humans continue to change and witness the dawn of a new day 'following/ the invincible sun from east to west.' (Shapcott 2010, 14). Imagination nourishes humans' hope that they could one day become gods and makes it possible for them to believe that gods were originally humans altered by their own imagination and persistence. The speaker in Shapcott's 'Religion for Girls' is concerned about the future of humanity without divine protection. From a different approach to survival, children and young-adults are depicted as a representation of hope that needs to be preserved in McCarthy's and Blackman's fictions. Adults in both Blackman's and McCarthy's novels realize that the survival of this hope depends on the choices they make, even if these choices mean that one should undergo some drastic mutation, spiritual and physical, to serve this new goal. Jasmine Hadley kills herself in a suicide bombing killing with her the man who acts as a threat to her daughter and granddaughter, while the Father in McCarthy's novel experiences metaphorical death of character on the road to survival as well as being forced to turn to violence in self-defence.

Writers' Personal Involvement: Dystopia, Illness, and the Family

McCarthy's *The Road* and Blackman's *Noughts and Crosses* address the experience of extremely unfortunate events and the way people's vision changes as they find salvation in being responsible for the younger generation.

There is a proportional relationship between physical power and the human sense of control in the sense that the more physically capable people are, the stronger their sense of control becomes, and their ability to act in a careless and irresponsible manner manifests itself more confidently. This will eventually lead to human's physical, emotional, and spiritual destruction. In 'Cormac McCarthy's *The Road* as Apocalyptic Grail Narrative' (2011), Lydia Cooper's commentary on McCarthy's novel suggests that '[w]hatever has caused the actual devastation ... is the internal corruption of people who sought too long for their own power, who placed their own needs above those of others, that has brought humanity to its doom.' (Cooper 222). Thus, paying attention to one's own self and realizing the meaning of one's own existence comes as tragedy befalls man, and this concept is what establishes a bridge between McCarthy's and Blackman's fiction and Shapcott's poetry in contemporary authors' quest to define the human. The subjective theme is central to these works since they all reflect their writers' dedication to the story they want to tell.

While, as argued earlier, Shapcott's *Of Mutability* was influenced by her personal experience with illness, she was also inspired by photographer, Helen Chadwick, whom she considers the 'presiding spirit of the collection' (Shapcott in Crown 2010 *Theguardian.com*). Shapcott borrowed the title for her poetry collection from Chadwick's art exhibition, *Of Mutability* (1984-86). In an interview with Shapcott by Sarah Crown, she expresses her fascination with Chadwick's work saying that it 'suggested ways of relating the body and the world, which at that moment spoke to me' (Shapcott in Crown 2010 *Theguardian.com*). Chadwick's *Of Mutability* featured 'collaged photocopies present[ing] her naked figure floating amongst a cornucopia of animal and

vegetable matter' (Buck 1996 *Independent.co.uk*), the concept behind which is synonymous with the way Shapcott portrays the human body as an integral part of nature in her poetry collection, *Of Mutability* (2010). Chadwick also 'employed computer technology to superimpose microscopic images of Chadwick's own body cells across epic photographs of the Pembrokeshire coast' (Buck, 1996) which suggests that objective science could be used to capture the subjective experience of the artist. While Shapcott argues that her personal experience with illness and cellular changes to her body has broadened her understanding of Chadwick's subjective work, I find that technology has influenced the artistic creation of both artist and poet. Chadwick used computer technology to introduce 'unconventional material' (Buck 1996 *Independent.co.uk*) such as *Piss Flowers* (another title in Shapcott's collection) 'made from casting the patterns of male and female urine in snow' (Buck 1996 *Independent.co.uk*). Shapcott, on the other hand, experienced technology and science differently. She underwent several years of cancer treatment which made her able to better understand the anatomy of the human body and how it functions in the different surroundings. In the same interview with Crown, Shapcott explains that as a cancer patient 'you're only ever in remission. You become aware that the body is going in one direction: towards disintegration. [...] that means living with a changed sensibility. [...] I've had to remake myself as a poet.' (Shapcott in Crown 2010 *Theguardian.com*). Hence, it could be argued that the same way Chadwick was grateful to new technology for allowing her to broaden the scope of her artistic creation, Shapcott also acknowledges that her journey with illness has made her a new poet, and that 'her oncology team [whom she] named in *Of*

Mutability's acknowledgments' (Crown 2010 *Theguardian.com*) have helped her understand and cope with the changes to her body.

Shapcott argues that the poems in *Of Mutability* 'are emotionally autobiographical, but not factually so' (Shapcott in Crown 2010 *Theguardian.com*), but she believes 'that readers tend to relate poems to poets in a way that they don't with novels.' (Shapcott in Crown 2010 *Theguardian.com*). However, Blackman was clear about her personal involvement in *Noughts & Crosses* series. She mentioned on several occasions in interviews that this series came to life because of a sense of commitment to children:

It's about making sure no child gets left behind. I loved reading when I grew up but did feel totally invisible because I couldn't see myself and my life reflected in the books I was reading. So it's about making sure every child feels included and have the right to express themselves creatively. (Blackman in Clark 2013 *Independent.co.uk*)

This sense of commitment is essential to my argument about *Noughts & Crosses* since I am investigating adults' attitudes towards teenagers in a young-adult book. Blackman's testimony indicates that adult characters and their attitudes in her novel are as important as the young-adult dystopian theme which is the topic discussed the most among critics of *Noughts & Crosses*. In 'Malorie Blackman is a Great Choice to Inspire Children', (2013) Martin Chilton commented on Blackman's new position as 2013-2015 Children's Laureate saying that 'she has a popular touch and exudes a natural empathy with children and teenagers. This sense of knowing how difficult life can be for

teenagers is also what makes her such an interesting choice for Laureate.’ (Chilton *Telegraph.co.uk*). Blackman believes that it is the responsibility of young-adult-fiction writers to make sure that every child could find herself/himself in a book the same way Jasmine, the character in her book, feels responsible for the suffering of her daughter and granddaughter. Blackman ‘suffered the indignity [...] during a period that made her, she admits, “an angry teenager”’ (Chilton *Telegraph.co.uk*) because she ‘grew up in a time when racial prejudice sometimes blighted Britain’ (Chilton *Telegraph.co.uk*) and could not quite find solace in the fictional books she read since rarely any addressed the issue of socially excluded black children. Blackman decided to write children’s books because, as she puts it, ‘I wanted to write all the books I missed as a child.’ (Brown 2008 *Telegraph.co.uk*). Therefore, with reference to Shapcott’s argument above which suggests that readers tend to interpret writers’ works autobiographically, there is a clear line of distinction between writers being ‘emotionally’ invested in their work and their intention to represent their own personal experience in their work, which is not the case in Shapcott’s *Of Mutability* and Blackman’s *Noughts and Crosses*.

The same sort of emotional involvement of the writer also exists in McCarthy’s *The Road*. In an interview, McCarthy confirms that the relationship between his characters, the Man and the Boy, is based on the relationship between him and his son:

[A] lot of the lines that are in there are verbatim conversations my son John and I had. A lot of the things that the kid [in the book] says are things that John said. John said, ‘Papa, what would you do if I died?’ I said, ‘I’d

want to die, too,' and he said, 'So you could be with me?' I said, 'Yes, so I could be with you.' (McCarthy in Jurgensen 2009 *Wsj.com*).

It is spiritually afflicting when parents observe the world and worry that their children's future will be overbearing. This forces parents to think that they may be partly responsible for what is going to happen to their children in the future. The world is so fast-paced that it makes everything seem to be uncontrollable even on the individual level. McCarthy worries that 'in 100 years the human race won't even be recognizable. We may indeed be part machine and we may have computers implanted.' (McCarthy in Jurgensen *Wsj.com*). Thus, writing a story that echoes his environmental and human concerns could be McCarthy's way of shouldering responsibility as an author and a father whose love for his son makes him concerned about the future of humanity and the environment. McCarthy's worries about his son's future are reflected in *The Road* in which 'the main character obsessively protects his son and prepares him to carry on alone' (Jurgensen *Wsj.com*) as the journey becomes harder and more tormenting.

Illness and Social Alienation in Contemporary Fiction and Poetry

In *Illness and Culture in the Postmodern Age* (1998), David B. Morris 'explores the changing relationship between culture and biology as they reconfigure our experience of illness.' (Morris 3). He argues that '[i]llness somehow defines us. It tells us who we are.' (Morris 1). Although not directly involved in fiction, Morrison establishes the idea of illness in relation to postmodernity. He suggests that illness is not just a one dimensional body of

change; it is an ever changing concept in the sense that it does not function on the physical level autonomously and independently:

Illness, however, is not strictly speaking an object. It is not something we can know inside and out, through an inventory of its material properties, like a moon rock. [...] illness is a fluid process that changes as we change, enigmatic, insubordinate, subjective. It captures bodies, minds, and emotions, remains at its deepest level inaccessible to language, and alters under the influence of nonmedical events from divorce to climate change.
(Morris 5)

Morris argues that illness does not only change the body, but it also changes one's knowledge of the self and the world. In this context, Blackman's and McCarthy's novels as well as Shapcott's *Of Mutability* have in common the idea of physical and spiritual pain as navigating the lives of individuals who experience it. According to Susan Sontag in *Illness as Metaphor and AIDS and Its Metaphors* (1979), in which she extends her critique of her experience as a cancer patient to analysing the social constructions of the AIDS virus, '[d]isease is seen as the invasion of alien organisms, to which the body responds by its own military operations' (Sontag 66). Indeed, identifying the existence of an 'invader' is crucial to the whole idea of curing diseases because it establishes the territory of bodily defences against the 'alien' organism, and, as Sontag points out, '[i]t was when the invader was seen not as the illness but as the microorganism that causes the illness that medicine really began to be effective' (Sontag 66). This suggests, with reference to the literary texts in this chapter (and the other science fiction texts discussed in previous chapters dealing with

the concept of the alien), the struggle against pain is a struggle within one's own body and against it at the same time because it is identified as the source and origin of anomaly. Therefore, the change in characters' response to the world and the decisions they make in *The Road* and *Noughts & Crosses* is a reflection of their bodies' responses to pain or illness. Change is, hence, an inside-out process.

An interest in the relationship between the anatomy of the body and medicine and the way the mind responds to bodily changes has been in evidence in science fiction and poetry since the second half of the twentieth century. According to Slonczewski and Levy in their chapter on life sciences in *The Cambridge Companion to Science Fiction*, the 'great adversary' of modern times became 'the enemies within – cancer, AIDS, bio-weapons – as well as ... our own lifestyle destroying our bio-sphere' (Slonczewski and Levy 174). In their study of science fiction narrative, they noticed that in 'the nineteenth and early twentieth century, writers faced questions of biological change [...] in human nature, or in our natural surroundings' (Slonczewski and Levy 174) finding science fiction as an outlet to express their curiosity regarding biological controversies in fiction. Although not mentioned by Slonczewski and Levy, the same principles apply to poetry. A poetry anthology entitled *Holding Your Eight Hands: An Anthology of Science Fiction Verse* (Lucie-Smith ed., 1970) contains poems that deal with scientific questions regarding the world and its relationship to the human. Although the editor of this anthology, Edward Lucie-Smith, suggests in his introduction that 'modern science fiction started its career as a specifically prose form' and 'that science fiction remained, in its early days, sternly anti-poetical' (1970), early '[s]cience fiction stories were not like novels'

(Lucie-Smith xiv). Story-telling is not exclusive to fiction since many science fiction stories have indeed appeared in verse as well as in fictional forms, such as Deryn Rees-Jones' narrative poem, *Quiver* (2004), which was discussed in Chapter One. Many poems in Lucie-Smith's anthology tell stories about supernatural creatures (Brian Patten's 'A Small Dragon' 86), the future (John Brunner's 'To Myself on the Occasion of My Twenty-First Century' 11), and genetic mutation (John Robert Colombo's 'Frankenstein' 18), and other themes that remain controversial in twenty-first-century literature. The relationship between poetry and science which led to the association between poetry and science fiction started with Romantic poets' fascination with nature and details of their surroundings sharing with science 'a universal insight or law through the particular.' (Padel *Theguardian.com*). An example from the twenty-first century is English poet Lavinia Greenlaw's (ed.) poetry anthology, *Signs and Humours: The Poetry of Medicine* (2007) which introduces poems that deal with medical issues, in general, and the experience of pain and illness, in particular. From Alzheimer's and Tinnitus to cancer and anxiety, poems in Greenlaw's anthology relate to the theme of human experience with illness and molecular changes, and this reflects the shared interest of other twenty-first-century writers and poets including those discussed in this chapter.

Kristeva's Foreignness: Bodily Changes and the Other in Contemporary Fiction and Poetry

The earlier sections of this chapter have explored the representation of the topic of self-knowledge and familial sacrifice in fiction and poetry. However, the background against which Blackman's, McCarthy's and Shapcott's works

are set is the idea of physical and spiritual change and how it influences the characters in Blackman's *Noughts and Crosses* and McCarthy's *The Road* and the way it is used as a metaphor of new knowledge and self-discovery in Shapcott's poems in *Of Mutability*. Change in the form of a sudden illness or some sort of physical or psychological transformation creates a sense of Otherness or Foreignness in the affected subject from the surrounding social environment. Blackman represents this concept by introducing the topic of racial discrimination in dystopian terms while McCarthy and Shapcott draw attention to life-changing events which contribute to the creation of this sense of Otherness. According to Julia Kristeva in *Strangers to Ourselves* (1991): 'The Foreignness is within me, hence we are all foreigners' (Kristeva 1991, 192). Through discussing the subject of social, ethnic, religious, and political alienation and drawing on Freud's *The Uncanny* (1919), Kristeva suggests that 'Otherness' is unsettling because it invokes a sense of difference within oneself. This happens as one questions her/his being in relation to that of others; identifying their Foreignness implies that s/he could be a foreigner in their eyes as well. The idea of difference is a recurring one in the history of literature. The Other is perceived as an enemy in front of which one senses her/his own weakness. In situations where people encounter others who speak a different language or who have a different skin colour, there is always a tendency to defy this difference or sometimes try to explore it and identify with it as a kind of self-reassurance to overcome this sense of Foreignness. This phenomenon is common in dealing with any ethnic minority, for example, that is either bullied or excluded in the predominant social surrounding. The process of acceptance versus rejection of the Other could, in this respect, be a self-defence

mechanism against identifying oneself as a prospective foreigner when put in a situation where the minority encountered becomes predominant and s/he becomes the minority, the Other.

Kristeva's argument is illuminating for the analysis of the idea of alienation because it encapsulates the different attitudes towards the Other in the works of Blackman, McCarthy and Shapcott. In Blackman's *Noughts & Crosses*, the troubled relationship between black and white people is the result of the instability in dealing with the idea of difference and the inability to settle on a way to accept variation. In one of the very few articles to have analysed *Noughts and Crosses*, 'The "Other" Country: Memory, Voices, and Experiences of Colonized Childhoods' (2006), Christine Wilkie-Stibbs adopts a similar approach to Kristeva's argument using her analysis of dystopian young-adult fiction texts (Malorie Blackman's *Noughts & Crosses*, Anne Provoost's *Falling* (1997) and Meg Rosoff's *How I Live Now* (2004)) to draw attention to the role of politics in promoting racist thinking in societies:

They interrogate and expose the mechanisms of power—how it functions and sustains itself and is the agent of structural violence that gives rise, not only to racism, but to all kinds and types of politically discriminatory practices. They show how power politics filter into the divisive practices of everyday lives with terrible consequences. (Wilkie-Stibbs 2006, 238)

Taking this argument into consideration when exploring the concept of difference as suggested by Kristeva and represented in Blackman's novel, Wilkie-Stibbs focuses on the role of political power in reinforcing 'discriminatory practices' as a weapon against the Other and a way to remain powerful in the

social and political surroundings. The *Noughts & Crosses* series introduces the dilemma of the younger generation who have to decide whether to continue using the older generation's discriminatory practices in dealing with the Other or to adopt a more peaceful approach that embraces difference and understands it. Blackman spent a long time thinking about writing *Noughts & Crosses* because she 'didn't want to be labelled a 'social issues' writer' (Blackman in Brown 2008 *Telegraph.co.uk*). However, her experience as a teenager from an ethnic minority has encouraged her to write this novel which addresses the experience of the individual and identifies with children's and young-adults' feeling of alienation. Sephy believes that racial discrimination is like a plague that must have started with a single individual before it managed to take over the whole society so that there is no turning back:

I used to comfort myself with the belief that it was only certain individuals and their peculiar notions that spoilt things for the rest of us. But how many individuals does it take before it's not the individuals who are prejudiced but society itself? (Sephy in *Noughts & Crosses* Blackman, 336)

Sephy and Callum are on the opposite sides of the social structure. Society dictates that they act as foreigners to one another, so they find themselves forced to 'become radicalized into their extremist positions' (Wilkie-Stibbs 2006, 243) although they are unable to understand the logic behind this social division. Sephy is black and powerful while Callum is white and considered to be inferior like the rest of the white community. Their love relationship endangers the social and political structure of the community because it defies the principles of dealing with the Other as an enemy. The way they choose to

relate to the Other and act against the social norm “show[s] how these young people negotiate their identities across the newly mapped hyper-borders of the contemporary political maelstrom that is the generationally exclusive frame through which [...] politics translate into their everyday lives” (Wilkie-Stibbs 2006, 238). The ‘politics’ of discrimination in *Noughts & Crosses* translates itself in feeling threatened by others and trying to avoid the company of those who are different from oneself. Black and white people are not supposed to seek each other’s company, and any deviation from that norm would create chaos in what people who live in this dystopian society consider as normal and safe. Sephy and Callum feels uncomfortable by the social tension that others in society decide to ignore. They do not feel that the blacks and whites should always be careful around and away from each other. Their families and friends and everyone else in society will not, however, appreciate their intentions to overcome their social and biological differences.

‘You’re a Nought and I’m a Cross and there’s nowhere for us to be, nowhere for us to go where we’d be left in peace [...] That’s why I started crying. That’s why I couldn’t stop. For all the things we might’ve had and all the things we’re never going to have.’ (Callum in *Noughts & Crosses* Blackman, 419)

With reference to Kristeva’s argument in *Strangers to Ourselves* (1991) which focuses on reshaping the concept of difference and ridding it of its association with Foreignness and Otherness, *Noughts & Crosses* represents this viewpoint through the relationship between Sephy and Callum, two young people with different skin colours and social status, who attempt to reconcile their

differences. They want people around them to see that their love and differences are constructive as opposed to the destructive nature of Foreignness according to which people in their society understand difference. However, their relationship makes people recognize them as a new representation of Foreignness because they refuse to be alienated from those who are different.

Jo Shapcott, on the other hand, uses the metaphor of illness in exploring the idea of Kristeva's Foreignness in a number of poems in *Of Mutability*. Although Shapcott's series of poems about trees embrace unity with nature to foster self-knowledge ('I Go Inside the Tree', 'My Oak', 'Cedar of Lebanon', 'Trasimeno Olive', and Cypress), she also acknowledges the Other through positioning the speakers in 'Hairless' and 'Abishag' in simple yet shockingly intimate human confrontation. In fact, the poems about illness precede the ones about the trees in *Of Mutability*. When reading these poems in this order, the initial observations could suggest that humans will find harmony with their natural surroundings after embracing their human differences and seeing them as binding rather than alienating. In 'Hairless', the speaker is watching a hairless woman (presumably a cancer patient) cleaning bookshelves in a library. The speaker reads through this woman's mind where 'every thought visible – pure knowledge,/ mind in action – shining through the skull' (Shapcott 2010, 8) as if tangible boundaries between humans disappear when thought communicates with thought. The transcendental nature of this indirect human confrontation where two people exist in the same physical space without speaking to each other changes people's understanding of Foreignness. One can familiarize oneself with the Other without saying a word. This image is

particularly moving because it tackles a very delicate subject related to the way the healthy thinks of the ill, and the way people usually find it difficult to communicate with an ill person without worrying that they might upset them. In 'Hairless', the speaker realizes how simple it is to understand another human being without even speaking to them where the air in the room is sufficient to convey what the speaker wants to say. Shapcott returns to the theme in the opening poem, 'Of Mutability', which suggests that physical mutation helps people acquire better self-knowledge and familiarity with their natural surroundings as 'the air/ speaks to them differently, touches their heads/ with exquisite expression.' (from 'Hairless', Shapcott, 2010, 8). In 'Abishag', there is another vivid representation of human intimacy in which 'a speaker nursing her lover through terminal illness licks his skull' (Leviston 2010 *Theguardian.com*) and holds him tight to feel their bodies become one:

Tie my arms around the neck

of my beloved, so as to wrap

me close, even when I'm asleep

...

With my face in his beard

...

I can feel his mind through my tongue

as I trace patterns with the tip across his scalp. (from 'Abishag', Shapcott, 2010, 10)

This intense physical harmonization between the two lovers suggests that illness cannot change sincere emotions, rather, as Leviston says in her review of Shapcott's *Of Mutability*, '[t]hese perfectly observed moments of shocking intimacy seem to offer a moment's permeability in the membrane that separates the self from the world, or the self from the Other; a chance to slip through the gaps, and commune.' (2010 *Theguardian.com*).

In 'Friends in Need: Illness and Friendship in Adolescent Fiction' which appeared in the *Literature and Medicine journal* in 2002, Marilyn Chandler McEntyre explores the representation of the topic of illness in a number of young-adult novels such as Paige Dixon's *May I Cross Your Golden River?* (1975) which tells the story of a teenage athlete who was diagnosed with Gehrig's disease that affects joints functions. Another novel analysed by McEntyre is Cynthia Voigt's *Izzy, Willy Nilly* (1986) which explores the suffering of a teenage character who had an amputation. McEntyre highlights her interest in exploring the representation of physical vulnerability in young-adult fiction by arguing that:

One of the most peculiar and unsettling dimensions of illness or accident may be the way such crises reconfigure relationships within families and among friends. [...] In the wide array of recent young adult novels that focus on situations of illness, accident, and recovery, loss of or change in important relationships figures as a central theme. Young patients watch parents, siblings, or best friends react to their own sorrow, guilt, and fear by backing off. (McEntyre132)

McEntyre focuses on late twentieth-century young-adult fiction while the theme of fatal illness is still being represented in twenty-first-century narratives. The representation of cancer as one of the most striking examples of painful illness has recently appeared in the young-adult novel, *The Fault in Our Stars* (2012), by American author and video blogger, John Green, in which a sixteen-year-old girl suffers from terminal cancer and she falls in love with another cancer patient. Together, they get to learn about the meaning of their lives even when very little is left for them to live. The novel gained great popularity among the young-adult audience, and it was soon made into a film that was released in 2014 with the same title. I believe that the general theme is what genuinely attracts the attention of the reader or viewers rather than the particularities of the story itself, and many would say, as was mentioned in this review on *The Guardian*, that the novel 'did change my views on things' (2014). Probably, the fact that the characters in the novel are young and dying is one reason why it is reviewed as being very intimate and shocking at the same, especially that young people usually expect easy and happy love while this novel would make them consider new life possibilities. Illness cannot overcome love, and Foreignness only prevails when people fail to understand that mutation is only a part of life's natural order.

Although not about illness, a similar relationship is depicted in a science fiction poem by Dana Bryce called 'Dreams of Alien Love' in Mark Pirie's and Tim Jones' anthology, *Voyagers: Science Fiction Poetry from New Zealand* (2009). In Dana Bryce's 'Dreams of Alien Love', the speaker believes that love transcends human boundaries: 'I hope when I reach out/ this time, I will feel a different skin./ Not coarse like the dark boy of yesterday or/ pale and blue-

veined fragile of the girl of last week.' (Bryce in Pirie and Jones 2009, 91). Love of an alien might seem a bit exaggerated here, but I am using this poetic portrayal of a science-fiction theme as a symbol of human beings crossing boundaries with the Other whether it is a person from a different ethnicity or someone who speaks a different language. The goal of science fiction is to familiarize readers with realms beyond the norm, not to make them believe in the existence of such realms, but to look for possibilities in unexpected places. The speaker's experience in the above poem with the 'dark boy' and the 'blue-veined ... girl' (Bryce in Pirie and Jones 2009, 91) suggests that life is full of variations worth exploring, and that being open to the Other enriches the human experience and expands the boundaries of love.

Similarly, Sephy and Callum in *Noughts & Crosses* refuse to feel that they are threatened by the Other; they want to replace fear by an exciting curiosity to know and understand the Other. However, the irony of their situation lies in the fact that their love defines them as, what I choose to call, the double foreigner, the one who is initially recognised as a threat by those who are different (black versus white and wealthy versus poor) and now also rejected by family and friends. This state of social entrapment within the concept of Foreignness explains Wilkie-Stibbs' argument that '[t]he apportioning of "us" and "them" is one of the issues behind Malorie Blackman's *Noughts and Crosses*' (2006 241) because it presents the above concept as an infinite cycle that cannot be broken or escaped. While Kristeva argues that reconciling differences will result in more healthy individuals and societies (because people will stop seeing themselves as foreigners once they stop looking at others as so), people, according to Blackman, are taught since early childhood to identify

oneself as different from and superior to the Other. Regardless of the economic and social hierarchy, Callum is encouraged to bear a grudge against the black community and feel superior to them although white people like himself are the less fortunate in society. Callum's irrational urge to assert his superiority through terrorism eventually separates him from Sephy. The first book of Blackman's series ends with Callum's unjust execution and Sephy being pregnant with his child.

However, McCarthy's *The Road* and Shapcott's *Of Mutability* approach the concept of Otherness differently. These works introduce a different philosophy that considers the Other more empathetically. Although Shapcott's *Of Mutability* 'never refers to breast cancer specifically, her illness, and more particularly its effects on her outlook' (Cochrane 2011 *TheGuardian.com*), the poems as a collection make several references to life and death ('The Death of Iris', 'Era', and 'The Deaths') as symbols of change, mutability, and a way to closely explore Otherness and understand change in its destructive as well as constructive nature. According to Whiteside, the poems in this collection are 'about transformation, mutation, mutability, in the body and the world around it. Shapcott presents this mutation as sometimes liberating, sometimes destructive, full of possibilities and yet ultimately a symbol of just one terrifying inevitability.' (Whiteside 2012 *Writersentrenorwich.org.uk*). While reviews of this collection (Cochrane, 2011, Whiteside, 2012) focus on its representation of mutation and understanding how one's own body relates to the Other elements that surround it, they overlook the aspect of nature and its role in enacting the laws of mutability and change. In 'Era', Shapcott describes a journey 'on foot towards the city' where she 'said goodbye to the outside of [...] [her] body'

(Shapcott 4) in a semi-surreal experience. The troubling atmosphere with loud 'muggies', 'roar[ing]' airplanes, and a fountain bursting with 'chemical bubbles over its lips' (Shapcott 4) suggests that an ordinary everyday experience could sometimes seem different (here in 'Era' upsetting and terrifying) when one is in an alternative physical or spiritual state. For example, people who suffer from Tinnitus sometimes listen to music to neutralize the noise that they constantly hear; hence, for them complete silence no longer exists. Physical mutability changes the way people normally experience the world, and their altered state becomes the new Other with which they need to coexist. Indeed, Shapcott goes beyond humans' self-estrangement to explore natural metamorphosis in 'I Go Inside the Tree' 'tasting/ weather in the tree rings,/ scoffing years of drought and storm' (Shapcott 2010, 39). Nature is personified in *Of Mutability* because Shapcott believes that the essence of humanity involves the capacity to understand the Other forms of life:

It's only human to think the olive

speaks, that there are mouths

singing, screaming, even, in the gashes

and you can't help but see a figure

twinned in the trunk or struggling out. (from 'Trasimeno Olive' Shapcott, 2010, 42)

By communicating these detailed representations of nature to the reader, Shapcott attempts to reconcile the concept of body mutation with humans' understanding of life which is not supposed to be constantly stable because

'[s]tability and similarity are optical illusions, tricks of the brain to make life easier' (Leviston 2010 *Theguardian.com*). Easy monotonous life means missing all the beauty of details surrounding us as humans. By travelling inside the tree and assuming that the olive could be animated, Shapcott summons readers' 'close attention to experience that these admirable poems demand.' (Leviston 2010 *Theguardian.com*). This series of poems about trees highlight the beauty of experience when humans venture to step out of their comfort zone and accept physical change or metamorphosis as an extension of humans' existence. This approach to nature is also compared to McCarthy's ecological vision in *The Road*. Appreciating natural variations and their necessity for the continuation of human life as 'the planet's fragile ecosystem has been devastated' (McSweeney 2013, 45) is one of the themes repeatedly discussed in McCarthy's novel. Indeed, this interest in nature also exists in science fiction poetry although it usually discusses the artificial as opposed to the natural. Here, another science-fiction poem (also about a tree) in *Voyagers* offers an illuminating portrayal of the greatness of nature seen through the eyes of an alien. In Jane Matheson's 'An Alien's Notes on first seeing a prunus-plum tree' in Pirie and Jones' *Voyagers*, the alien observes the tree admiring this natural 'device for recycling air/ [...] so intelligently functional in its design/ yet aesthetically pleasing in its line.' (Matheson 2009, 102). This direct yet vivid description of the tree suggests that humans take their natural habitat for granted. The implication of the term 'device' to describe the tree refers to the mentality of mechanization that governs contemporary thinking which also extends to nature. One type of response to this idea of exploiting natural resources is that humans do not need to become aliens in order to acquire a

fresh perspective that appreciates their bonds with nature. When humans fail to understand their affiliation with their ecological system, they fail to understand the essence of their lives, and, thus, become foreigners to themselves.

This similarity between Shapcott's poems about nature and the ecological theme in McCarthy's *The Road* demonstrates the contemporary concerns about the environment and the public response to the role of humans in causing the harmful changes to the biosphere. Kunsa argues that *The Road* is 'regarded as McCarthy's masterpiece' (Kunsa 2009, 58), and he suggests that 'this historically based novel neglects the issue of ethics' to focus on a father's 'love for his child and hope for some salvation' (Kunsa 2009, 58). This paternal quest for 'hope' and 'salvation' is characterised by an agonizing journey of self-discovery similar to the one represented by Shapcott in *Of Mutability* as the ill and the healthy acquire better understanding of themselves as a result of their encounter with the Other. Comparably, the title poem by Rachel Bush in Pirie and Jones' poetry anthology, 'Voyagers', introduces a relevant depiction of the journey of change:

We too are voyagers and will be changes.

We do not know where we will discover

our future, but know we must start with guides

we trust and then must travel beyond them.

We too can move with hope through unknown seas

towards far stars. (Bush 2009, 129)

This poem approaches the visions of McCarthy and Shapcott in embracing the contemporary trend in literature which encourages accepting the process of change. The 'guides we trust' are a reflection of one's own consciousness and thought as they acquire a metamorphic state and one becomes ready to 'travel beyond them' (Bush 2009, 129). There is similarity between the title of this poem, 'Voyagers', and the Anglo Saxon poem, 'The Wanderer', which was preserved in the Exeter Book manuscript in the late 10th century. 'The Wanderer' offers a portrayal of a warrior's journey surrounded by devastation, solitude, and death as he gradually learns that nothing is eternal but hope: 'A wise man perceives how ghastly it will be/when all this world's weal desolate stands' (from 'The Wanderer' in Pope ed., 1981). However, the similarity in content between this poem and 'Voyagers' is in the final section of the former which addresses humans' inevitable quest for hope which has always been a recurrent theme in speculative poetry. 'Voyagers' ends with the speaker's certainty that humans are able to 'move with hope through unknown seas/ towards far stars.' (Bush 2009, 129). Similarly, the closing lines in 'The Wanderer' reflect the warrior's hope that '[w]ell will it be/ to him who seeks favor, refuge and comfort,/ from the Father in heaven' (from 'The Wanderer' in Pope ed., 1981). Both poems suggest that there is always hope that humanity will survive as long as nature, which could be the 'unknown seas' or 'the Father in heaven', continues to exist. 'The Wanderer' also sums up the journey of physical mutation in *The Road* and *Of Mutability*: 'Here goldhoard passes, here friendship passes,/ here mankind passes, here kinsman passes:/ all does this earth-frame turn worthless!' (from 'The Wanderer' in Pope ed., 1981). It is, thus, evident that speculations on life and death and the prospect of hope existed

long before humans acquired the technology to destroy their own natural habitat. Both 'The Wanderer' and *The Road* assume that war and hostility of men towards each other is the primary destructive force of all forms of life. 'Voyagers', on the other hand, assures that hope emerges from change and that no matter how difficult accepting change seems when first encountered, humans could always choose to survive on the spiritual level when bound by the limitations of the body.

Conclusion

This chapter has analysed the theme of bodily changes and the way they affect individuals' future choices, particularly, the choices concerning the younger generation represented by one's own children. This topic has been explored with reference to the study of body mutation in three different works in contemporary literature, Jo Shapcott's *Of Mutability* in poetry, and Malorie Blackman's *Noughts & Crosses* and Cormac McCarthy's *The Road* in fiction. The discussion began by exploring the relationship between body mutation and changes to the natural environment as recurrent science fiction themes and the way these topics are employed in the different genres in twenty-first-century literature. The texts analysed in this chapter all contain science-fiction elements although none of them is classified as science fiction. It is becoming an increasingly popular trend in contemporary literature to apply science-fiction settings to the main plot either by imagining a dystopian future or by creating an alternative world so that there is almost no clear distinction between the two genres. The main reason behind this merger between science fiction and non-science fiction is that advanced science has allowed many fictional scientific

speculations to become a possibility or even a reality. Cormac McCarthy's *The Road* is one example of literature that explores a variety of themes in one single work. I have attempted to illustrate how McCarthy's novel deals with the idea of change from the macro scale represented by the radical devastation of the environmental biosphere of the earth to the micro level highlighting an individual person's physical and emotional suffering trying to survive and adapt to the new way of life. I tend to agree with what many critics suggest that this novel mainly traces the relationship between the two main characters, the Father and the Son. However, my analysis included a comparison between *The Road* and *Noughts & Crosses* drawing attention to the relationship between illness and emotional growth of parents and their readiness to sacrifice themselves to save the endangered future of the younger generation. While the future in *The Road* is defined by aridity of natural resources and cannibalism, *Noughts & Crosses* introduces a society built on generations of hatred and racial discrimination. As their physical pain intensifies, parents in both novels learn that saving their children is the only way to redeem their suffering and feeling of guilt.

Since the parent-child relationship is a preoccupation in contemporary popular culture, I have chosen to include a relevant comparison between *The Road* and the TV series, *The Walking Dead* (2010-), which presents a very similar portrayal of a post-apocalyptic family trying to survive an overwhelming zombie attack. Representing the idea of Foreignness and difference in human societies in contemporary literature and popular culture is becoming more and more versatile because the features distinguishing individuals from each other are dramatically increasing so that aliens and zombies are no longer the only recognizable form of the Other. Authors and poets are trying to represent these

new divisions in contemporary human societies characterised by alienation of the Other be it an ill person or someone from a different ethnicity or way of thinking. Although globalism in the modern age is meant to be bringing people closer together, the contemporary human being is becoming more isolated than ever. The works of fiction, poetry, and television mentioned in this chapter all deal, either directly or indirectly, with a certain aspect of Foreignness that contemporary societies are currently witnessing. Julia Kristeva's definition of the Other according to twentieth-century social standards applies to Blackman's fictional series which revives the traditional theme of racial discrimination defining the previous century by creating an imaginary future situation in which the roles between white and black people are reversed while the status quo of society still reflects hatred and grudges from both sides towards each other. The setting in *Noughts & Crosses* has a metaphorical implication as well since it offers a contrast between the unified continent, Pangaea, with the animosity between the people who populate it.

The association between nature and the environment and human societies is explored more profoundly in *The Road* and *Of Mutability*. Jo Shapcott uses images from nature in her poems to illuminate the way the human body acts and responds to changes according to the laws of nature and science since humans are a part of the natural sphere they inhabit. The order in which Shapcott's poems appear in *Of Mutability* starts with a close encounter with one's own body while undergoing a significant mutation before introducing images of human communications and, then, moving to portrayals of nature. Likewise, McCarthy's intention in *The Road* is to represent the future of humanity when people can no longer rely on nature for food and resources.

Kristeva's Foreignness as a concept exists in McCarthy's novel as people feel alienated from the land to which they used to resort for life supplies. Humans now realize that they are strangers to themselves as well as to others because everyone is now forced to change in order to survive the post-apocalyptic situation. The Father in the novel watches himself change throughout the journey; he begins to understand that since he is unable to reverse the damage to the environment, it is his responsibility to save his son who represents hope in the future of humanity. Survival and sacrifice are, in this respect, correlative with humans trying to undo the natural destruction by securing a better future for their children hoping that the latter would be able to set humanity on the right path.

Conclusion

The representation of youth in twenty-first-century fiction and poetry (2000 - 2010) tends to focus on the topic of humanity and how it is going to change in the future. My research was illuminated by the growing preoccupation in contemporary literary criticism that tends to explore literary theories of specific decades. This chapter offers an account of the theoretical literary frame as well as the thematic structure of the literary texts that have been discussed in this thesis. The movement towards exploring socio-political and techno-political topics rather than the political aspects of war and social conflicts is evident in numerous twenty-first-century texts in fiction and poetry. It appears that literary representations of the human have witnessed some substantial changes through introducing dystopian and post-apocalyptic possibilities of life in the future in light of new technology. In 'Feminism, Technology, and the Posthuman' (2007), Kim Toffoletti refers to Judith Halberstam and Ira Livingstone's *Posthuman Bodies* (1995) in which they defined the posthuman body as

the queer body, the technobody and the contaminated body; bodies that rupture a coherent narrative of the human subject in favour of the body in crisis. [...] Such hybrid forms are no longer futuristic ideals, utopian myths or nightmarish fantasies. Instead, these new imaginings of the human circulate as possibilities, potentialities, and processes that shatter the conventional divide between reality and fantasy or fact and fiction. (Toffoletti in *Cyborgs and Barbie Dolls* 14).

This thesis is particularly concerned with the study of the 'technobody' (Toffoletti 14) in what I established as the 'techno-teen'; the possibility that a whole generation of youth may acquire a posthuman form when the human becomes part organic and part machine.

The previous chapters have demonstrated how literature in the twenty-first century is concerned with representing the future generation, particularly young people and how they are positioned in the family and in society, and how advanced technology is reshaping and controlling youth and contemporary society as well as the way medical and biotechnological discoveries contribute to permanently changing the human body. Therefore, my research suggests that this tendency to represent science in literature and the way it combines aspects of reality and speculation is not a temporary trend in literature. In the twenty-first century where information sciences have become easily accessible by the public, authors tend to associate technology with youth in literary writing. Since the beginning of the twenty-first century, these topics tend to be explored in different ways, and authors are offering readers new stories about what might happen to humanity in the future as far as technology is concerned. One point that comes out of this exploration is that young-adult fiction and science fiction are influential genres in twenty-first century literature, and they sometimes merge. The issue of genre categorisation has become less relevant to contemporary authors, especially after the establishment of the *Interstitial Arts Foundation* in 2004 by a number of award winning authors including American editor and short story writer, Kelly Link, who won both the Nebula and the Hugo awards for 'Magic for beginners' (2005) and 'The Faery Handbag' (2005), respectively. This thesis also refers to the gradual transition from the modern to

the contemporary in literature by reflecting on literature in the modernist period, with the high point of Modernism in the 1920s, where many would argue that Modernism is very much a reaction to the First World War (1914-18). This has continued throughout the periodisation of the twentieth century with Modernism and Postmodernism, looking at the contemporary in relation to the interwar period and the Second World War that witnessed an increase in literary publications discussing the industrial revolution, industrialised culture, and the birth of the machine. Therefore, this kind of focus on the two world wars in the twentieth century in literary and cultural studies has significantly affected how literature, arts, and culture have changed in light of the political and social changes at that time. There are new forces of change emerging from biological sciences and computer technologies that define the contemporary period which has started to shape life after the Second World War and the 1950s. These technologies are creating new cultural shifts demonstrated in fiction and poetry.

My research on contemporary literature suggests that history repeats itself. The literature under investigation in this thesis from the year 2000 to 2010 consistently demonstrates a sort of anxiety about the impact of new technologies on people and culture, but particularly on youth which has been recurrently associated with the posthuman. Toffoletti's argument in *Cyborgs and Barbie Dolls* (2007) summarises the concerns of contemporary authors regarding the two faces of technology in the sense that '[w]hile technology may enframe objects by bringing them into being for human resource, people too, can be enframed by technology as objects to be used and manipulated.' (Toffoletti 11). However, the same does not always apply to contemporary poets in the way they introduce science and technology. As has been established

earlier, albeit the similarities between fiction and poetry as far as new technologies are concerned, science still has a closer relation to poetry than to fiction. This will be explained further in the following sections. Nevertheless, new insight is provided in this thesis by the comparative analysis of fiction and poetry together which opens new perspectives on the relationship between youth, technology, and the human body. Inspired by Edward Lucie-Smith's *Holding Your Eight Hands: An Anthology of Science Fiction Verse* (1970), Tim Jones' *Voyage: Science Fiction Poetry from New Zealand* (2009), and recent preoccupations in interstitial arts, this thesis focused on comparative reading of both fiction and poetry in the period between 2000 and 2010 to identify new preoccupations with youth and the posthuman. As has been established earlier in Chapter Three, twenty-first-century poetry moves freely among other artistic and literary genres. This has been established in Deryn Rees-Jones' *Quiver* (2004) which uses narrative verse and Jo Shapcott's *Of Mutability* (2010) which contains some poems inspired by science and some others influenced by Helen Chadwick's work in visual arts. Thus, the scientific motif in contemporary poetry is not exclusive to themes but also represents itself in experimentation with different creative styles and forms. However, one of the most important findings of this thesis is that the recent involvement of poetry in science signals a closer association between advanced technology and socio-cultural debates which find an outlet for speculation about the future of the relationship between technology and the posthuman in literature.

The three areas that I focused on, the clones, the computerised body, and the impact of misused technology on the family, feature in many twenty-first-century texts. Chapter One in this thesis began with the topic of cloning

because it was a turning point in literary as well as scientific history. The cloning of Dolly the Sheep in 1996 has started a literary trend towards the end of the twentieth century where literature has begun to express a genuine interest in the topic of human cloning. Reading about cloning now is not as shocking or surprising as it was before Dolly the sheep. Although human cloning has not yet been performed, these texts represent human cloning as an impending future crisis. Literature reflects the anxiety that this might become a reality through demonstrating the drawbacks of such technological application. This scientific breakthrough has accelerated debates about posthumanism as a state that is likely to redefine the future of humanity.

Literature discussed in Chapter Two demonstrates that technology is becoming a part of the human body, a discussion that has developed since the twentieth century based on experiments in medical science such as the implementation of pacemakers that help the human body properly function. However, literature further considers how technology might invade the human body with chip implants and barcode tattoos as a means of social surveillance rather than medical treatment which extends the argument already set in the decade following the Second World War by George Orwell's dystopian classic, *Nineteen Eighty-Four* (1949). Twenty-first-century literature argues that this type of technological surveillance is a major feature of the posthuman condition.

Chapter Three brings together the representation of family relations and adults' feeling of guilt and sense of responsibility towards their children in post-apocalyptic and dystopian narratives. The poetry discussed in the same chapter is also more concerned with establishing a new poetic experience through

science without being directly involved with or focused on a certain area of technology. The poetic explorations in both Shapcott's *Of Mutability* and Tim Jones' *Voyagers* are more spatial, more interstitial, and definitely more transcendental in their exploration of the human. The posthuman topic in both fiction and poetry in Chapter Three is explored without direct reference to technology or the body as machine; rather, a new perspective emerges from associating illness and pain with a transcendental human state that elevates the mind and spirit. In this sense, the posthuman becomes a transhuman as has been established earlier in the chapters.

Genres, Theories, and Decades: The Contemporary and the 2000s

Although this thesis explores various areas in literature in the 2000s, particularly young-adult fiction, science fiction, and poetry, this particular literary era between 2000 and 2010 is more than just a decade because it marks the beginning of the twenty-first century where new social, scientific, political, and literary values are constantly emerging. According to Nick Bentley, Nick Hubble, and Leigh Wilson in *The 2000s: A Decade of Contemporary British Fiction* (2015), there has been hope that the twenty-first century will promise great reforms to the global political, economic, ecological, and social systems, but 'this optimism now seems, at the very least, misplaced and yet to regard the feeling at the turn of the millennium as simply the product of false consciousness is to misunderstand the significance of what actually happened during the decade.' (Bentley, Hubble, and Wilson in 'Introduction: Fiction of the 2000s' 1-2). The failure of global authorities to effect a tangible positive change or prevent world crises has created a sense of disappointment which highlights

the first decade of the twenty-first century. This pessimism has been represented in literature of the decade.

However, a recurrent theme in literary criticism of contemporary literature, in general, and twenty-first-century literature, in particular, is the growing preoccupation with science in literature that derives from and is based on contemporary life. Many literary critics argue for the strong relationship between late-twentieth-century and twenty-first-century literature and technology. In the introductory chapter in *British Fiction of the 1990s* (2005), editor, Nick Bentley, refers to 'Millennial Anxieties' (7) which are characterised by 'the uncertain relationship between the real and the unreal, and the past, present and future that challenged a teleological and rational model of historical progress [and that] resulted in many narratives that engaged in self-reflection, and the transparency (or opacity) of writing.' (Bentley 7). My thesis has additionally demonstrated that youth is a focus of concern in the 2000s. Bentley explains that contemporary cultural identities offer a deeper engagement in the contemporary critical debate of literature in the 1990s. Bentley introduces Patricia Waugh's 'Science and Fiction in the 1990s' in which she argues that 'the discovery and then "breaking" of the code of DNA in the 1950s had certainly introduced a new wave of interest in evolutionary biology, intensifying throughout the 1990s in the lead-up to the completion of the genome report at the end of the decade' (Waugh 59). Patricia Waugh's article focuses on the relationship between fiction and the biological sciences through tracing the scientific developments and critical theory during the second half of the twentieth century and exploring a series of narratives during and towards the beginning of the 1990s such as Kazuo Ishiguro's *The Remains of the Day*

(1989) and Ian McEwan's *Enduring Love* (1998). Although this essay contains no direct reference to cloning as a major breakthrough in genetic science, I agree with Waugh that the developments in biological science after the 1950s have inspired fictional writings throughout the decade leading up to the twenty-first century which the book also demonstrates in Roger Luckhurst's 'British Science Fiction in the 1990s: Politics and Genres.' According to Bentley, 'science fiction (SF) in the 1990s offered a potential literature of resistance to the new hegemonies of consensus politics of 1990s Britain.' (Bentley 8). This viewpoint is analysed by Luckhurst who focuses on British authors' 'investments in the imagination of disaster' (Luckhurst 84) in twentieth-century science fiction and fantasy. He argues for the relationship between 'cultural politics' (79) and science fiction without particularly focusing on the topic of youth. However, through examining three 1990s' British science fiction novels by Ken MacLeod, Gwyneth Jones, and James Lovegrove, Luckhurst suggests that science fiction, as one of the "lowly" genres in the 1990s' (Luckhurst 79), started to flourish towards the end of the twentieth century as a result of 'the development of a new kind of cultural politics that has been called "cultural governance".' (Luckhurst 79). Assuming that the cultural governance of the late 1990s and early 2000s is based on technologically oriented cultural institutions, and specifically a globalised political context, this thesis argues that science fiction is now only one part of a more comprehensive literary movement that utilises different writing styles to represent contemporary culture that is defined by advanced science.

My argument in this thesis reflects Luckhurst's viewpoint which emphasises the involvement of science fiction in politics and culture, but it also

extends the borders of science fiction to include poetry. This is because contemporary literary genres tend not to operate autonomously but react and influence each other in a global context. Similarly, in Harry Edwin Eiss's *Young Adult Literature and Culture* (2009), Sally Sugarman suggests that 'science fiction emerged out of the dramatic changes that occurred in the initial triumph of knowledge over faith, of technology over human limitations'. (Sugarman in 'Outer Space, Inner Worlds: Science Fiction and the Adolescent Imagination 110). Mark William Roche introduces a similar critical observation of twenty-first-century literature in *Why Literature Matters in the 21st Century* (2008). Roche agrees with Waugh, Luckhurst, and Sugarman that 'the fates and prospects of humanity are under the influence of technology' (Roche 1). However, Roche sees that literature and technology operate under different rules, and that it is becoming more and more difficult for the two worlds to meet in the twenty-first century:

Given the complexity of modern technology, literature and technology seem to have become separate and unbridgeable spheres, and the connection between literature and technology may be greater in principle than they appear at first glance. Technology is creative, and literature follows certain laws. (Roche 4-5)

This thesis argues otherwise. The growing preoccupation with interstitial literature since the beginning of the twenty-first century proves that literary forms are recently becoming more versatile and open to adapting new writing styles. The issue of subgenres and genre categorisation is becoming less relevant to authors and critics who have recently started to focus particularly on

the thematic frame of the literary text. Online poetry about science is one example. In 'Contemporary Poetry as a Global Dialogue' (2005), Chetana Nagavajara argues that since 'the existing media can at best be used to reinforce poetry and are not yet ready to 'poeticise' themselves, [...] [poets] have resorted to the internet, and poetry websites which have sprung up in recent years' (298). Some of the poetry discussed in this thesis has been published electronically, and this further emphasises the interstitial nature of contemporary fiction and poetry which manifests itself in multi-faceted genres that could appear in print, web, and/or recording format.

However, another critical view that testifies to the versatility of contemporary culture is expressed by Patrick Imbert in Suthira Duangsamorn's *Re-imagining Language and Literature for the 21st Century* (2005). In 'Literature and Globalization: the Future of Humanity', Imbert suggests that twenty-first-century culture 'is already a mix of high or specialised cultures and elements of popular cultures set into high tech or modified traditional media.'(238). This cultural 'mix' will eventually affect literature both thematically and formally.

The study of cultural surveillance remains a focal point in contemporary literary criticism since it was so dramatically introduced by George Orwell in *Nineteen Eighty-Four* (1949). This literary-critical theory explores aspects in literature that deal with the topic of controlled social environments that started to expand after the Second World War. In the twenty-first century, surveillance takes many shapes and forms and is primarily dependent on the application of technology to the daily life of individuals. In *Literary Criticism in the 21st*

Century: Theory Renaissance (2014), Vincent B. Leitch offers a more politically oriented observation of contemporary literary critical theory by exploring Hardt and Negri's term, 'Empire', which is 'famously used to depict postcolonial and post-Cold War globalisation that promotes ... the ceding of considerable national sovereignty to supranational non-democratic institutions that increasingly regulate life.' (Leitch 134). Nevertheless, the term 'Empire' is not as essential to literary criticism as its implications and applications in contemporary literature. The idea of the 'Empire' in twenty-first-century literature is mainly introduced in dystopian fiction and film by depicting utilitarian powers controlling individual freedom. Technology is usually represented as a subjugating tool. On the other side of this hierarchical relationship between the authority and the individual, characters represent the human struggle to survive and maintain individual freedom. This theme of the subjective experience of struggle is recurrent in speculative fiction that employs aspects of fantasy, yet based on a somehow realistic experience. One example of such fiction would be Margaret Atwood's *Oryx and Crake* (2003) which Damien Walter described as 'transrealist' fiction in 'Transrealism: the First Major Literary Movement of the 21st Century' (*theguardian.com* 2014). Walter reintroduces Rudy Rucker's 'A Transrealist Manifesto' (1983) to contemporary literary criticism to describe works that express writers' 'immediate perceptions in a fantastic way.' (Rucker 1). As 'a revolutionary art form' (Rucker 2), transrealism 'aims for a very specific combination of the real and the fantastic, for a very specific purpose, that seems to have become tremendously relevant for contemporary readers.' (Walter, *theguardian.com* 2014). The fascination with the fantastic in contemporary literature is different from what it used to be in the previous century in the sense

that it now incorporates in its narratives glimpses of realistic experiences or possibilities that characterise the future prospects of humanity, and this is the epitome of transrealistic fiction:

[W]hile Rucker was writing at a time when science fiction and mainstream literature appeared starkly divided, today the two are increasingly hard to separate. It seems that here in the early 21st century, the literary movement Rucker called for is finally reaching its fruition. [...] Both sci-fi and realism provide a measure of comfort – one by showing us the escape hatch from mundane reality, the other by reassuring us the reality we rely upon is fixed, stable and unchanging. Transrealism is meant to be uncomfortable, by telling us that our reality is at best constructed, at worst non-existent, and allowing us no escape from that realisation. (Walter, *theguardian.com* 2014)

This sense of discomfort as Walter suggests is evident in many subcultural novels of the 2000s such as Kazuo Ishiguro's *Never Let Me Go* (2005) which was discussed earlier as an example of speculative fiction that portrays the dystopian future of a closed group of young individuals. In 'Subcultural Fictions: Youth Subcultures in Twenty-First-Century British Fiction' that appeared in *The 2000s: A Decade of Contemporary British Fiction* (Ed. Nick Bentley, Nick Hubble and Leigh Wilson 2015), Nick Bentley recognises three types of twenty-first-century subcultural novels: '(i) novels that look back at previous recognised subcultures such as rastas or hippies from the position of the twenty-first century; (ii) fiction that focuses on contemporary youth subcultures; and (iii)

novels that offer an examination of group dynamics more generally without a distinct label attached to the group.' (Bentley 57).

My thesis focuses on novels that offer portrayals of a specific group of individuals that are 'marginalised and offset from mainstream society, but [their] internal cohesion is either more difficult to categorise, or is used as a metaphor for broader concerns about the marginalisation of subaltern groups.' (Bentley 59). Literary criticism seems to be interested in the metaphorical aspect of these narratives. In *Never Let Me Go*, the subcultural group is the clones. They represent the crisis of contemporary youth who struggle with a sense of alienation from their surroundings and their own selves. Again, a transrealist aspect is evident in this novel since it incorporates a fantastic idea such as cloning with a realistic social problem such as alienation. Sally Sugarman argues that the 'fascination with the other is characteristic of SF. For a nation ... where each generation in a technologically advanced society may seem alien to a preceding one, this is an understandable preoccupation.' (110). Sugarman identifies the themes of the generation of technology and bodily changes as forms of contemporary social alienation that find a medium for expression and exploration in literature. Sugarman asks: 'Do the changing bodies of adolescents make them feel alien from their childhood selves and make it necessary for them to build new selves, separate not only from their parents, but from their younger selves?' (114). The exploration of the posthuman as alien in this thesis suggests that contemporary young-adult fiction is a major contributor to the various representations of this topic. The Other or the alien in contemporary fiction is represented in various figures; Ishiguro's aliens are clones, Atwood's are the genetically modified humans and the lonely survivor

who now sees himself as the alien, Blackman's aliens are the white among the black or vice versa, and Anderson's and Weyn's are young adults with chip implants and barcode tattoos within their bodies.

Youth, Technology, and the Mother Figure in Contemporary Fiction and Poetry

In 'Post-Modernism and Feminist Science Fiction' (1990) which was published in the *Science Fiction Studies journal*, Robin Roberts considers narratives such as Margaret Atwood's *The Handmaid's Tale* (1985) and Ursula K. Le Guin's *Always Coming Home* (1985) as examples of late twentieth-century 'female dystopia' (Roberts143). Chapter Three in this thesis highlights a new familial concept in twenty-first-century fiction which particularly focuses on representing what David Greven describes as the 'male mother' in 'The Fantastic Powers of the Other Sex: Male Mothers in Fantastic Fiction' (2003). Such representations have been explored in Cormac McCarthy's *The Road* (2006) in fiction and AMC's *The Walking Dead* (2010-present) on television. Both of these examples feature a male protagonist trying to protect their children who lost their mothers in the events surrounding the apocalypse. However, the new idea that has been established in Chapter Three is the relationship between physical illness and the evolution of the parent in dystopian narratives in which the psychological trauma and physical challenges that such characters are forced to handle affect the way they relate to the world.

In other literary works such as Deryn Rees-Jones' narrative poem, *Quiver* (2004), parenting is represented in terms of accepting, understanding, and protecting the Other. The topic of the changed human body, the existence

of the alien or the Other is being considered from a maternal point of view where the aspect of difference is being dealt with in a rather empathetic manner. According to Judith Halberstam and Ira Livingston in the introduction to *Posthuman Bodies* (1995), '[t]he human body itself is no longer part of "the family of man" but of a zoo of posthumanities.' (Halberstam and Livingston 3). This argument falls within the scope of the contemporary literary discussion about the family in my thesis, highlighting the role of contemporary culture and science in the formation and re-formation of the family unit. The discussion in the earlier chapters demonstrates how the concept of the family has become more figurative than literal because of the recurrent representation of dysfunctional familial tropes in contemporary speculative fiction:

The human tribe can never again be family. Postfamilial bodies celebrate the end of His-and-Her matching series that endlessly revolve around the miserable imagined unit, the imagined comm-unity [*sic*] of an imagined kinship in an imagined house with an imagined dog and two (if only) imagined children. (Halberstam and Livingston 10).

The 'postfamilial bodies' in contemporary literature could be aliens, genetically-modified human, clones, or even ordinary human beings existing in not-so-ordinary environments. This last example is quite evident in the texts discussed in the previous chapters, particularly in Malorie Blackman's *Noughts and Crosses* (2001) and Cormac McCarthy's *The Road* (2006). In these two novels, the children and young adults are surrounded by challenging circumstances that make it difficult for them to lead normal lives. The dystopian society that passes hatred and racial discrimination from generation to generation in *Noughts and*

Crosses and the post-apocalyptic world that has exhausted all natural resources in *The Road* threaten the life of the present and future generations. However, the image of the posthuman family is not limited to these representations.

Halberstam and Livingston also suggest that this cultural anxiety represented in literature by posthuman bodies such as the clones in Ishiguro's *Never Let Me Go* introduces dystopian scenarios in which innocence is victimized within vicious surrogate familial authorities:

Purity dissolves in extrafamilial relations, the body in culture is always a viral body, a time bomb of symptoms. Posthumanities embrace a radical impurity that includes the pure without privileging it. Extrafamilial desire exposes the family as a magic trick pulled by science and sustained by social science. (Livingston 13)

Judith Halberstam and Ira Livingston's *Posthuman Bodies* introduces two essays that discuss the topic of the posthuman in relation to the family, motherhood, and human reproduction in literature and culture. The first essay is Susan M. Squier's 'Reproducing the Posthuman Body: Ectogenetic Foetus, Surrogate Mother, Pregnant Man', and the second one is Roddy Reid's "'Death of the family," or Keeping Human Beings Human'. Squier's essay is particularly relevant to my discussion of the family and the posthuman in the sense that it provides an account of postmodernist theory regarding the topic of reproductive birth or human reproduction as explored by feminists, literature, and culture. Squier explores the representation of scientifically-conducted human reproduction in literature in the Romantic and the Modernist period leading up to

the postmodern representation of this topic in postmodern literature towards the end of the twentieth century.

Mary Shelley's *Frankenstein* (1818), as defined by Squier, is the mother of all arguments in the Romantic era regarding the possibility that science will eventually succeed in creating a new life, jeopardising natural reproduction (Squier 116). Shelley's narrative, according to Squier, reflects the values of Romantic feminism fearing the possibility of a man giving birth to a man in a patriarchal society. Squier argues that these patriarchal ideals of the Romantic period

reshaped the foetus as the state's ideal, organically developing, autonomous individual; they marginalised woman, exiling her from the public realm of the social contract to the private realm of the sexual contract; and they reconstructed man as both father and mother of the new political order. (Squier 116)

However, my argument in this thesis considers the idea of 'male mothers' (Greven 301) from a different perspective, perhaps more compatible with the other text that Squier mentions which is *Brave New World* (1932) by Aldous Huxley which represents the influence of technology on human reproduction and the family. Huxley's text, according to Squier, testifies to the values of the twentieth century with advanced science becoming the centre of attention in social, cultural, and literary studies. Thus, the new knowledge that my thesis offers traces the continuation of the topic of the posthuman family in twenty-first century young-adult fiction, speculative fiction, science fiction, and poetry.

As established earlier in Chapter Three, my thesis identifies the significance of the figure of youth in the spiritual experience of adults in response to the turmoil of the post-apocalyptic in which they exist. Jimmy in Atwood's *Oryx and Crake*, the Father in McCarthy's *The Road*, and Sephy's grandmother in Blackman's *Noughts and Crosses* are examples of this representation. The adults in such narratives carry a deeply rooted feeling of guilt. They may be the guardians, parents, or grandparents of problematic youth, and these adults feel responsible for the suffering of their descendants. Jimmy, for instance, sees himself as the guardian of the Crakers, the modified humans, who came to this world after humanity has seemingly been wiped out on the planet. Jimmy feels guilty for being the representation of the human species that manipulated the genetic code to create super humans, only to leave them alone and unguided in this nightmarish world.

In this respect, the 'family of man' (3) which Halberstam and Livingston described as a 'zoo of posthumanities' (3) is so accurately represented in Atwood's example. Furthermore, Squier refers to the role of science in reshaping the human family. The representation of the family unit in contemporary fiction is influenced by social and cultural debates regarding the changes to the relationship between family members within the one family. Descendants, for example, could be adopted children, foster children, or could even be clones in the future. Squier argues that these newly invented models of the contemporary family could create an identity crisis in affected individuals:

Science and technology have so rearranged the boundary conditions for the reproduction of human identity that the choice is no longer between

the natural body and the culturally constructed body, but between different fields of bodily (re)construction bearing different social and cultural implications. The significance of postmodern representations of reproductive technology will differ, depending on the strategy deployed for denaturing the human being: whether they call into question the totalised notion of a human being [...] in order to affirm other multiple identities and positionalities, or substitute for that totalisation an instrumental focus on body fragments as segments of information subject to manipulation. (Squier 119)

According to Squier, the aspect of 'manipulation' is closely related to 'culturally constructed bodies' (119) within the family. It is often claimed that foster children, for instance, are mistreated in their foster homes. Many foster parents only take in children for the financial benefit they will receive from the government to support their children; however, this money is not always used to accommodate the needs of these children. Furthermore, such children could be subject to identity crisis in the sense that they are made to believe that the foster family is doing them a favour for taking them in while, at the same time, they are not well treated in their new homes. This kind of abuse could make these children feel that this is the best society could give them for being orphans or abandoned. They feel inferior and helpless.

My thesis deals with the representation of this topic of abandoned childhood in twenty-first-century fiction in relation to posthuman bodies. The clones in Ishiguro's *Never Let Me Go* and the Crakers in Atwood's *Oryx and Crake* are posthuman orphans and foster children. While Chapter One focuses

on the manipulation of youth, Chapter Three considers adults' attitude towards this human injustice regarding the treatment of youth as objects. This is a new area that has not been explored before in literary criticism of twenty-first-century speculative fiction. This humane, empathetic, and more responsible approach in dealing with literary representations of the problem of youth in contemporary fiction draws attention to the importance of the family in helping younger individuals face and overcome life challenges.

I interpret the recurrence of this theme in contemporary literature in maternal terms although the guilty adults in a number of the narratives discussed are males. David Greven considers this motif with reference to the theories of Bruno Bettelheim in *Symbolic Wound* (1954) which explores the female within every male. Greven considers this argument in speculative fiction asking:

[W]hy Male Mothers have been generally depicted in works that defy the constraints of realism, such as science fiction and horror. Is the Male Mother a trope too radical to be found anywhere else, or do speculative genres themselves dictate the investigations of non-normative gender and sex roles? (Greven 301)

These speculations find their answer in contemporary speculative fiction where male figures are often represented as the only guardian for their children, sometimes because of some apocalyptic scenario that left the male figure the only responsible adult for children. McCarthy's *The Road* in fiction and AMC's *The Walking Dead* (2010-) on TV are two very similar examples in which a father feels responsible for the safety of his children in a post-apocalyptic world.

Chapter Three considers this representation by exploring how 'the Male Mother can be seen as a man who retains his gendered identity [...] while enjoying the benefits of womanhood.' (Greven 302). While Greven focuses on gender roles, my argument emphasises the humane aspect of this representation of maternal fatherly figures. The argument in Susan Yunis and Tammy Ostrander's 'Tales your Mother Never told You: "Aliens" and the Horrors of Motherhood' (2003) is particularly relevant to my exploration of male mother figures. Although the argument revolves around the representation of mother aliens and alien sexuality in fiction, it refers to the role of adults in protecting children as a holy mission:

In fact, perhaps the central myth of Western culture- the birth of Christ- assures potential parents that the birth of a child is God's greatest gift to humanity, potentially a saving, transformational event for the culture, as well as for the mother. If she must sacrifice for this child, she may be canonized in the process (Yunis and Ostrander 68-69)

The Man in McCarthy's narratives is an embodiment of this notion. Children are the future; they are the continuation of divine existence on earth; they are the hope of the future and the saviours of humanity. In this sense, the task of shielding them from all the evil in the world is not only humane, subjective, and personal, but is also divine. Therefore, although Greven argues that '[m]ale Mothers represent the opportunity for access to certain powerful, profound traits in femininity and womanhood' (303) focusing, by that, on the reversal of gender roles, the main point in my argument about the maternal aspect in contemporary fiction considers the matter from a global perspective. The role of

adults is to guide youth safely towards the future because these younger individuals will one day become the adults to guide their children into the future. It is a human tradition and a cycle of survival.

In poetry, however, this sort of maternal responsibility is represented by human empathy towards the posthuman. In Deryn Rees-Jones' *Quiver* (2004), the narrator, who is expecting the birth of her first child, empathises with an adult female clone whom she encounters. The narrator feels responsible and guilty for the whole society for depriving an individual of love and compassion which is usually found within the family. This techno-social and, at the same time, feminist approach to the posthuman topic offers a broader scope for authors to express their attitudes towards contemporary social and technological debates regardless of genre restrictions. Rees-Jones' poem is a narrative verse that discusses a multitude of themes within the one text. In this context, the clone is not only a posthuman body but also the new orphan in society that needs the protection of the family. Eva Hoffman's *The Secret* (2001) explores a similar topic. The novel unravels the truth about the overly co-dependent relationship between Iris, a seventeen-year-old girl, and her mother, Elizabeth. It transpires that Iris is her mother's clone. She is, thus, an orphan for the purposes of my argument. In 'Send in the Clones' (2001), a review of Hoffman's novel on *The Guardian* website, Maya Jaggi suggests that 'the novel imagines the consequences of the hubris science has made possible [...] While all parenting may involve a wish to perpetuate oneself, to invest in those who will live on for us, self-cloning is the ultimate narcissism.' (Jaggi, *theguardian.com*). Hoffman's narrative investigates the issue of cloning from the perspective of the clone in a similar manner to Ishiguro in *Never Let Me Go*.

However, a new perspective in Hoffman's narrative appears in involving the familial relationship between the cloned subject as well as the clone.

It seems that Jaggi's account of Hoffman's narrative focuses more on the clone than on the cloned 'mother' in suggesting that 'the novel dramatises recognisable stages of psychological growth' of the young-adult clone and 'revisits time less [*sic*] philosophical questions - of individuation and identity, freedom and will, genetic determinism and selfhood.' (Jaggi, *theguardian.com*).

However, the new knowledge that my thesis provides and which is often overlooked when studying the posthuman body is the question of maternal and/or paternal responsibility towards problematic youth and childhood focusing not only on the youth subject but on the psychological dilemma of the parental adult as well. Furthermore, the exploration of the posthuman in maternal terms testifies to the interstitial quality of contemporary literature that gives the treatment of youth in speculative writing more profound dimensions. This sort of humane and empathetic approach to the posthuman also features in Jo Shapcott's *Of Mutability* (2010). Although introduced through a series of poems that explore how illness changes the human body, the Other is still presented by Shapcott with a new understanding. An ill person might as well be a posthuman body; illness transforms those who are affected by it into strangers or foreigners among the healthy norm. Shapcott explores bodily changes through illness and how, by witnessing these changes, the human develops a better ability to understand their inner self and surroundings and to feel a deeper connection with nature as the mother of creation and change.

Poetic Science and Scientific Poetry: Contemporary Theory and Genres

The comparative study of the posthuman in both contemporary fiction and poetry in this thesis highlights the differences between these two genres in representing ideas of technology, youth, and the posthuman. In the 'Introduction' to *Contemporary Poetry* (2011), Nerys Williams suggests that 'the term "contemporary" denotes a complexity of time frames' (3) and that a 'key question is how do we read "new" and can the word 'contemporary' be substituted for "new"?' (3). Differentiating between the modern and the contemporary in literary terms is difficult considering the terminology that has been used to define each poetic era. The word 'Modern' has been substituted by the word 'Modernist' to further indicate that this particular poem or poet belongs to that specific period of time rather than its being described as 'modern' in the literal sense. However, the same does not apply to contemporary poetry which has presumably flourished during the last five decades of the twentieth century. From Blake Morrison and Andrew Motion's *The Penguin Book of Contemporary British Poetry* (1982) to Harold Bloom's *Contemporary Poets* (2010) which introduces contemporary American poets through a series of essays, one could identify different recurrences of individuals that define the contemporary poetic era.

However, to summon up some earlier definitions of 'modern' versus 'contemporary', it may seem that there is some lack of consistency regarding the confidence and accuracy in defining and differentiating between both terms. For example, in *The Situation of Poetry: Contemporary Poetry and Its Traditions* (1976), Robert Pinsky defines Modern poetry as 'work [that] included a mistrust

of abstraction and statement, a desire to escape the blatantly conventional aspects of form, and an ambition to grasp the fluid, absolutely particular life of the physical world by using the static, general medium of language.' (Pinsky 3). However, on the difference between the eras of poetry, Pinsky's definition seems more hesitant, rather apologetic for the lack of a clear frame to accommodate the term 'contemporary'. He suggests that:

the quotation marks bracketing 'Romantic', 'Modern', and 'Contemporary' indicate [...] that the problematical relation between words and things does not change, from one time to another, however much stylistic responses to the dilemma may vary. The circumstance or philosophical situation remains essentially the same. And perhaps even the range of emotional responses to the subject has not varied much, either – though the stylistic responses have varied enormously. (Pinsky 87)

Pinsky's differentiation is summarised by a somewhat general observation of the different 'stylistic responses' (Pinsky 87) that each poetic period utilises. This exemplifies the difficulty in reaching an accurate and feasible conclusion regarding the definition of 'contemporary' poetry. Accordingly, in 'Trends in Contemporary Poetry' which appeared in *The Phylon Quarterly* in 1958, Richard K. Barksdale explains that:

Defining contemporary trends in any category of literature is a very difficult task. First, there is the problem of gaining something approximating proper historical perspective -- a type of perspective which will enable one to appraise literature with some degree of objectivity. Moreover, every

tendency or direction in literary expression has a specific background or historical frame of reference. (Barksdale 408)

Barksdale suggests that the word 'contemporary' signals a historical standpoint which will differ from one time to another. This article was published during the late 1950s; therefore, what was then defined as 'contemporary' in literature might not be regarded as so in the following decades. Also, the definition of the 'contemporary', according to Barksdale, is governed by the cultural and political background of a specific period of time. Hence, Barksdale argues that the most valid method of defining the 'contemporary' in literature at any given historical point is by identifying 'the prevailing standards governing poetic form and content today' (Barksdale 408). For instance, Leonard Brown's 'Our Contemporary Poetry', which appeared in *The Sewanee Review* in 1933, discusses Alfred Lord Tennyson and Rudyard Kipling as contemporary poets (44-45). Romanticism might as well have been seen as 'contemporary' in the nineteenth century. Therefore, in light of Barksdale's argument, this thesis explores the recurrences of scientific representations in literature as the 'historical frame of reference' (Barksdale 408) that defines the characteristics of poetry in the twenty-first century.

Robert Crawford's *Contemporary Poetry and Contemporary Science* (2006) includes a series of essays that explores the topic of science in poetry in a number of contemporary poets. One of these essays is Simon Armitage's 'Modelling the Universe: Poetry, Science, and the Art of Metaphor' which is particularly valuable in explaining the relationship between poetry and science. The essay introduces the contemporary poet's perspective on the relationship

between poetry and science through offering memoir-type anecdotes highlighting the stages through which Armitage comes to appreciate the strong bond between the completely different worlds of poetry and science. Towards the end of his essay, Armitage suggests that:

The apparently exponential developments in technology over the past fifty years have left poetry with an important, adversarial role, that of getting beyond the high gloss and instant gratification of our contemporary world. The dominance of electronic means over mechanical and the preference for digital rather than analogue devices have eventually put the installation, maintenance, and even operation of many everyday contraptions beyond the understanding of most of their uses. The most obvious example is the computer. (Armitage 121)

According to Armitage, poetry understands science; hence, its role in the contemporary world, as I choose to describe it, is to 'domesticate' or 'tame' science and to warn people against becoming completely dependent on technology 'that can make us, if we are not careful, sloppy, accepting, lazy, subservient, cosseted, and cut off.' (Armitage 122). Armitage sets as an example high-tech machines that come with a very useless user manual including a phone number to call in case any issue arises. The user here might feel helpless or rather useless for being unable to understand this new machine or know how to fix it because the manual does not want you to do so; just dial the number (Armitage 120-121). Armitage is persuasive in contending that the world of imagination poetry offers is an important weapon against turning life into a form of 'virtual' (Armitage 122) reality that controls its surroundings with

the press of a button. In this respect, poetry could be a metaphor for human redemption because it is a constant reminder that the faculty of imagination is the most important asset to humanity. Similarly, Nerys Williams argues that poetry 'can be seen as a slave for troubled times and a medium of comfort. From another perspective, poetry offers a means for examining and exploring the world.' (Williams 1). My thesis has demonstrated how poetry survives the tropes of our present fast-paced life governed by technology by using the power of science to feed the poetic imagination. In Chapter Three, I have argued that Jo Shapcott's poems in *Of Mutability* (2010), for example, use the scientific logic of molecular biology to investigate human spiritual transcendence through illness. The power of imagination governs both science and literature, and exploring the unknown is the most exhilarating journey for scientists and authors alike. However, the public might be a bit more cautious when approaching the unknown or the unfamiliar; therefore, the role of literature might as well be to mediate science and technology to society through the introduction of thought. For example, the recurrence of the topic of alienation and the alien in contemporary literature seems to serve two different purposes. Firstly, it familiarises readers with the concept of the alien so that if, for example, robots were to become a part of everyday life in the future, people will not be so apprehensive, shocked, or intimidated. Secondly, and most importantly, it constructs alienation as a metaphor of difference. In this respect, the alien which people learn how to gradually accept in books could be a representation of the 'other' that they encounter in reality. This Other might be someone who speaks a different language, has a different sexual orientation, and/or a different skin colour.

The literary and poetic exploration of science serves to introduce scientific knowledge to and raise awareness of the public. However, in 'How Should a Science Fiction Story Begin?' (2001), Brian Stableford argues that, even in literature, introducing the unfamiliar to the reader presents some difficulties. Stableford suggests that 'the notion that a story might be set in the future was so alien to nineteenth century readers that every single future-set story written in that era begins with an essay-like preface introducing the notion' (Stableford 333). The unfamiliar represented by the horrifying scenarios of the apocalypse has always been strongly present in poetry, from Dante's *Divine Comedy* in the fourteenth century to John Milton's *Paradise Lost* (1667) in the seventeenth century to T. S. Eliot's *The Waste Land* (1922) in the twentieth century. The theme of alienation is explored through the depiction of the Apocalypse in different socio-political and religious contexts, and it often includes biblical connotations that associate the unfamiliar with fear and horror, according to William Franke in *Poetry and Apocalypse: Theological Disclosures of Poetic Language* (2009). Accordingly, the difference between poetic and fictional representations of the Apocalypse is obvious. Fiction represents the apocalypse or the post-apocalypse, such as in Cormac McCarthy's *The Road* (2006) and Margaret Atwood's *Oryx and Crake* (2003), from a technological point of view, whether directly or not.

Apocalyptic poetry in the previous centuries could indicate that poetry started to explore the unfamiliar long before fiction did. It appears that the questioning of the virtue of science and technology in apocalyptic fiction replaces the power of religious authority in poetry about the apocalypse centuries ago. From religion to technology, the representation of the power

structure in society has dramatically changed in literature throughout the centuries. The perception of apocalyptic discourses has started to change since the 1930s, according to Chris H. Lewis in 'Science, Progress, and the End of the Modern World', an article which appeared in *Soundings: An Interdisciplinary Journal* in 1992. In this article, Lewis provides an account of the philosophical representation of the apocalypse in religion versus science from early to late twentieth century thinking:

Since the 1930s, concerned scientists have drawn from this ecological apocalyptic discourse, warning that unless science can control technological and scientific progress and end humanity's war against nature, then modern industrial civilization will collapse and humanity face extinction. Such scientific apocalypticism articulates these scientists' radical fear that scientific and technological progress has created powers that are beyond human control. (Lewis 309)

Lewis refers to 'apocalyptic scientists' arguing that science has dominated literature since the early years of the twentieth century. These scientists believe that our inability as humans to control science and technology will bring about the dystopian or post-apocalyptic nightmares of the future. However, this perspective has been represented in fiction more than it has been in poetry because the former has always had a tendency to be more focused on the detailed representation of the influence of technology on the human. In the texts that this thesis explores it is evident that fiction is more direct in the treatment of the posthuman than poetry because fiction focuses more on characterisation

rather than on the general speculative presumptions of technology and posthumanism.

As a contemporary poet who is particularly interested in studying the relationship between science and poetry, Simon Armitage ironically suggests that although '[i]t isn't unusual, as a poet, to be associated with all kinds of scientific incompetence' (Armitage 111), 'not all scientists think of poetry as ineffectual, effete, and useless [...] [because] poetry and science, for all their perceived differences, might well be attempting to accomplish the same thing and through remarkably similar means.' (Armitage 112). Furthermore, Stableford argues that '[s]cience fiction stories are sometimes likened to the kinds of "thought experiments" that scientists routinely carry out' (Stableford 331). Both Stableford and Armitage argue for the similarity between science and literature on the grounds that they share the same goal of figuring out the mysteries of life and nature through observation and experimentation. This thesis establishes that science is a valuable thematic trope in contemporary poetry about cloning, illness, and the posthuman. Science and literature employ the same logic through adopting different methodologies, according to Stableford:

Science is the pursuit of objective truth; fiction is the concoction of lies.

The method of science is, however, an inventive one; it involves formulating new hypotheses that might, when tested, prove superior to the theories we currently hold. If we were not able to imagine that things might be other than what we currently perceive them to be then we would probably be unable to engage in the continual reconstruction of our

theories. [...] Our ability to imagine other possibilities is, therefore, a great asset to scientific progress (Stableford 331-332)

The principles of science and fiction as laid out by Stableford here are simple; fiction is the product of imagination which itself is scientists' only compass in 'the pursuit of objective truth' (Stableford 331). Thus, the parallel logic that associates literature with science seems to be both timeless and infinite.

However, in light of my exploration of Jo Shapcott's poems in *Of Mutability* (2010), which portrayed the changes in the spiritual and emotional perceptions of the surrounding natural environment through molecular changes of the human body, Armitage's following analysis of the relationship between science and poetry is very relevant to the values of twenty-first-century literary theory:

Science [...] is besotted with the issue of prediction. The possibility of an event happening again on the grounds that it has happened before in the same circumstances. Poetry might seem to be in conflict with that position, since it goes out of its way to describe every occasion in a new and fresh and surprising way. But in fact it attempts the same thing, albeit through sensation rather than understanding. The reaction a poem evokes is presumably a response by chemical and electrical components within the body to a set of external stimuli. [...] a successful poem brings about a kind of animal comprehension rather than its theoretical explanation, and comprehension comes from a common pool of experience. Some of us hope to remain open to that type of perception. (Armitage 113)

I understand that the difference between the methods of both science and poetry, as far as Armitage's argument is concerned, is characterised by

scientists' tendency to use, what I choose to call, 'predictive imagination' while poets usually employ 'creative imagination'. For poetry, no two experiences are the same. When dealing with the topic of bodily changes through illness, science conceptualises all kinds of physical change as similar; through prediction, science understands cancer, for example, as an abnormal growth of body cells that will eventually lead to organ failure and death. Science may try to invent a cure or use methods that slow down the process of deterioration, but it still predicts that cancer would lead to death.

Poetry, on the other hand, recognises the different 'stimuli' each bodily change creates. Although cancer as an illness was not referred to directly by Shapcott in *Of Mutability*, pain brought about by illness is a recurrent motif in Shapcott's poems, and it is represented as liberating rather than limiting. Illness may be painful, but pain itself, according to the poet, is a torch that guides the spirit profoundly into the mystery of life and creation, of human and nature. Shapcott's poetry might have been inspired by Elaine Scarry's *The Body in Pain: The Making and the Unmaking of the World* (1985) and Julia Kristeva's *Strangers to Ourselves* (1991), but it still clearly represents the poet's personal commitment in investigating the relationship between pain and creativity in poetry. Nicholas Ruddick's argument is particularly relevant to the topic of pain and bodily changes expressed by Shapcott. Ruddick expresses this idea of body versus soul in 'Putting the Bits Together: Information Theory, "Neuromancer", and Science Fiction' (1994) with reference to the American mathematician, Claude Elwood Shannon's, information theory which appeared in 'A Mathematical Theory of Communication' (1948). Ruddick argues that:

in the light of information theory the body/soul duality become a little more explicable than it could be according to any purely materialistic theory of reality. After death, the material body decays according to the laws of thermodynamics. The soul, or spirit, or mind, or intellect, being an informational phenomenon and therefore not subject to the laws of conservation, vanishes, at least in its material form but is maintained in informational forms (Ruddick 86).

The argument could also apply to the poetic experience as a whole. Poetry is generated through the imagination of the mind which highlights and builds on tangible experiences that become memories. The Romantic poets argued that these experiences are, then, preserved, restored, and reincarnated in poetry. Armitage introduces a series of examples from walking 'on the lunar mass' (120) and inventing the electric lamp to the erection and, then, destruction of the World Trade centre 'as a suicidal glimpse of poetic paradise' (120) and the nuclear bombing of Hiroshima during the Second World War in order to propose that all science starts with thought, with poetry, but neither thought nor science is always good:

In placing this kind of importance on poetry, I'm asking it to come forward and be congratulated for its achievements, but also to take responsibility for the error of its ways. [...] Poetry proposed the existence of the DNA double helix with its eye for detail, and poetry postulated the theory of relativity with its penchant for cryptic crosswords, and poetry produced the first light bulb because of its fear of the dark, and poetry learned how to

create fire from friction because of its grumbling dislike of the cold and its fascination with the supernatural effects of combustion. (Armitage 120)

By contrast, fiction approaches science and technology with caution because many of the narratives involving science also deal with the topic of youth and the future of humanity if technology became so overwhelming that no human authority could control it. Therefore, individuality seems to be the primary focus in the treatment of youth in contemporary fiction, especially when it relates to aspects of technology in social dystopias such as Malorie Blackman's *Noughts and Crosses* (2001) and Kazuo Ishiguro's *Never Let Me Go* (2005) among others. While fiction is more interested in exploring alien presence in the human body as a way of familiarising oneself with and trying to understand and accept the Other, poetry is more concerned with representing the magic of advanced science and posthumanism. A specific exception would be Deryn Rees-Jones' long narrative poem, *Quiver* (2004), which poeticises the science of cloning and the mysteries of human nature, but, at the same time, it also conveys a sense of responsibility towards cloned subjects.

This hybridisation of genre is not so unconventional in contemporary literature. The majority of the texts discussed in this thesis feature aspects of more than one genre or, most frequently, subgenre. According to Andrew M. Butler in 'Between the "Deaths" of Science Fiction: A Skeptical View of the Possibility for Anti-Genres' (2004), genre hybridity is not a new phenomenon in literature:

It is clear that even at the turn of the seventeenth century genres could hybridize, and, even though the First Folio was divided into Histories,

Tragedies and Comedies, the boundary between these is not clear-cut [...] I hold these truths to be self-evident: i) no genre is ever pure; ii); iii) no text is genreless. (Butler 208)

Butler's argument that 'no text ever belongs to a single genre' applies to contemporary young-adult literature explored in this thesis that usually exhibits dystopian, post-apocalyptic, and/or science-fiction aspects, and speculative fiction that is not specifically written for young adults also deals with the topic of youth as the main focus. As for contemporary poetry, the way science is taken as an inspiration, used as a method and approached as a topic testifies to the interstitial nature of poetry which has always been so versatile and surprising in its innovative representation of contemporary human values.

In this respect, I also find that Romanticism has, more generally, in addition to the influential representation of the creature by Mary Shelley in *Frankenstein*, been revived in contemporary speculative and science fiction poetry explored in this thesis because it celebrates the power of nature in changing the human. Science in Romantic poetry was often an inspiration and rarely separable from nature which was depicted as the mother of creation and creativity for the Romantics. William Wordsworth's *The Prelude or, Growth of a Poet's Mind* (1798) is an example of Romantic poets' fascination with nature. Wordsworth perceives nature as a nurturing mother through which the poet could transcend the material world towards poetic greatness and spiritual elevation. Similarly, contemporary poetry about science also celebrates the human as a biological scientific phenomenon in relation to nature and the ability of the human body to transcend its limitation through posthumanism. This sort

of scientific, more imaginative and speculative aspect of poetry contributes to a better understanding of the human state and a revival of an aspect of the Romantic spirit in contemporary poetry. However, poetry now is rather more concerned with technology which depends on the human capability of innovation and creativity in the first place. The power of nature that manifests itself in more enhanced humans is what empowers nature with an unsurpassable will to survive. The new Romantic spirit in poetry argues that the death of the idea of 'nature' means the death of creation, and this leads to the extinction of life. This highlights another difference between fiction and poetry about youth and the posthuman in the twenty-first century. When comparing fiction and poetry in the previous chapters, I demonstrated that the former is definitely more technophobic than the latter. Yet, both genres deal with the concept of the Other more liberally and interstitially. The posthuman body is the new alien which is considered as an extension to the self and, probably, a state of human evolution.

The defining aspect of the contemporary poetry about science, technology, and youth examined in this thesis is the discovery of new life and the celebration of 'nature' as the source of evolution which humans now see differently with the application of technology to the human body. Fiction, on the other hand, is still concerned about the negative effects of technology on the younger generation in contemporary society, and more so on the generation of the future. It recurrently expresses a sense of technophobia that deems science destructive for developing new ways to control individual freedom through electronic surveillance. Ironically enough, this technophobic attitude resulted in developing a better understanding of the Other, or what I established as the

techno-teen. This techno-teen could be the young adult or the child whose body is being subjected to experiments with chip implants and barcode tattoos as discussed earlier in Suzanne Weyn's *The Barcode Tattoo* (2004) and M. T. Anderson's *Feed* (2002). In these examples, the young human body is being unwillingly modified to become a controlled posthuman subject, and it is represented in fiction as the victim, not the enemy.

The Relevance of Interstitial Arts to Twenty-First-Century Literature

This thesis demonstrates how genre hybridisation defines twenty-first-century fiction and poetry. This hybrid or interstitial quality of contemporary literature exists either in the employment of experimental writing formats or in the utilisation of thematic representations that are usually associated with a certain genre. The relevance of the interstitial theory to my argument is that the term "interstitial" represents an open-ended possibility to experiment with literary form and content. The majority of the primary texts discussed in this thesis, such as Rees-Jones' *Quiver* and Kazuo Ishiguro's *Never Let Me Go*, could be described as belonging to more than one genre or subgenre. In genre theory, interstitial literature is not 'genreless' (Butler 208); rather, it is an infinite genre with no limitations despite the controversy as to what is the most appropriate classification of each interstitial text.

In 'Critical Theory, Academia, and Interstitiality' which appeared in the *Journal of the Fantastic in the Arts* in 2004, Veronica Schanoes argues that:

While previous scholars have examined the concept of borders as it applies to geography, ethnicity, race, sexuality, gender, and authorial identity, interstitiality as a literary concept refers specifically to border-

crossings and the space between borders within the texts themselves:
interstitiality relates to the borders of genre. (Schanoes 243)

In speaking about 'the concept of borders as it applies to geography, ethnicity, race, sexuality, gender, and authorial identity' (243), Schanoes may be referring to the semi-autobiographical work, *Borderlands/La Frontera: The New Mestiza* (1987), by American scholar, Gloria E. Anzaldúa, which has inspired interstitial studies in the 1990s including Homi Bhabha's research on hybridity and hybridisation of culture as discussed earlier in the Introduction chapter. Anzaldúa's work incorporates poetry and prose in exploring the relationship between categorically opposing cultural groups in a geographical borderland between Mexico and the United States such as men and women, Latin and American, and heterosexuals and homosexuals among others. Similarly, Deryn Rees-Jones' narrative poem, *Quiver* (2004), as discussed in Chapter One, could be considered as an interstitial work in the sense that it represents genre hybridity both formally and thematically. Rees-Jones uses narrative language in her poem to explore the unfamiliar represented by the life and death of a clone. *Quiver* contains aspects of the mystery novel as well as science fiction, and the innovative writing style that Rees-Jones employs could inspire future poetic writings that may challenge the stylistic norms of poetry writing and step outside the zone of conventional and traditional artistic creation. As discussed earlier in this chapter, the relationship between poetry and science is another example of the interstitial quality of literature. Contemporary poetry about science has a tendency to combine speculative aspects with Romantic motifs, and it sometimes incorporates narrative within verse.

However, my exploration of fiction and poetry about youth and technology proves that interstitiality is not limited to new stylistic writing formats. The new knowledge that this thesis introduces is the interstitial thematic quality of twenty-first-century fiction and poetry which is represented in the treatment of the Other or the alien in contemporary literature. My thesis argues that the interstitial and hybrid characteristics of contemporary literature help the twenty-first-century young and/or adult reader develop a more liberal attitude towards difference, foreignness, and the Other. In this respect, interstitial fiction and poetry are culturally effective. For instance, the story in Rees-Jones' *Quiver* is introduced through a chronological series of events related to a murder investigation and an encounter with a clone. The attitude towards the clone in Rees-Jones' work, as is the case in Atwood's and Ishiguro's narratives discussed earlier, is accepting and welcoming. Thus, this more empathetic and open-minded treatment of the Other or the alien in twenty-first-century literature is another interstitial quality that this thesis highlights.

The Other as a body of difference is the focus of the majority of the texts discussed in the earlier chapters which foreground existing cultural debates regarding the effect of information technology on youth. The Crakers in Atwood's *Oryx and Crake* are superior posthuman aliens; the clones of Hailsham in Ishiguro's *Never Let Me Go* are socially and culturally aliens; the 'techno-teens', as I have established, in Anderson's *Feed* and Weyn's *The Barcode Tattoo* are also aliens, and finally, an ill person in Shapcott's *Of Mutability* and McCarthy's *The Road* could, in a sense, be an alien. However, in all of these texts the alien is approached with compassion, empathy, and, sometimes, with a feeling of guilt for being mistreated and marginalised. Thus,

contemporary authors engage with the debate on cultural globalisation foregrounded by Homi Bhabha through adopting and maintaining a more liberal perspective regarding the treatment of the alien or the Other in literature.

Conclusion

Exploring the representation of youth in relation to science, information technology, alienation, family bonds, illness, and adult responsibility in both fiction and poetry while locating similarities and differences among these representations in this thesis highlights the 'interstitiality' (Pilinosky 242) of twenty-first-century literature. Helen Pilinosky argues that '[t]he primary goal of the Interstitial Arts movement at this juncture is to promote understanding of the nature of interstitiality' (242). Contemporary interstitial values, thus, allow for a more liberal approach to literary evaluation of existing texts in literary criticism. Therefore, hybridisation is one of the most important aspects of literature in the twenty-first century. Through introducing new explorations of science and culture, twenty-first-century literature plays a vital role in promoting interstitial thinking, not as a temporary artistic trend, but as a safe outlet for authors and artists to introduce their revolutionary ideas regardless of genre restrictions and definitions that may have dominated the arts and culture in the previous century. Although interstitial arts operate within the danger zone of becoming either over inclusive or over exclusive, 'it's a worthwhile endeavor to experiment' (Pilinosky and Sherman 248) because this uncertainty regarding the borders of this movement is what makes it innovative and valuable to contemporary literary criticism.

The accelerating advancements of science in the twenty-first-century and the overflow of information that predicts the future of humanity impose a state of uncertainty on literature and the arts. This uncertainty is expressed by the resurgence of hybrid genres that highlight the characteristics of twenty-first-century literature and culture. The texts examined in this thesis demonstrate a trend in literature that focuses on the representation of youth in various possible social scenarios in relation to the effect of science on the formation of the posthuman. However, exploring the recurrence of the topic of youth in both fiction and poetry and the emphasis on accepting the posthuman body is a new area in literary criticism that this thesis brings forward.

Bibliography

Primary Sources (Fiction)

- Anderson, M. T. *Feed*. Massachusetts: Candlewick Press, 2002. Print.
- Atwood, Margaret. *Oryx and Crake*. London: Bloomsbury Publishing, 2003. Print.
- Blackman, Malorie. *Noughts & Crosses*. London: Random House, 2001. Print.
- Collins, Suzanne. *The Hunger Games*. New York: Scholastic Paperbacks, 2008. Print.
- Haddix, Margaret Peterson. *Double Identity*. New York: Simon & Schuster Children's Publishing, 2005. Print.
- Ishiguro, Kazuo. *Never Let Me Go*. London: Faber and Faber, 2005. Print.
- McCarthy, Cormac. *The Road*. New York: Alfred A. Knopf, 2006. Print.
- Meyer, Stephenie. *The Host*. New York: Little, Brown & Company, 2008. Print.
- Weyn, Suzanne. *The Bar Code Tattoo*. New York: Scholastic Paperbacks, 2004. Print.

Primary Sources (Poetry)

- Boston, Bruce. 'Dystopian Dusk' *Strangehorizons.com*. n.p., 2008, n.page. Web. 18 Feb 2012.
- Cooke, Sophie. 'Forward Deck.' *Genomicsnetwork.ac.uk*. ESRC Genomics Forum, 29 Jan. 2011. Web. 15 Nov. 2011.

Dennis, Felix. 'This Is the Server'. *Lone Wolf*. London: Random House, 2004. Print.

Greenlaw, Lavinia. *Minsk*. London: Faber & Faber, 2003. Print.

Morley, David. 'Nature of Memory'. *Scientific Papers*. Manchester: Carcanet Press, 2002. Print.

O'Riordan, Adam. 'Goooogle' *In the Flesh*. London: Vintage Books, 2010. Print.

Pirie, Mark and Tim Jones (eds.) *Voyagers: Science Fiction Poetry from New Zealand*. Queensland: Interactive Press, 2009. Print.

Rees-Jones, Deryn. *Quiver*. Bridgend: Seren, 2004. Print.

Schwader, Ann K. 'It Wears You.' *Strangehorizons.com*. Strange Horizons, 19 Aug. 2002. Web. 15 Nov. 2011.

Schwader, Ann K. 'Past Human.' *Strangehorizons.com*. Strange Horizons, 6 June 2011. Web. 15 Nov. 2011.

Shapcott, Jo. *Of Mutability*. London: Faber and Faber, 2010. Print.

Smartt, Dorothea. 'Shake My Future' *Connecting Medium*. London: Peepal Tree, 2001. Print.

Primary Sources (Television)

The Walking Dead. AMC Networks. AMC, New York City. 31 Oct. 2010. Television.

Secondary Sources (Print)

Adams, Dennis M. and Mary Hamm. 'Communication Technologies.' *Redefining Education in the Twenty-first Century: Shaping Collaborative Learning in the Age of Information*. Illinois: Charles C Thomas Publisher, 2005. Print.

Adams, Dennis M. and Mary Hamm. 'Language Arts in a New Era: Social Interaction, Information technology, and Language Learning.' *Redefining Education in the Twenty-first Century: Shaping Collaborative Learning in the Age of Information*. Illinois: Charles C Thomas Publisher, 2005. Print.

Anderson, M. T. and James Blasingame. 'Interview with M. T. (Tobin) Anderson.' *Journal of Adolescent & Adult Literacy*, 47.1 (2003): 98-99. Print.

Anonymous. 'The Wanderer.', Ed. John C. Pope. *Seven Old English Poems*. 2nd ed. New York: Norton, 1981. Print.

Armitage, John. 'Dissecting the Data Body: An Interview with Arthur and Marilouise Kroker.' *Angelaki* 4.2 (September 1999): 69-74. Print.

Armitage, Simon. 'Modelling the Universe: Poetry, Science, and the Art of Metaphor.' *Contemporary Poetry and Contemporary Science*. Ed. Robert Crawford. Oxford: Oxford University, 2006. Print.

Aronson, Marc. *Exploding the Myths: The Truth about Teenagers and Reading*. Maryland: Scarecrow Press, 2001. Print.

Aston, James. 'The Post-apocalyptic Family in The Walking dead.' *Small Screen Revelations: Apocalypse in Contemporary Television*. Eds. James

- Aston and John Walliss. Sheffield: Sheffield Phoenix Press Limited, 2013. Print.
- Attebery, Brian. 'Review: Living as Posthumans.' *Science Fiction Studies* 34.3 (2007): 517-521. Print.
- Baldick, Chris. *In Frankenstein's Shadow: Myth, Monstrosity, and Nineteenth-century Writing*. Oxford: Oxford University, 1987. Print.
- Barber, Benjamin R. *Consumed: How Markets Corrupt Children, Infantilize Adults, and Swallow Citizens Whole*. New York: Norton and Company, 2008. Print.
- Barksdale, Richard K. 'Trends in Contemporary Poetry.' *The Phylon Quarterly* 19.4 (1958): 408-416. Print.
- Berger, Albert I. 'Towards a Science of the Nuclear Mind: Science-Fiction Origins of Dianetics.' *Science Fiction Studies*, 16. 2 (1989): 123-144. Print.
- Best, Steven and Douglas Kellner. *The Postmodern Adventure: Science, Technology, and Cultural Studies at the Third Millennium*. Cambridge, MA: MIT, 2001. Print.
- Bentley, Nick. 'Introduction.' *British Fiction of the 1990s*. Ed. Nick Bentley. Oxon: Routledge, 2005: 1-18. Print.
- Bentley, Nick. 'Subcultural Fictions: Youth Subcultures in Twenty-First-Century British Fiction.' *The 2000s: A Decade of Contemporary British Fiction*. Eds. Nick Bentley, Nick Hubble and Leigh Wilson. London: Bloomsbury, 2015: 53-82. Print.

- Bergthaller, Hannes. 'Housebreaking the Human Animal: Humanism and the Problem of Sustainability in Margaret Atwood's *Oryx and Crake* and *The Year of the Flood*.' *English Studies* 91.7 (2010): 728-743. Print.
- Black, Shameem. 'Ishiguro's Inhuman Aesthetics' *MFS Modern Fiction Studies* 55.4, (2009): 785-808. Print.
- Blake, William. *The Illuminated Books of William Blake, Volume 5: Milton, A Poem*. Ed Robert N. Essick and Joseph Viscomi. Princeton: Princeton University, 1998 (Illustrated 1804-1810). Print.
- Blasingame, James. 'Feed by M. T. Anderson'. *Journal of Adolescent & Adult Literacy*, 47.1 (2003): 88-90. Print.
- Booth, Heather. *Serving Teens Through Readers' Advisory*. Chicago: American Library Association, 2007. Print.
- Bradford, Clare. "'Everything must go!' Consumerism and Reader Positioning in M. T. Anderson's *Feed*". *Jeunesse: Young People, Texts, Cultures*, 2.2 (2010): 129-137. Print.
- Brigley, Zoe. 'Replication, Regeneration or Organic Birth: The Clone in Deryn Rees-Jones' *Quiver* and Donna Haraway's "A Cyborg Manifesto".' *Critical Survey* 18.2 (2006): 16-30. Print.
- Brown, Leonard. 'Our Contemporary Poetry.' *The Sewanee Review* 41.1 (1933): 43-63. Print.

- Butler, Andrew M. 'Between the "Deaths" of Science Fiction: A Skeptical View of the Possibility for Anti-Genres.' *Journal of the Fantastic in the Arts* 15.3 (2004): 208-216. Print.
- Campa, Riccardo. 'Pure Science and the Posthuman Future.' *Journal of Evolution and Technology* 19.1 (2008): 28-34. Print.
- Cavell, Stanley. *The Claim of Reason: Wittgenstein, Skepticism, Morality, and Tragedy*. New York: Oxford University Press, 1979. Print.
- Chaviano, Daína. 'Science Fiction and Fantastic Literature as Realms of Freedom.' *Journal of the Fantastic in the Arts* 15-1 (2004): 4-11. Print.
- 'Children's Choice: Noughts & Crosses' *The Observer*. The Observer, 7 Jan. 2001. Print.
- Clayton, Jay. 'The Ridicule of Time: Science Fiction, Bioethics, and the Posthuman'. *American Literary History*, 25. 2 (2013): 317-340. Print
- Cooper, Ilene. 'Naughts and Crosses (Review).' *The Booklist* 101.19/20 (2005): 1796. Print.
- Cooper, Ilene. 'Knife Edge (Review).' *The Booklist* 103.21 (2007): 49. Print.
- Cooper, Lydia. 'Cormac McCarthy's *The Road* as Apocalyptic Grail Narrative.' *Studies in the Novel* 43.2 (2011): 218-236. Print.
- Corbett, Robert. 'Romanticism and Science Fictions: A Special Issue of Romanticism On the Net. *Romanticism On the Net* 21 (2001): 1-11. Print.
- Craig, Amanda. 'Crossed Swords.' *New Statesman* 14.643 (2001): 53. Print.

- Crew, Hilary S. 'Not So Brave a World: The Representation of Human Cloning in Science Fiction for Young Adults.' *The Lion and the Unicorn* 28.2 (2004): 203-221. Print.
- Csicsery-Ronay, Jr, Istvan. 'On the Grotesque in Science Fiction.' *Science Fiction Studies* 29.1 (2002): 71-99. Print.
- Curry, Alice. *Environmental Crisis in Young Adult Fiction: A Poetics of Earth*. Houndmills: Palgrave Macmillan, 2013. Print.
- Dashner, James. *The Maze Runner*. New York: Delacorte Press, 2009. Print.
- Deflem, Mathieu. 'Introduction: An Eye on Surveillance and Governance.' *Surveillance and Governance: Crime Control and Beyond*. Ed. Mathieu Deflem. Bingley: Emerald Group Publishing Limited, 2008. Print.
- Derleth, August. 'Contemporary Science-Fiction.' *The English Journal* 41.1 (1952): 1-8. Print.
- Dostoevsky, Fyodor. *The Brothers Karamazov*, trans. Richard Pevear and Larissa Volokhonsky. New York: Farrar, Straus and Giroux, 1990. Print.
- Easthope, Antony. 'Homi Bhabha, Hybridity and Identity, or Derrida Versus Lacan.' *Hungarian Journal of English and American Studies* 4.1/2 (1998): 145.151. Print.
- Ede, Sian. 'Preface'. *Signs and Humours: The Poetry of Medicine*. Lavinia Greenlaw ed. London: Calouste Gulbenkian Foundation, 2007. Print.

- Elle Jemtegaard, Kristi. 'Noughts & Crosses (Review).' *The Horn Book Magazine*, 81.6 (2005): 742. Print.
- Farmer, Nancy. *The House of the Scorpion*. New York: Atheneum Books, 2002. Print.
- Foucault, M. *Discipline and Punish: The Birth of the Prison*. Harmondsworth: Penguin, [1975] 1977. Print.
- Franke, William. *Poetry and Apocalypse: Theological Disclosures of Poetic Language*. California: Stanford University, 2009. Print.
- Fukuyama, Francis. *Our Posthuman Future: Consequences of the Biotechnology Revolution*. New York: Farrar Straus & Giroux, 2002. Print.
- Gadsby, Meredith M. 'Harvesting Salt'. *Sucking Salt: Caribbean Women Writers, Migration, and Survival*. Columbia: University of Missouri, 2006. Print.
- Gessert, George. 'Oryx and Crake by Margaret Atwood' *Leonardo* 37.5 (2004): 416-417. Print.
- Gordijn, Bert & Ruth Chadwick. *Medical Enhancement and Posthumanity*. New York: Routledge, 2007. Print.
- Gordin, Michael D., Helen Tilley, and Gyan Prakash. *Utopia/Dystopia: Conditions of Historical Possibility*. New Jersey: Princeton University, 2010. Print.
- Green, John. *The Fault in Our Stars*. New York: Dutton Books, 2012. Print.

Greenlaw, Lavinia ed. *Signs and Humours: The Poetry of Medicine*. London: The Calouste Gulbenkian Foundation, 2007. Print.

Greven, David. 'The Fantastic Powers of the Other Sex: Male Mothers in Fantastic Fiction.' *Journal of the Fantastic in the Arts* 14.3 (2003): 301-317. Print.

Groenke, Susan Lee and Michelle Youngquist. 'Are We Postmodern Yet? Reading "Monster" With 21st-century Ninth Graders.' *Journal of Adolescent & Adult Literacy*, 54.7 (2011): 505-513. Print.

Gumpert, Gary and Susan J. Drucker. 'The Demise of Privacy in a Private World: From Front Porches to Chat Rooms.' *Communication Theory*, 8.4 (1998): 408-425. Print.

Hamilton, Sheryl N. 'Traces of the Future: Biotechnology, Science Fiction, and the Media' *Science Fiction Studies* 30.2 Social Science Fiction (2003): 267-282. Print.

Harper, Mary Catherine. 'Incurably Alien Other: A Case for Feminist Cyborg Writers.' *Science Fiction Studies*, 22.3 (1995): 399-420. Print.

Harrison, Robert Pogue . *Juvenescence: A Cultural History of Our Age*. Chicago: University of Chicago Press, 2014. Print.

Haney, William S. *Cyberculture, Cyborgs and Science Fiction: Consciousness and the Posthuman*. Amsterdam: Rodopi, 2006. Print.

- Haraway, Donna Jeanne. 'A Cyborg Manifesto.' *Simians, Cyborgs and Women: The Reinvention of Nature*. New York: Routledge, 1991: 149-182. Print.
- Hayles, N. Katherine. 'Afterword: The Human in the Posthuman.' *Cultural Critique* 53 (2003): 134-137. Print.
- Hayles, N. Katherine. 'Commentary: The Search for the Human'. *New Literary History*, 36.2 (2005): 327-333. Print.
- Hayles, N. Katherine. 'Flesh and Metal: Reconfiguring the Mindbody in Virtual Environments'. *Configurations*, 10.2 (2002): 297-320. Print.
- Hayles, N. Katherine. *How We Became Posthuman: Virtual Bodies in Cybernetics, Literature, and Informatics*. Chicago: University of Chicago Press, 1999. Print.
- Hayles, N. Katherine. 'Refiguring the Posthuman.' *Comparative Literature Studies* 41.3 (2004): 311-316. Print.
- Heisenberg, Werner. *Das Naturbild Der Heutigen Physik*. Hamburg: Rowoholt Taschenbuch Verlag, 1955. Print.
- Hollinger, Veronica. 'Deconstructing the Time Machine.' *Science Fiction Studies* 14.2 (1987): 201-221. Print.
- Hollinger, Veronica. 'Stories about the Future: From Patterns of Expectation to Pattern Recognition.' *Science Fiction Studies* 33.3 (2006): 452-472. Print.

- Humphreys, Lee. 'Who's Watching Whom? A Study of Interactive Technology and Surveillance.' *Journal of Communication*, 61 (2011): 575–595. Print.
- Hunt, Peter. *Understanding Children's Literature*. London: Routledge, 1999. Print.
- Hutley, Krista. 'Noughts & Crosses (Review).' *Bulletin of the Center for Children's Books*, 58.10 (2005): 429. Print.
- Huxley, Aldous. *Brave New World*. London: Chatto & Windus, 1932. Print.
- Huxley, Aldous. 'Variations on a Philosopher.' *Themes and Variations*. New York: Harper & Brothers, 1950: 1-160. Print.
- Imbert, Patrick. 'Literature and Globalization the Future of Humanity.' *Re-imagining Language and Literature for the 21st Century*. Duangsamorn, Suthira (eds. *et al.*). New York: Rodopi, 2005: 233-240. Print.
- James, Edward. 'Utopias and Anti-Utopias.' *The Cambridge Companion to Science Fiction*. Eds. Edward James and Farah Mendelsohn. Cambridge: Cambridge University, 2003. 219-229. Print.
- Jameson, Fredric. *Archaeologies of the Future: The Desire Called Utopia and Other Science Fictions*. London: Verso, 2005. Print.
- Jerng, Mark. 'Giving Form to Life: Cloning and Narrative Expectations of the Human.' *Partial Answers* 6.2 (2008): 369–393. Print.

- Jones, Tim. 'Genre Benders: How Interstitial Fiction Is Bringing Speculative Fiction and Literary Fiction Together.' *English in Aotearoa*, 67 (2009): 7-12. Print.
- Joron, Andrew (Contributor). 'Introduction.' *Quanta: Award Winning Poems* (by Bruce Boston). New York: Miniature Sun Press, 2001. Print.
- King, Stephen. *The Running Man*. New York: Signet Books, 1982. Print.
- Klotzko, Arlene Judith. *A Clone of Your Own? The Science and Ethics of Cloning*. Cambridge: Cambridge University Press, 2006. Print.
- Koss, Melanie Debra. *A Literary Analysis of Young Adult Novels with Multiple Narrative Perspectives Using a Sociocultural Lens*. Chicago: University of Illinois, 2008. Print.
- Kraidy, Marwan. *Hybridity, Or the Cultural Logic of Globalization*. Philadelphia: Temple University Press, 2005. Print.
- Kristeva, Julia. *Strangers to Ourselves*. London: Harvester Wheatsheaf, 1991. Print.
- Kroker, Arthur and Marilouise Kroker, eds. *The Last Sex: Feminism and Outlaw Bodies*. London: Palgrave Macmillan, 1993. Print.
- Kunsa, Ashley. 'Maps of the World in Its Becoming: Post-Apocalyptic Naming in Cormac McCarthy's *The Road*.' *Journal of Modern Literature*, 33.1(2009): 57-74. Print.

- Kunsa, Ashley. 'Mystery and Possibility in Cormac McCarthy.' *Journal of Modern Literature*, 35.2 (2012): 146-152. Print.
- Lane, Richard J. and Philip Tew. 'Cultural Hybridity.' *Contemporary British Fiction*. Eds. Richard J. Lane, Rod Mengham, and Philip Tew. Cambridge: Polity Press, 2003: 143-144. Print.
- Lange, Victor. 'Fact in Fiction.' *Comparative Literature Studies* 6.3 Special Issue on the Art of Narrative (1969): 253-261. Print.
- Leitch, Vincent B. 'Twenty-First-Century Theory Favourites' *Literary Criticism in the 21st Century: Theory Renaissance*. London: Bloomsbury, 2014: 133-150. Print.
- Lenoir, Timothy. 'Makeover: Writing the Body into the Posthuman Technoscape: Part One: Embracing the Posthuman'. *Configurations*, 10.2 (2002): 203-220. Print.
- Lenoir, Timothy. 'Technohumanism: Requiem for the Cyborg.', *Genesis Redux: Essays in the History and Philosophy of Artificial Life*. Jessica Riskin (ed.). Chicago: University of Chicago Press, 2007. Print.
- Leonard, Elizabeth Anne. 'Race and Ethnicity in Science Fiction.' *The Cambridge Companion to Science Fiction*. Eds. Edward James and Farah Mendelsohn. Cambridge: Cambridge University, 2003. 253-263. Print.
- Lewin, Amy, Stephanie J. Mitchell and Cynthia R. Ronzio. 'Developmental Differences in Parenting Behavior: Comparing Adolescent, Emerging

- Adult, and Adult Mothers.' *Merrill-Palmer Quarterly*, 59.1 (2013): 23-49. Print.
- Lewis, Chris H. 'Science, Progress, and the End of the Modern World.' *Soundings: An Interdisciplinary Journal* 75.2/3 (1992): 307- 332. Print.
- Levstik, Linda S. 'Using Adolescent Fiction as a Guide to Inquiry.' *Social Studies: Theory into Practice* 30.3 (1981): 174-178. Print.
- Loewenberg, Ina. 'Creativity and Correspondence in Fiction and in Metaphors.' *The Journal of Aesthetics and Art Criticism* 36.3 (1978): 341-350. Print.
- Lucie-Smith, Edward. 'Introduction'. *Holding Your Eight Hands: An Anthology of Science Fiction Verse*. Edward Lucie-Smith ed. London: Rapp and Whiting, 1970. Print.
- Luckhurst, Roger. 'British Science Fiction in the 1990s: Politics and Genres.' *British Fiction of the 1990s*. Nick Bentley (ed.). Oxon: Routledge, 2005: 78-92. Print.
- Malmgren, Carl D. 'Self and Other in SF: Alien Encounters'. *Science Fiction Studies*, 20.1 (1993): 15-33. Print.
- Mangrum, Benjamin. 'Accounting for *The Road*: Tragedy, Courage, and Cavell's Acknowledgment.' *Philosophy and Literature*, 37.2 (2013): 267-290. Print.
- McDonald, Keith. 'Days of the Past Futures: Kazuo Ishiguro's *Never Let Me Go* as a "Speculative Memoir".' *Biography* 30.1 (2007): 74-83. Print.

- McEntyre, Marilyn Chandler. 'Friends in Need: Illness and Friendship in Adolescent Fiction.' *Literature and Medicine* 21.1 (2002): 132-146. Print.
- McSweeney, Terence. "'Each Night Is Darker—Beyond Darkness": The Environmental and Spiritual Apocalypse of *The Road* (2009).' *Journal of Film and Video*, 65.4 (2013): 42-58. Print.
- Miah, Andy. 'Posthumanism: A Critical History.' *Medical Enhancements & Posthumanity*. New York: Routledge, 2007: 71-94. Print.
- Miccoli, Anthony. 'Posthuman Assumptions and the Technological Embrace.' *Posthuman Suffering and the Technological Embrace*. Lanham: Lexington Books, 2010: 1-16. Print.
- Michael, Ashley. 'The Time Machines.' *The History of the Science Fiction Magazine: Volume 1*. Liverpool: Liverpool University, 2000: 1-92. Print.
- Mitchell, Kaye. 'Bodies That Matter: Science Fiction, Technoculture, and the Gendered Body'. *Science Fiction Studies*, 33.1 Technoculture and Science Fiction (2006):109-128. Print.
- Monbiot, George. "Civilisation Ends with a Shutdown of Human Concern. Are We There Already?" *The Guardian*. The Guardian, 2007. Print
- Morales, Nestor Micheli. 'Psychological and Ideological Aspects of Human Cloning: A Transition to a Transhumanist Psychology.' *Journal of Evolution and Technology*, 20.2 (2009): 19-42. Print.
- Morris, David B. *Illness and Culture in the Postmodern Age*. Berkeley: University of California, 1998. Print.

- Mullins, Matthew. 'Hunger and the Apocalypse of Modernity in Cormac McCarthy's *The Road*.' *Symploke*, 19.1-2 (2011): 75-93. Print.
- Mumford, Lewis. *The Myth of the Machine, the Pentagon of Power*. New York: Harcourt Brace Jovanovich, 1970. Print.
- Nagavajara, Chetana. 'Contemporary Poetry as a Global Dialogue' *Re-imagining Language and Literature for the 21st Century*. Duangsamorn, Suthira (ed. et al.). New York: Rodopi, 2005: 291-318. Print.
- '*Noughts & Crosses* (Review).' *Publishers Weekly*, 252.25 (2005): 78. Print.
- Nuzum, K. A. 'The Monster's Sacrifice – Historic Time: The Uses of Mythic and Liminal Time in Monster Literature'. *Children's Literature Association*, (2004): 207-227. Print.
- Orwell, George. *Nineteen Eighty-Four*. London: Secker and Warburg, 1949. Print.
- Ostry, Elaine. "'Is He Still Human? Are You?'" Young Adult Science Fiction in the Posthuman Age.' *The Lion and the Unicorn*, 28.2 (2004): 222-246. Print.
- Owen, Mary. 'Developing a Love of Reading: Why Young Adult Literature is Important.' *Orana: journal of school and children's librarianship*, 2003 (March): 11-17. Print.
- Pagetti, Carlo and Marie-Christine Hubert. "'The First Men in the Moon: H.G. Wells and the Fictional Strategy of His "Scientific Romances".' *Science Fiction Studies* 7.2 (1980): 124-134. Print.

- Pence, Gregory E. *Who's Afraid of Human Cloning?* Maryland: Rowman & Littlefield, 1998. Print.
- Pepperell, Robert. *The Posthuman Condition: Consciousness beyond the brain.* Bristol: Intellect Books, 2003. Print.
- Pilinovsky, Helen. 'Borderlands: The Who, What, When, Where, and Why of the Interstitial Arts.' *Journal of the Fantastic in the Arts* 15.3 (2004): 240-242. Print.
- Pilinovsky, Helen and Delia Sherman. 'Interstitial Arts: An Interview With Delia Sherman.' *Journal of the Fantastic in the Arts* 15.3 (2004): 248-250. Print.
- Pinsky, Robert. 'Introduction: "Modern" and "Contemporary".' *The Situation of Poetry: Contemporary Poetry and Its Traditions.* Princeton: Princeton University, 1976: 1-12. Print.
- Prensky, Marc. 'Digital Natives, Digital Immigrants, Part II: Do They Really Think Differently?' *On the Horizon: NCB University Press* 9.6 (2001). Print.
- Proffitt, Edward. 'Science and Romanticism'. *The Georgia Review*, 34.1 (1980): 55-80. Print.
- Puchner, Martin. 'When We Were Clones.' *Raritan* 27.4 (2008): 34-49. Print.
- Pulman, Bertrand. 'The Issues Involved in Cloning: Sociology and Bioethics.' *Revue française de sociologie* 48 Supplement: An Annual English Selection (2007): 129-156. Print.

- Raine, Craig, *A Martian Sends a Postcard Home*, Oxford: Oxford University Press, 1979. Print.
- Reichl, Susanne. 'Doing Identity, Doing Culture: Transcultural Learning through Young Adult Fiction.' *Children's Literature in Second Language Education*. Eds. Janice Bland and Christiane Lütge. London: Bloomsbury, 2013. 107-117. Print.
- Roberts, Robin. 'Post-Modernism and Feminist Science Fiction.' *Science Fiction Studies*, 17.2 Science Fiction by Women (Jul., 1990):136-152. Print.
- Roche, Mark William. *Why Literature Matters in the 21st Century*. New Haven: Yale University, 2008. Print.
- Rucker, Rudy. 'Transrealist Manifesto.' *Rudyrucker.com*. Rudy Rucker. Web. 15 Nov. 2015. (originally published in *The Bulletin of the Science Fiction Writers of America*, 82 (1983))
- Ruddick, Nicholas. 'Putting the Bits Together: Information Theory, "Neuromancer", and Science Fiction.' *Journal of the Fantastic in the Arts*, Vol. 3.3/4 (11/12), The Lost Issues (1994): 84-92. Print.
- Russ, Joanna. 'SF and Technology as Mystification'. *Science Fiction Studies*, 5.3 (1978): 250-260. Print.
- Salinger, J. D. *The Catcher in the Rye*. New York: Little, Brown and Company, 1951. Print.
- Sample, Ian. 'UK breakthrough as human embryo cloned.' *Guardian.co.uk*. The Guardian, 20 May 2005. Web. 21 Jan. 2012.

- Samuelson, David N. "‘Childhood's End’: A Median Stage of Adolescence?'.
Science Fiction Studies, 1.1 (1973): 4-17. Print.
- Scarry, Elaine. *The Body in Pain: The Making and the Unmaking of the World*.
New York: Oxford University Press. 1985. Print.
- Schanoes, Veronica. 'Critical Theory, Academia, and Interstitiality.' *Journal of
the Fantastic in the Arts* 15.3 (2004): 243-247. Print.
- Schmar-Dobler, Elizabeth. 'Reading on the Internet: The Link between Literacy
and Technology.' *Journal of Adolescent & Adult Literacy* 47.1 (2003): 80-
85. Print.
- Seideman, Tony. 'Barcodes Sweep the World.' Barcoding.com. Web. 02 March
2013. (originally published in *Inside Out: The Wonders of Modern
Technology*. Ed. Carol J. Amato. New York: Smithmark Publishing, 1993.
Print.
- Shary, Timothy. 'Course File for "Film Genres and the Image of Youth".' *Journal
of Film and Video* 55.1 (2003): 39-57. Print.
- Shelley, Mary. *Frankenstein*. [1818]. Ed. Maurice Hindle. New York: Penguin,
2003. Print.
- Slonczewski, Joan, and Michael Levy. 'Science Fiction and the Life Sciences.'
The Cambridge Companion to Science Fiction. Eds. Edward James and
Farah Mendelsohn. Cambridge: Cambridge University, 2003. 174-185.
Print.

- Smith, Elizabeth Irene and Elaine Scarry. "The Body in Pain": An Interview with Elaine Scarry.' *Concentric: Literary and Cultural Studies*, 32.2 (2006): 223-237. Print.
- Sontag, Susan. *Illness as Metaphor and AIDS and Its Metaphors*. New York: Vintage Books, 1979. Print.
- Squier, Susan M. 'A Tale Meant to Inform, Not to Amuse.' *Science, New Series* 302.5648 (2003): 1154-1155. Print.
- Stableford, Brian. 'How Should A Science Fiction Story Begin?' *Journal of the Fantastic in the Arts* 12.3 (2001): 322-337. Print.
- Stevenson, Melissa Colleen. 'Trying to Plug In: Posthuman Cyborgs and the Search for Connection'. *Science Fiction Studies*, 34.1 (2007): 87-105. Print.
- Stock, Gregory. *Redesigning Humans: Choosing Our Genes, Changing Our Future*. New York: Mariner Books, 2003. Print.
- Stock, Gregory. *Redesigning Humans: Our Inevitable Genetic Future*. New York: Houghton Mifflin Harcourt, 2002. Print.
- Storrow, Richard F. 'Therapeutic Reproduction and Human Dignity.' *Law and Literature*, 21.2 (2009): 257-274. Print.
- Sugarman, Sally. 'Outer Space, Inner Worlds: Science Fiction and the Adolescent Imagination.' *Young Adult Literature and Culture*. Harry Edwin Eiss (ed.). New Castle Upon Tyne: Cambridge Scholars Publishing, 2009. Print.

Suvin, Darko. *Metamorphoses of Science Fiction*. London: Yale U.P., 1979.

Print.

Synnott, Anthony. 'Truth and Goodness, Mirrors and Masks Part II: A Sociology of Beauty and the Face.' *The British Journal of Sociology* 41.1 (1990): 55-

76. Print.

Ventura, Abbie. 'Predicting a Better Situation? Three Young Adult Speculative Fiction Texts and the Possibilities for Social Change.' *Children's Literature Association Quarterly* 2011: 89–103. Print.

Vint, Sherryl. 'Becoming Other: Animals, Kinship, and Butler's "Clay's Ark".'

Science Fiction Studies 32.2 (2005): 281-300. Print.

Wallace, Jeff. 'Literature and Posthumanism.' *Literature Compass* 7.8 (2010):

692–701. Print.

Waugh, Patricia. 'Science and Fiction in the 1990s.' *British Fiction of the 1990s*.

Nick Bentley (ed.). Oxon: Routledge, 2005: 57-77. Print.

Wells, H. G. *The World Set Free: A Story of Mankind*. London: MacMillan & Co.,

1914. Print.

Wilkie-Stibbs, Christine. 'The "Other" Country: Memory, Voices, and

Experiences of Colonized Childhoods.' *Children's Literature Association*

Quarterly, 31.3 (2006): 237-259. Print.

Williams, Nerys. *Contemporary Poetry*. Edinburgh: Edinburgh University, 2011.

Print.

Wilmut, Ian and Keith Campbell. 'Viable offspring derived from fetal and adult mammalian cells.' *Nature*, 385 (1997): 810-813. Print.

Wisker, Gina. *Atwood's The Handmaid's Tale*. London: Continuum International Publishing, 2010. Print.

Zanderer, Leo. 'Popular Culture, Childhood, and the New American Forest of Postmodernism'. *The Lion and the Unicorn*, 11.2 (1987): 7-33. Print.

Zibrak, Arielle. 'Intolerance, A Survival Guide: Heteronormative Culture Formation in Cormac McCarthy's *The Road*.' *Arizona Quarterly: A Journal of American Literature, Culture, and Theory*, 68.3 (2012): 103-128. Print.

Yunis, Susan and Tammy Ostrander. 'Tales your Mother Never told You: "Aliens" and the Horrors of Motherhood.' *Journal of the Fantastic in the Arts* 14.1 (2003): 68-76. Print.

Secondary Sources (Web)

'1968: Surgeons conduct UK's first heart transplant.' *BBC*. bbc.co.uk, On This Day. 3rd May. Web. 3 Jan 2015.

'Adam O'Riordan'. *Aggsink.wordpress.com*. Word Press, 6 Dec. 2012, *n.page*. Web. 19 April 2013.

Anderson, E. Kristin. 'Interview with Suzanne Weyn Author of Empty'. *Ekristinanderson.com*. *n.p.*, 23 Nov. 2010, *n.page*. Web. 24 April 2013.

Aronson, Marc. 'Coming of Age: One editor's view of how young adult publishing developed in America.' *Publishers Weekly*. Publishersweekly.com, 11 Feb 2002. Web. 17 Sep. 2014.

Bradbury, Lorna. 'A writer's life: Lavinia Greenlaw'. *Telegraph.co.uk*. Telegraph, 19 Nov 2003, *n.page*. Web. 18 Aug. 2013.

Bradshaw, Peter. 'The Hunger Games – review'. *Theguardian.com*. The Guardian, 22 March 2012. Web.

Brooke, Keith. 'The Host by Stephenie Meyer.' *Guardian.co.uk*. The Guardian, 2009, *n.page*. Web. 21 Feb 2013.

Brown, Helen. 'Malorie Blackman: the Books I Missed.' *Telegraph.co.uk*. The Telegraph, 2008. Web. 26 May 2014.

Buck, Louisa. 'Obituary:Helen Chadwick.' *Independent.co.uk*. Independent, 1996. 10 Aug. 2014. Web.

Caines, Michael. 'Review of *Scientific Papers*'. *Carcenet.co.uk. Poetry Review*, 92.4 Summer 2005, *n.page*. Web. 17 March 2013.

Chilton, Martin. 'Malorie Blackman is a Great Choice to Inspire Children.' *Telegraph.co.uk. The Telegraph*, 2013. Web. 20 May 2014.

Clark, Nick. '*Noughts and Crosses* Author Malorie Blackman Appointed Britain's First Black Children's Laureate.' *Independent.co.uk. The Independent*, 2013. Web, 12 February 2014.

Cochrane, Kira. 'Jo Shapcott: the book of life.' *TheGuardian.com. The Guardian*, 2011. Web. 15 January 2014.

Crawford, Gary William. 'Songs of the Stars, Songs of the Dark: The Poetry of Bruce Boston'. *Gothlitdata.com. n.p., n.d., n.page*. Web. 20 June 2013.

Crown, Sarah. '*In the Flesh* by Adam O'Riordan'. *Guardian.co.uk. The Observer*, 4 Sept. 2010, *n.page*. Web. 15 April 2013.

Crown, Sarah. 'Jo Shapcott: I am not someone chasing her own ambulance.' *Theguardian.com. The Guardian*, 2010. 10 August 2014. Web.

Dewolf Smith, Nancy. 'Everything Old Is New Again.' *Wsj.com. The Wall Street Journal*, 2010. Web. 17 June 2014.

'Dolly the sheep clone dies young.' *BBC.co.uk. BBC* 14 Feb. 2003. Web. 1 Feb. 2012.

'Dolly the sheep scientist Keith Campbell dies.' *The Guardian. Theguardian.com*, 12.10.2012. Web. 14.08.2015.

Elgin, Suzette Haden. 'About Science Fiction Poetry.' *SFWA.org*. Science Fiction and Fantasy Writers of America. 1999. Web. 24 April 2012.

'Elgin, Suzette Haden.' *Sf-encyclopedia.com*. The Encyclopedia of Science Fiction. Web. 29.11.2014.

'Feed.' *Mt-anderson.com*. M. T. Anderson. *n.p., n.d., n.page*. Web. 30 May 2013.

Fukuyama, Francis. 'Sorry, but your soul just died'. *Theguardian.com*. The Guardian, 13 May 2002, *n.page*. Web. 16 Aug. 2013.

Fukuyama, Francis. 'Transhumanism.' *Foreignpolicy.com*. Foreign Policy, 1 Sep. 2003. Web. 30 Jan. 2012.

Geek's Guide to the Galaxy (pseudonym). 'Margaret Atwood on Science Fiction, Dystopias, and Intestinal Parasites.' *Wired.com*. Wired, 2013. 10 August 2014. Web.

Haddix, Margaret Peterson. 'Biography.' *Haddixbooks.com*. Haddix Books. 20 June 2011. Web. 20 Dec. 2011.

Haddix, Margaret Peterson. 'Frequently Asked Questions—Double Identity.' *Haddixbooks.com*. Haddix Books. 20 June 2011. Web. 20 Dec. 2011.

Hickman, Steven Craig. 'Fredric Jameson: The Utopic/Dystopic Imagination.' *Social Ecologies*. *socialologies.wordpress.com*, Feb, 2013. Web. 22.02.2015.

'Interview: Suzanne Weyn, Author Of "Empty"'. *Reachout.com*. n.p., 19 Oct. 2010, n.page. Web. 31 May 2013.

Jaggi, Maya. 'Send in the Clones.' *Theguardian.com*. The Guardian, 29 September 2001. Web. 23 June 2012.

Jurgenen, John., and Cormac McCarthy. 'Hollywood's Favorite Cowboy.' *Wsj.com*. The Wall Street Journal, 2009. Web. 29 May 2014.

Kellaway, Kate. '*In the Flesh* by Adam O'Riordan'. *Guardian.co.uk*. The Guardian, 4 July 2010, n.page. Web. 15 April 2013.

Kellaway, Kate. '*Of Mutability* by Jo Shapcott.' *The Guardian*. *Theguardian.com*, August 2010. Web. 10 July 2015.

LaGrandeur, Kevin. 'What is the Difference between Posthumanism and Transhumanism?.' Institute for Ethics and Emerging Technologies. *leet.org*, 28.6.2014. Web. 16.06.2015.

Le Guin, Ursula K. '*The Year of the Flood* by Margaret Atwood.' *Theguardian.com*. The Guardian, 2009. Web. 15 Dec. 2013.

Leviston, Frances. '*Of Mutability* by Jo Shapcott.' *Theguardian.com*. The Guardian, 2010. Web. 15 June 2014.

Lifeissweetinbooks. '*The Fault in our Stars* by John Green (Review).' *Theguardian.com*. The Guardian, 2014. Web. 1 July 2014.

- Lore, Kollin. 'The Walking Dead' Finale Review: Rick Turns Savage Yet Still
Brainless.' *Guardianlv.com*. Guardian Library Voice, 2014. Web. 09 June
2014.
- Maddox, Brenda. 'The Triumph of the genetic Revolution.' *The Guardian*.
Theguardian.com, 02.06.2002. Web. 28.03.2014.
- 'Margaret Atwood: The Road to Utopia.' *The Guardian*. Theguardian.com,
October 2011. Web. 5 Aug. 2014.
- Maxted, Luke. 'When the Martians landed – From the archives: Craig Raine and
the birth of Martian poetry'. *Newstatesman.com*. New Statesman, Feb
2013. Web. 20 Jan 2015.
- Monaghan, Lauren . 'A barcode for life'. *Cosmosmagazine.com*. Cosmos
Online, 9 April, 2008. Web. 15 August, 2012.
- Mourão, José Augusto. 'Hybridization and Literature.' *New University of Lisbon*.
Inst.at, 2006. Web. 15.08.2015.
- 'Mouse brain simulated on computer.' *BBC.co.uk*. BBC, 27 April, 2007, *n.page*.
Web. 16 December, 2012.
- 'New Study: 55% of YA Books Bought by Adults'. *Publishersweekly.com*.
Publishers Weekly. 13 Sep 2012. *n.page*. Web. 1 August 2013.
- Padel, Ruth. 'The Science of Poetry, the Poetry of Science.' *Theguardian.com*.
The Guardian. 2011. Web. 15 May 2014.

Phillips, Janet. 'Medusa and Me: Janet Phillips Interviews Dorothea Smarrt'.

Poetry News. n.p., Autumn 2001, n.page. Web. 7 June 2013.

'Poetry'. *The Encyclopedia of Science Fiction*. Sf-encyclopedia.com, 5 Feb 2015 Entry. Web. 11 Feb 2015.

Rae, Ali. 'The Host by Stephanie Meyer – Review.' *Guardian.co.uk*. The Guardian, 2012, n.page. Web. 15 Feb 2013.

'Review: Redesigning Humans by Gregory Stock.' *Theguardian.com*. The Guardian, 1 June 2002 . Web. 13 Dec 2014.

Rustin, Susanne. 'Children's Laureate Malorie Blackman: 'I'm looking forward to redressing the balance for teenagers.' *Theguardian.com*. The Guardian, 2013. Web. 2 June 2014.

Sellers, John A. 'A Dark Horse Breaks Out: The buzz is on for Suzanne Collins's YA Series Debut.' *Publishersweekly.com*. Publishers Weekly, 2008, n.page. Web. 15 Feb 2013.

Spielberg, Steven and Jim Windolf. 'Q&A: Steven Spielberg.' *Vanity Fair*. Vanity Fair, 2008. Web. 15 Mar. 2012.

'The Human Brain Project.' *Bluebrain.epfl.ch*. École polytechnique fédérale de Lausanne EPFL, n.d., n.page. Web. 5 January, 2013.

'The Importance of Dolly.' *Roslin.ed.ac.uk*. Roslin Institute. Web. 13.07.2013.

TheJust. 'Author – Suzanne Weyn'. *Teenink.com*. n.p., n.d.. n.page. Web. 30 May 2013.

'Thirty-Three: Lavinia Greenlaw, *Minsk*. *52poets.wordpress.com*. Wordpress, 17 Sep. 2008, *n.page*. Web. 18 Aug. 2013.

Urwin, Rosamund. 'Welcome to your juvenescence: why keeping up with the kids is becoming a trend.' *London Evening Standard*. Standard.co.uk, 11 Nov. 2014. Web.

Vanderhooft, JoSelle. 'Interview: Bruce Boston'. *Strangehorizons.com*. *n.p.*, 18 June 2007, *n.page*. Web. 15 Aug. 2012.

Walter, Damien. 'Transrealism: the first major literary movement of the 21st century?' *Theguardian.com*. The Guardian, 24 Oct. 2014. Web. 07 July 2015.

Whiteside, Rowan. 'Sam Reviews 'Of Mutability' by Jo Shapcott.' *Writersentrenorwich.org.uk*. Writers Centre Norwich, 2012. Web. 31 March 2014.

Windling, Terri. 'Artists Without Borders.' *Interstitialarts.org*. Interstitial Arts Foundation, 2003. Web. 08.07.2015.

'Winning poem offers a new twist on "improving the human".'
Genomicsnetwork.ac.uk. ESRC Genomics Forum, 29 Jan. 2011. Web. 15 Nov. 2011.

Wooten, William. 'Surface Tension'. *Theguardian.com*. The Guardian, 17 Jan. 2004, *n.page* . Web. 18 Aug. 2013.